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ABSTRACT

This is the third progress report on a 5-year longitudinal study of the labor market experience of a national sample of middle-aged men. The subjects were interviewed for the first time in the summer of 1966 when they were between 45 and 59 years of age. Twelve months later the sample was reinterviewed. Data from these two surveys are presented in two earlier monographs (ED 026 525 and ED 039 331). The present report utilizes data collected by means of a mail questionnaire in mid-1968 and by personal reinterviews with the sample in mid-1969, which helped to describe the magnitude and patterns of change in the status of the respondents that have occurred over the first 3 years of the study and to identify some of the causes and consequences of these changes. As in the two previous reports, analysis is based exclusively on cross-tabulations of the data. The five chapters of the report are: (1) Changes in Personal and Family Characteristics, (2) Longitudinal Measures of Labor Force Participation and Unemployment, (3) Job Changes, (4) Collective Bargaining Coverage and Hourly Rate of Pay, and (5) Summary and Conclusions. (Author/JS)

THE PRE-RETIREMENT YEARS: A longitudinal study of the labor market experience of men

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VOLUME THREE
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PREFACE

In early 1965, the Office of Manpower Policy, Evaluation and Research (now the Office of Policy, Evaluation and Research of the Manpower Administration) of the U. S. Department of Labor contracted with the Center for Human Resource Research of The Ohio State University for a five-year longitudinal study of the labor market experience of four groups of the United States population: men 45 to 59 years of age, women 30 to 44, and young men and women 14 to 24.

Cost considerations dictated limiting the population covered; given that constraint, these four groups were selected for study because each faces special labor market problems that are challenging to policy makers. In the case of the older male group these problems are reflected in a tendency for unemployment, when it occurs, to be of longer-than-average duration and in the fact that average annual incomes of males decline continuously with advancing age beyond the mid-forties. In the case of the older of the two groups of women the special problems are those associated with reentry into the labor force on the part of a great many married women after their children no longer require their continuous presence at home. For the young men and women, of course, the problems are those revolving around the process of occupational choice and include both the preparation for work and the frequently difficult period of accommodation to the labor market when formal schooling has been completed.

While the more-or-less unique problems of each of the subject groups to some extent dictate separate orientations for the four studies, there is, nevertheless, a general conceptual framework and a general set of objectives common to all of them. Each of the four studies views the experience and behavior of individuals in the labor market as resulting from an interaction between the characteristics of the environment and a variety of demographic, economic, social, and attitudinal characteristics of the individual. Each study seeks to identify those characteristics that appear to be most important in explaining variations in several important facets of labor market experience: labor force participation, unemployment experience, and various types of labor mobility. Knowledge of this kind may be expected to make an important contribution to our understanding of the way in which labor markets operate and thus to be useful for the development and implementation of appropriate labor market policies.

For each of the four population groups described above, a national probability sample of the noninstitutional civilian population has been drawn by the Bureau of the Census. Members of each sample have been surveyed periodically over a five-year period. This report, the third in

the series on the older group of men, summarizes some of the data produced by a questionnaire mailed to members of the sample in 1968 and by third round of interviews in 1969. Based exclusively on tabular data, it is intended primarily as a progress report on the longitudinal study, focusing on the magnitude and patterns of change in the labor market status of the men during the three-year period between the 1966 and 1969 interviews. More intensive multivariate analyses will be made when the computer tape containing the data from the final (1971) round of interviews becomes available.

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August 1972

Both the overall study and the present report are the product of the joint effort of a great many persons, not all of whom are even known to us. The research staff of the Center has enjoyed the continuous expert and friendly collaboration of personnel of the Bureau of the Census, which, under a separate contract with the Department of Labor, is responsible for developing the samples, conducting all of the interviews, processing the data, and preparing the tabulations we have requested. We are particularly indebted to Earle Gerson, Chief of the Demographic Surveys Division, and to his predecessor, Daniel Levine; to Robert Mangold, Chief of the Longitudinal Surveys Branch, and to Marie Argana who until recently held that position. These are the individuals who in the recent past have been our liaison with the Census Bureau. We wish also to acknowledge our indebtedness to James Johnson and his staff of the Field Division, who were responsible for the collection of the data; to David Lipscomb, Eleanor Brown and their staff of the Systems Division for editing and coding the interview schedules; and to Stuart Lynn, Bernadette Marlow, and their associates for the computer work.

The advice and counsel of many persons in the Department of Labor have been very helpful to us both in designing the study and in interpreting its findings. Without in any way implicating them in whatever deficiencies may exist in this report, we wish to acknowledge especially the continuous interest and support of Howard Rosen, Director of the Office of Manpower Research, and the valuable advice provided by Stuart Garfinkle and Jacob Schiffman, who, as our principal contacts in the Office of Manpower Research, have worked closely with us from the outset.

We have benefited from the reactions to a preliminary version of the manuscript provided by Arvil V. Adams, Sookon Kim, Andrew Kohen, James Murphy, and Roger Roderick of the Center for Human Resource Research, and by Frank Mott and Jacob Schiffman of the Department of Labor.

Ellen Mumma and Regina Parks were responsible for preparing the tables and checking the manuscript in addition to serving as principal liaisons with the Census Bureau. Laura Ference, Constantine Karmas, and Elias Poston also made major contributions to the preparation of tables. Richard Emerine drafted preliminary versions of portions of the manuscript. Kandy Bell and Dortha Gilbert expertly typed the several versions of text and tables.

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CHAPTER ONE

CHANGES IN PERSONAL AND FAMILY CHARACTERISTICS

I INTRODUCTION

This is the third progress report on a five-year longitudinal study of the labor market experience of a national sample of middle-aged men. The subjects were interviewed for the first time in the summer of 1966, when they were between 45 and 59 years of age.[1] Twelve months later the sample was reinterviewed. Data from those first two surveys have been reported in two earlier monographs.[2] The present report utilizes data collected by means of a mail questionnaire in mid-1968 and by personal reinterviews with the sample in mid-1969 to describe the magnitude and patterns of change in the status of the respondents that have occurred over the first three years of the study and to identify some of the causes and consequences of these changes. As in the two previous reports, analysis is based exclusively on cross-tabulations of the data. Plans are currently being made for more refined multivariate analysis when data from the final interviews in 1971 become available.

The report is divided into five chapters. Section II of this chapter examines the extent of attrition in the sample between 1966 and 1969. Section III describes the degree of change over the three-year period in selected personal characteristics of the respondents that are presumably related to their labor market behavior, e.g., marital and

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1 The sample was designed to represent the noninstitutional civilian population of men within these age limits. Black men were overrepresented in the sample in approximately a three-to-one ratio in order to provide enough sample cases for statistically reliable estimates. The original sample consisted of about 5,000 individuals, of whom roughly 3,500 were white and 1,500 black. A small number of cases of other races have been eliminated from the data in this report. For further information on sampling, interviewing, and estimating procedures, see Appendix C.

2 Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, Ruth S. Spitz and Associates, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of Men, vol. 1, U.S. Department of Labor, Manpower Research Monograph no. 15 (Washington: U.S. Government Printing Office, 1970); Herbert S. Parnes, Karl Egge, Andrew I. Kohen, and Ronald M. Schmidt, Pre-Retirement Years, vol. 2 (1970).

family characteristics, health, and vocational training. Some of these data are of interest in their own right, since information about gross flows from one status to another is very limited. But in addition, analysis of the way in which these changes are related to other characteristics of the respondents will be useful in interpreting some of the data in subsequent chapters. For example, knowledge of the way in which changes in health over the three-year period differ as between white and black men and among men of different ages will help to explain whatever intercolor or interage variations are observed in labor market experience. Section IV records the changes in family income and assets over the three-year period.

Chapter Two analyzes changes in labor force and employment status between 1966 and 1969. Chapter Three discusses the amount and character of job shifting over the three-year period. Chapter Four analyzes variation in 1969 average hourly earnings and of the relative increase in earnings between the 1967 and 1969 surveys. The extent and incidence of collective bargaining coverage among wage and salary earners in 1969 are also described. Chapter Five, the final chapter, summarizes the major findings and makes some concluding observations about the future course of the study.

The tables in this report have a number of characteristics which should be borne in mind by the reader. Perhaps the most important of these is that in calculating percentage distributions, cases in which no information was obtained have been excluded from the base. Where percentages do not add to 100, it is because of rounding error. Where absolute figures do not add up to their indicated total, the difference (unless otherwise noted) is attributable primarily to cases for which no information was obtained. For an elaboration of these points, as well as a description of additional characteristics of the tabulations, the reader is referred to Appendix A.

II ATTRITION, 1966-1969

Of the 5,027 men who were initially interviewed in 1966, over nine-tenths (92.5 percent) responded to a mail questionnaire in mid-1968 that was designed to obtain summary information on employment experience during the preceding 12 months.[3] Almost nine-tenths of the original sample were reinterviewed in 1969 (86.8 percent). Thus, in the three-year period between the first and fourth surveys, the original sample shrank by 13.2 percent (Table 1.1). Much of this however, was attributable to death; less than 8 percent of the original sample had dropped out by

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3 In the first reinterview of 1967, 94.2 percent of the original respondents were resurveyed. See Ibid., 2:41.

Table 1.1 Attrition Rate, 1968 and 1969 Surveys, by Reason and Color: All Respondents Interviewed in 1966

Color	Total number 1966 (thousands)	1968 Mail survey					1969 Interview survey				
		Percent deceased	Noninterview rate			Total attrition rate	Percent deceased	Noninterview rate			Total attrition rate
			Refused	Unable to locate[b]	Total			Refused	Unable to locate[b]	Total	
All respondents[a]	15,020	4.0	2.3	1.2	3.5	7.5	5.9	4.3	3.0	7.3	13.2
Whites	13,615	4.0	2.3	1.0	3.3	7.4	5.9	4.3	2.8	7.1	13.0
Blacks	1,305	3.0	2.9	2.8	5.7	8.7	5.4	4.1	4.7	8.8	14.2

a Includes a small number of nonwhites other than Negroes.

b Includes a small number of cases in which the respondent was inaccessible to the interviewer even though his location was ascertained.

1969 as the result of refusal (4.3 percent), inability to be located (2.0 percent), or for other reasons (1.2 percent), e.g., institutionalization. The total attrition rate of blacks was slightly higher than that of whites (14.2 versus 13.0 percent).[4] Black men had slightly lower rates of attrition due to death (5.4 versus 5.9 percent) and to refusal to be interviewed (4.1 versus 4.3 percent) but a higher disappearance rate attributable to inability to locate and other reasons (4.7 versus 2.8 percent).

A detailed breakdown of the noninterview rate in 1969 by selected demographic, social, and economic characteristics is presented in Appendix E. The attrition rate attributable to factors other than death was higher than average among men who were nonmarried in 1966, among men who were out of the labor force in 1966 or who had experienced substantial periods out of the labor force in 1965, among those working in the construction industry in 1966 (whites only), and among home-renters as distinguished from home-owners. The extent of variation in attrition, however, is not very great. None of the characteristics studied is associated with a noninterview rate that departs from the average by more than five or six percentage points and most are within the range of two or three. Variations in nonresponse, therefore, are not likely to lead to serious biases in the analysis. However, we must keep in mind that measures of the extent of job changing are probably understated by our data, since men who disappeared from the sample because they could not be located are more likely than others to have made such moves.

III CHANGES IN SELECTED PERSONAL CHARACTERISTICS, 1966 TO 1969

On the basis of cross-sectional data it is clear that such factors as marital status, health, and training bear strong relationships to several aspects of the labor market behavior and experience of men. Portions of the present report will be concerned with the question whether such relationships are observed longitudinally, that is, whether changes in these variables over time are associated with changes in labor market status. It is therefore desirable at this point to examine the extent and character of the changes that have taken place in these explanatory variables over the three years covered by the data and to see how they are related to age and color.

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4 In the two previous reports of this series, the term "blacks" was used to refer to the category generally described in official government statistics as "Negro and other races." In other words, it included other nonwhite groups as well as Negroes. In the present report the former have been removed from the category, so that "blacks" refers exclusively to Negroes. Since the number of sample cases of other nonwhites is too small for separate analysis, they are not included in any of the tables of this report.

Marital Status

As might have been expected, men in this age category experience very little change in marital status over a three-year period. Using the category "married" to refer to all men who are married (including both "spouse present" and "spouse absent"), and "nonmarried" to refer to all others (separated, widowed, divorced, and never-married), only 2.6 percent of the white men and 7.3 percent of the black men changed from one to the other of these categories between the initial survey and the 1969 interview (Table 1.2). The change from married to nonmarried was more than twice as common in each color group as the reverse. Black men were almost three times as likely as white men to make each of these types of change.

Although marital status was quite stable over the three-year period, there was substantial change in another dimension of family structure--the number of children living in the household. Fully one-third of both the white men and the black men experienced a change in this respect (Table 1.3). A great majority of these had fewer children living with them in 1969 than in 1966, but about 6 percent of the black men and 3 percent of the white men had larger families in 1969.

Health

Respondents were asked an identical question with respect to health in both the 1966 and 1969 surveys: "Does your health or physical condition (a) keep you from working? (b) limit the kind of work you can do? (c) limit the amount of work you can do?" For purposes of the analysis in this volume, respondents in each year are categorized into two groups: those whose health or physical condition affected their work, and all others.

Identical proportions of both white and black men (62 percent) had no health problems affecting their work in either 1966 or 1969 (Table 1.4). This proportion varied inversely with age, again with virtually no variation between blacks and whites. The fraction of men free of health problems in both years ranged between about seven-tenths for those whose 1966 age was between 45 and 49 years to only about one-half for those between 55 and 59.

At the other extreme almost one-fifth of the men had health problems in both years. Here, too, there is a pronounced relationship with age, the proportion doubling between the youngest and oldest of the three five-year age categories. The remaining one-fifth of the men in each color group reported a change in health condition: about 13 percent for the worse and about 8 percent for the better.

The similarity of the data for blacks and whites in Table 1.4 is remarkable. There is virtually no other characteristic that we have examined for which the differences between the two color groups are as

Table 1.2 Comparison of Marital Status, Survey Weeks 1966 and 1969 by Color

(Percentage distribution)

Comparison	WHITES	BLACKS
Married, 1966 and 1969	89.1	77.0
Not married, 1966 and 1969	8.3	15.7
Married, 1966, not married 1969	1.8	5.2
Not married 1966, married 1969	0.8	2.1
Total percent	100.0	100.0
Total number (thousands)	11,839	1,118

Table 1.3 Comparison of Number of Children in Household, Survey Weeks 1966 and 1969, by Color: Respondents Living in Nonfarm Areas in 1966

(Percentage distribution)

Comparison	WHITES	BLACKS
Same number in 1966 and 1969	67.0	68.5
More in 1969 than in 1966	3.1	5.9
Fewer in 1969 than in 1966	29.9	25.6
Total percent	100.0	100.0
Total number (thousands)	10,660	1,038

Table 1.4 Comparison of Health Condition, 1966 and 1969 Survey Weeks, by Age of Respondent and Color

(Percentage distribution)

Age	Health affected work in:				Total percent	Total number (thousands)
	1966 and 1969	1966, not in 1969	1969, not in 1966	Neither 1966 nor 1969		
	WHITES					
45-49	13	8	10	68	100	4,382
50-54	17	8	12	62	100	4,048
55-59	25	6	16	52	100	3,409
Total or average	18	8	13	62	100	11,839
	BLACKS					
45-49	14	8	9	69	100	416
50-54	18	7	13	63	100	399
55-59	26	8	15	51	100	306
Total or average	19	8	12	62	100	1,118

Table 1.5 Incidence and Duration of Training Since 1966 Survey, by Color

(Percentage distribution)

Incidence and duration	WHITES	BLACKS
No training	83	91
Some training	17	9
1-14 weeks	11	5
15 or more weeks	5	4
Total percent	100	100
Total number (thousands)	11,839	1,118

small. This is all the more noteworthy in view of the fact that black men tend to be concentrated in the lower occupational levels, in which the incidence of health problems is higher.[5] As we have observed previously,[6] we are not at all confident that the measure of health and physical condition that has been used in this study reflects the actual difference between black and white men. We suspect cultural biases which may (1) cause black men to recognize only limitations that are quite severe, or (2) cause white men to recognize a wider range of ailments as "health problems."

Training

At the time of the 1966 survey, about half of the total number of men in the sample had at one time or another taken some kind of vocational training outside the regular school system. The proportion was substantially higher, however, for white than for black men (51 versus 30 percent). In the three years between the 1966 and 1969 surveys, 17 percent of the white men and 9 percent of the black men participated in training programs (Table 1.5). It is interesting that these proportions are about one-third as large as the proportion who in the first survey had reported such training over their entire careers. This could reflect the greater prevalence of training programs in recent years or the fact that a good portion of the training that takes place each year involves men who have previously been through other programs. It may also be that faulty recall resulted in the understatement of the lifetime amount of training reported in 1966. In any case, it is noteworthy that the disparity between blacks and whites in the amount of training they have received during this three-year period is even greater than in their lifetime training as measured in 1966. In the latter case, black men were three-fifths as likely as white men to have participated in training programs, while over the three-year period the corresponding proportion was only slightly higher than half. Nevertheless, the training that blacks received during this period was of longer average duration than that received by whites.

IV CHANGES IN INCOME AND ASSETS

Total Family Income

Between calendar years 1965 and 1968 median family income increased by $1,421 for white men and by $958 for black men, reaching levels of

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5 Parnes et al., Pre-Retirement Years, 1:42.

6 Ibid., p. 31.

$10,228 and $5,889, respectively (Table 1.6). Although the absolute increase was smaller for blacks than whites, their relative increase was greater (19 versus 16 percent). Thus, the relative intercolor difference in 1968, although substantial, had shrunk slightly as compared with 1965. In the earlier year median black income was 56.0 percent of that of white; by 1968 it had risen to 57.6 percent. Although modest, this improvement in the relative income position of the black families is encouraging because black men were more likely than white men to have withdrawn from the labor force over the three-year period (see Chapter Two).

The improvement of average income during the period obscures the fact that a substantial proportion of the men suffered a decrease. Table 1.7 classifies the respondents according to total family income in 1965 into $1,000 intervals between $2,000 and $20,000. On this basis, 21 percent of the white men dropped from their 1965 category to a lower one in 1968, such decreases being more common among those with high 1965 incomes. About one-third (32 percent) either remained in the same category or advanced one interval over the three-year period. The remaining 46 percent moved up two or more intervals. This means that almost half of the respondents experienced an increase in family income of greater than $1,000.

Among black men, the proportion whose income declined by one or more intervals was identical to that of the white. Black men were more likely than white to remain in the same income category or advance to the next higher (42 versus 32 percent) but were less likely to advance two or more intervals (37 versus 46 percent).

The incidence of poverty Using an adaptation of the poverty criteria developed originally by Mollie Orshansky of the Social Security Administration, Table 1.8 shows the incidence of poverty both in 1965 and 1968 among respondents who lived in urban areas in 1966 as well as the gross movement across the poverty line between those two years.[7]

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7 For a description of the method of defining the poverty line, see Mollie Orshansky, "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin 28 (January 1965):3-29. It was not possible to replicate all the aspects of the Orshansky measure for purposes of this study. For example, we have eliminated the farm-nonfarm distinction and have confined the universe for this analysis to those men living in nonfarm areas in 1966 because our data do not permit us to differentiate between farm and nonfarm residents in 1969. Moreover, we have measured the size of each respondent's family on the basis of his marital status and the number of children living in the household. Finally, in deciding whether a particular family is "in poverty" we have used total family income before taxes, even though the Orshansky threshold incomes are net of taxes. We have updated the Orshansky income levels, which were originally derived from 1963 data, by applying the percentage increase in the consumer price index that had occurred between 1963 and 1965 and between 1963 and 1968.

Table 1.6 Total Family Income, 1965 and 1968, by Color

(Percentage distribution)

Income	WHITES		BLACKS	
	1965	1968	1965	1968
Less than $3,000	9	7	28	22
$3,000-4,999	9	8	23	19
$5,000-6,999	15	11	20	21
$7,000-8,999	19	14	14	16
$9,000-10,999	15	16	5	9
$11,000-12,999	13	12	4	5
$13,000-14,999	6	9	2	3
$15,000-16,999	4	8	1	2
$17,000-18,999	2	4	1	1
$19,000 or more	7	11	1	2
Total percent	100	100	100	100
Total number (thousands)	11,839	11,839	1,118	1,118
Median income[a]	$ 8,807	$10,228	$4,931	$5,889

a Medians computed from grouped data.

Table 1.7 Total Family Income in 1965, by Total Family Income in 1968 and Color

(Percentage distribution)

Income in 1965	Income in 1968									
	WHITES					BLACKS				
	Percent in lower category[a]	Percent in same or next higher category[a]	Percent advancing at least two categories[a]	Total percent	Total number (thousands)	Percent in lower category[a]	Percent in same or next higher category[a]	Percent advancing at least two categories[a]	Total percent	Total number (thousands)
Less than $2,000	0	63	37	100	472	0	70	30	100	145
$2,000 - 2,999	10	45	46	100	370	21	50	29	100	100
3,000 - 3,999	18	39	43	100	401	20	47	34	100	109
4,000 - 4,999	22	28	50	100	468	15	39	46	100	96
5,000 - 5,999	11	44	45	100	610	14	38	48	100	87
6,000 - 6,999	18	26	56	100	753	30	28	43	100	95
7,000 - 7,999	20	30	50	100	947	29	44	27	100	81
8,000 - 8,999	19	31	50	100	785	41	24	34	100	46
9,000 - 9,999	22	29	49	100	739	42	14	44	100	29
10,000 - 10,999	20	27	53	100	681	b	b	b	b	19
11,000 - 11,999	18	24	58	100	603	b	b	b	b	18
12,000 - 12,999	30	22	48	100	572	b	b	b	b	21
13,000 - 13,999	34	18	48	100	396	b	b	b	b	8
14,000 - 14,999	49	18	34	100	202	b	b	b	b	7
15,000 - 15,999	38	20	43	100	249	b	b	b	b	3
16,000 - 16,999	41	10	49	100	152	b	b	b	b	8
17,000 - 17,999	35	4	61	100	105	b	b	b	b	6
18,000 - 18,999	31	26	42	100	129	b	b	b	b	1
19,000 - 19,999	b	b	b	b	91	b	b	b	b	1
20,000 or more	28	72	0	100	547	b	b	b	b	6
Total or average	21	32	46	100	11,839	21	42	37	100	1,118

a Percentages computed for respondents whose income was ascertained in both years.

b Percentages not shown where the base is fewer than 25 sample cases.

Table 1.8 Gross Changes in Poverty Status, 1965 to 1968, by Color: Respondents Living in Nonfarm Areas in 1966

(Percentage distribution)

Poverty status, 1965 and 1968	WHITES	BLACKS
Poor in 1965	4.3	17.9
Poor in 1968	1.7	9.7
Nonpoor in 1968	2.0	7.0
Not ascertained in 1968	0.6	1.2
Nonpoor in 1965	73.7	61.5
Poor in 1968	1.5	2.8
Nonpoor in 1968	63.6	49.6
Not ascertained in 1968	8.6	9.1
Not ascertained in 1965	21.9	20.6
Poor in 1968	0.9	2.3
Nonpoor in 1968	14.6	13.9
Not ascertained in 1968	6.4	4.4
Total percent	100.0	100.0
Total number (thousands)	10,660	1,038

In 1965 at least 4.3 percent of the urban households headed by white men and 17.9 percent of those headed by black men were below the poverty threshold.[8] By 1968 these percentages had dropped to 4.1 percent of the white respondents and 14.8 percent of the black respondents. The gross flows across the poverty line, although small, were nevertheless larger than the net change reflected in the above figures. Of the whites, at least 2 percent had moved from poverty in 1965 to nonpoverty in 1968 while 1.5 percent had moved in the opposite direction. In the case of the blacks, 7 percent had moved out of poverty while 2.8 percent had moved into it. Expressing these figures somewhat differently, of all those in poverty in 1965, 46 percent of the whites and 39 percent of the blacks had escaped by 1968; of the nonpoor in 1965, 2 percent of the whites and 4 percent of the blacks had slipped into poverty by 1968. Thus, over the three-year period under consideration blacks were both more likely than whites to fall into poverty and less likely than whites to escape from it. Blacks, of course, were also far more likely than whites to be poor in both years (9.7 versus 1.7 percent).

Income Other than Respondent's Earnings

Among middle-aged men, sources other than the earnings of the household head account for a not inconsequential proportion of total family income (Table 1.9). Moreover, this proportion grew for blacks and whites over the three-year period, reflecting the declining labor market activity of the respondents (see Chapter Two) and possibly greater labor market activity of secondary household members generated by improvements in general economic conditions. The median "other income" figure for white families in 1965 was $1,282 or 15 percent of median total family income. By 1968 this figure had grown by 50 percent to $1,929, which represented 19 percent of family income. Among blacks the increase between 1965 and 1968 was only 30 percent, from $686 to $891. As a proportion of total family income the 1965 "other income" figure stood at 14 percent, rising to 15 percent by 1968. Despite lower levels among blacks for both total family income and "other income," it is interesting that the relationship between the two measures on average, is not very different from that among the whites.

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8 In presenting these percentages we are departing from our usual practice of eliminating the cases of "no data" from the total, since there is reason to believe that nonresponse on the income questions is disproportionately greater among high income than among low income respondents. Consequently, if cases of "no data" were eliminated from the base in calculating the percentages there would be an upward bias in the estimate of the number of poverty families. Of course, on the assumption that there are some instances of poverty among respondents who did not report income, the estimates that we have calculated are downward biased and thus are conservative estimates of the number of persons in poverty in the two years.

Table 1.9 Total Family Income Less Earnings of Respondent, 1965 and 1968, by Color

(Percentage distribution)

Total family income less earnings of respondent	WHITES		BLACKS	
	1965	1968	1965	1968
Less than $300	30	26	41	38
$300-1,399	22	19	25	21
$1,400-3,999	25	24	22	24
$4,000 or more	23	31	12	16
Total percent	100	100	100	100
Total number (thousands)	11,839	11,839	1,118	1,118
Median income[a]	$ 1,282	$ 1,929	$ 686	$ 891

a Medians computed from grouped data.

Net Family Assets

The net asset position of white men in 1966 was substantially higher than that of black men and improved substantially more in relative terms between 1966 and 1969 than did that of the blacks (Table 1.10). Median assets among white respondents were $12,045 in 1966 as compared with only $1,038 for the blacks. Over the three-year period the assets of the whites had increased by 50 percent to $18,044, in contrast to a mere 5 percent rise in the assets of the blacks to $1,088. To take but one additional indicator, in 1966 over one-fourth (26 percent) of white men had assets of $25,000 or more in contrast to only 4 percent of the black. By 1969 the proportion of white men with $25,000 or more in assets had risen to about two-fifths (39 percent) while the corresponding proportion of black men remained the same.

Despite the substantial increase in median assets of the white men, a considerable number experienced a decrease (Table 1.11). In every asset category except the lowest and the three highest, at least one-fifth of the white respondents experienced a decrease. In the case of the blacks, only the lowest asset category is an exception to this generalization.

Table 1.10 Net Family Assets, Survey Weeks 1966 and 1969, by Color

(Percentage distribution)

Net family assets	WHITES		BLACKS	
	1966	1969	1966	1969
Less than $500	14	11	46	43
$500-999	2	1	4	3
$1,000-2,499	5	4	8	6
$2,500-5,199	9	7	11	10
$5,200-7,499	8	5	7	10
$7,500-9,999	7	6	7	8
$10,000-13,199	10	8	6	7
$13,200-24,999	20	19	7	9
$25,000 or more	26	39	4	4
Total percent	100	100	100	100
Total number (thousands)	11,839	11,839	1,118	1,118
Median assets[a]	$12,045	$18,044	$1,038	$1,088

a Medians computed from grouped data.

Table 1.11 Net Family Assets in 1966 Survey Week, by Net Family Assets in 1969 Survey Week and Color

(Percentage distribution)

Net family assets 1969	Net family assets 1966									
	Less than $500	$500-999	$1,000-2,499	$2,500-5,199	$5,200-7,499	$7,500-9,999	$10,000-13,199	$13,200-24,999	$25,000 or more	Total or average
	WHITES									
Less than $500	66	31	13	9	5	4	2	1	1	11
$500-999	5	18	7	2	1	0	0	0	a	1
$1,000-2,499	8	18	23	9	6	0	0	2	a	4
$2,500-5,199	8	15	32	25	11	7	4	2	1	7
$5,200-7,499	2	6	10	24	18	9	4	2	0	5
$7,500-9,999	5	3	3	8	24	15	9	2	1	6
$10,000-13,199	1	3	2	13	14	35	22	6	a	8
$13,200-24,999	2	6	9	9	18	26	48	42	7	19
$25,000 or more	2	0	0	1	4	4	11	44	90	39
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,175	136	413	733	644	601	821	1,688	2,245	11,839
	BLACKS									
Less than $500	81	63	16	17	7	15	7	0	14	43
$500-999	3	16	5	6	0	3	0	0	0	3
$1,000-2,499	6	12	18	6	6	2	0	0	5	6
$2,500-5,199	2	6	30	23	14	12	12	5	0	10
$5,200-7,499	3	3	16	24	24	11	4	9	0	10
$7,500-9,999	2	0	7	9	19	18	20	7	4	8
$10,000-13,199	1	0	3	8	16	28	16	8	9	7
$13,200-24,999	1	0	4	7	14	9	38	41	4	9
$25,000 or more	0	0	1	1	0	3	4	30	65	4
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	422	32	71	99	65	63	59	64	36	1,118

a Less than one-half of one percent.

CHAPTER TWO

LONGITUDINAL MEASURES OF LABOR FORCE PARTICIPATION AND UNEMPLOYMENT

From cross-sectional data it is clear that the labor force participation of men over 40 declines with advancing age. The present set of data provides an opportunity to examine this process by "aging" a single set of individuals over a three-year period. In this chapter we examine the extent of change in labor force exposure and unemployment experience of our sample of middle-aged men over the period 1966 to 1969. We begin with an examination of the extent of net and gross change in labor force and employment status between the survey dates in 1966 and 1969. In the second section of the chapter we relate the age of the respondents and their health characteristics to changes in their labor market activity over the three-year period as measured by (a) change in labor force status between the survey week of 1966 and 1969, (b) average number of weeks in the labor force in a 12-month period preceding each survey, and (c) average number of hours per week usually worked during each of the same 12-month periods. The third section of the chapter is devoted to a brief examination of the respondents' unemployment experience over the three-year period.

I NET AND GROSS CHANGES IN CURRENT LABOR FORCE AND EMPLOYMENT STATUS, 1966 TO 1969

The decline in labor force participation since the initial survey in 1966 which had already become perceptible by the time of the 1967 interview[1] became more pronounced by 1969. Over the three-year period the labor force participation rate of white men dropped by 3.8 percentage points, while that of black dropped by 4.5 percentage points (Table 2.1). As a consequence, the intercolor difference in labor force participation widened by somewhat more than half a percentage point. As of the 1969 survey date, about 91 percent of the white men and 88 percent of the black men were in the labor force.

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1 Herbert S. Parnes, Karl Egge, Andrew I. Kohen, and Ronald M. Schmidt, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of Men, vol. 2, U.S. Department of Labor, Manpower Research Monograph no. 15 (Washington: U.S. Government Printing Office, 1970), p. 8.

Table 2.1 Labor Force and Employment Status in 1966 and 1969 Survey Weeks, by Color

(Percentage distribution)

Labor force and employment status	WHITES		BLACKS	
	1966	1969	1966	1969
Employed	93.6	89.9	90.4	86.1
Unemployed	1.3	1.2	1.8	1.6
Out of labor force	5.1	8.9	7.8	12.4
Total percent	100.0	100.0	100.0	100.0
Total number (thousands)	11,839	11,839	1,118	1,118
Labor force participation rate	94.9	91.1	92.2	87.7
Unemployment rate	1.4	1.3	2.0	1.8

Although there was some evidence of a slight worsening of the unemployment situation between 1966 and 1967,[2] it is noteworthy that the same is not true when one compares 1966 with 1969. Indeed, if anything, the situation had improved somewhat--by one-tenth of one percent for the white men's unemployment rate and by two-tenths of one percent for the blacks'. Of course, over the three-year period economic conditions in the country had improved more substantially than these figures would suggest. The seasonally adjusted national unemployment rate for males between 25 and 54 years of age was 2.2 percent in June of 1966 but only 1.6 percent in June of 1969.[3] It seems reasonable to conclude that had the economic climate not improved between 1966 and 1969 the decline in labor force participation of the respondents would have been even greater and there would have been a worsening of their unemployment experience.

Gross Changes

While gross flows into and out of the labor force and between employment and unemployment were somewhat larger than the net changes that have been described, such movements were nonetheless limited (Table 2.2). Less than 9 percent of both the whites and the blacks

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2 Ibid.

3 U.S. Bureau of Labor Statistics, Monthly Labor Review, September 1966, Table A-3, p. 1026 and September 1969, Table 7, p. 79.

reported a change in labor force or employment status between the survey dates in 1966 and 1969. Almost nine-tenths of the white men (88 percent) and over four-fifths of the black (84 percent) were employed at both of these times. As might be surmised from the net change data, the principal component of the gross flows was a change from employed in 1966 to out-of-the-labor-force in 1969. Such moves were made by 4.5 percent of the white men and 5.2 percent of the black. There was a small return flow--about 1 percent of each of the color groups--between the two weeks under consideration.

Table 2.2 Comparative Labor Force and Employment Status, 1966 and 1969 Survey Weeks, by Color

(Percentage distribution)

Comparative labor force and employment status	WHITES	BLACKS
Employed both years	88.0	84.0
Employed 1966, unemployed 1969	1.0	1.2
Employed 1966, out of labor force 1969	4.5	5.2
Unemployed both years	0.1	0.3
Unemployed 1966, employed 1969	0.9	1.3
Unemployed 1966, out of labor force 1969	0.3	0.3
Out of labor force both years	4.1	6.9
Out of labor force 1966, employed 1969	1.0	0.8
Out of labor force 1966, unemployed 1969	0.1	0.1
Total percent	100.0	100.0
Total number (thousands)	11,839	1,118

II CORRELATES OF CHANGE IN LABOR FORCE PARTICIPATION

Both the survey week labor force participation rate and the average number of weeks per year in the labor force show a decline between the 1966 and 1969 interviews (Table 2.3). As has been seen, based upon status in survey week, more men left the labor force between the two terminal dates than reentered it. Number of weeks in the labor force in the 12-month period preceding each survey shows a slightly declining trend for both whites and blacks. For the white men, mean number of weeks in the labor force was 49 in 1965, rose to 50 in the 12 months preceding the 1967 survey, and then declined to 49 and ultimately to 48 in the next two periods. In the case of blacks the pattern was very similar although at a slightly lower level. The reason for the increase

Table 2.3 Selected Longitudinal Measures of Labor Market Participation, 1966-1969, by Age in 1966 and Color

Measure	WHITES				BLACKS			
	45-49	50-54	55-59	Total or average	45-49	50-54	55-59	Total or average
Total number (thousands)	4,382	4,048	3,409	11,839	416	399	306	1,118
Comparative labor force status, 1966 and 1969 survey weeks								
In labor force both years	94.4	92.6	81.3	90.0	89.1	89.3	79.5	86.6
Out of labor force both years	2.3	3.2	7.3	4.1	3.7	6.5	12.5	7.1
In labor force 1966, out 1969	2.5	3.3	9.8	4.8	5.5	3.8	7.6	5.5
Out of labor force 1966, in 1969	0.8	1.0	1.5	1.1	1.7	0.4	0.5	0.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labor force participation rate, survey week, 1966	96.9	95.8	91.1	94.8	94.6	93.1	87.1	92.1
Labor force participation rate, survey week, 1969	95.2	93.6	82.8	91.1	90.8	89.7	80.0	87.7
Mean number of weeks in labor force[a]								
1965	50	49	48	49	49	49	45	48
1966-1967	51	50	49	50	50	50	48	49
1967-1968	50	49	48	49	47	48	45	47
1968-1969	49	49	45	48	48	48	45	47
Mean number of hours usually worked per week[a,b]								
1965	45	45	45	45	42	42	42	42
1966-1967	44	44	44	44	42	42	40	42
1967-1968	43	43	43	43	41	41	39	40
1968-1969	45	45	44	45	44	42	42	43

a The reference period is calendar 1965 for the 1966 survey and the 12-month period preceding the survey dates in 1967, 1968, and 1969.

b Universe is restricted to men who worked at least one week in all four periods. There are 6,556 thousand white men and 654 thousand black men in this universe.

in the 12-month period prior to the 1967 survey as compared with calendar year 1965 may be attributable to the substantial improvement in employment opportunities between the two periods.[4]

Among men who worked at least a week in each of the four periods, there was no decline in weekly hours comparable to the decrease in labor force participation.[5] For both blacks and whites there was a downward trend between calendar 1965 and the 12-month period preceding the 1968 survey, but a reversal occurred over the next 12 months so that average weekly hours for that period were as high as in 1965 for white men and actually higher than in 1965 for black (Table 2.3). Moreover, neither in the cross-section nor longitudinally are there systematic relationships between weekly hours of work on the one hand and age or health condition on the other (Tables 2.3 and 2.4). It is evident that reductions in labor supply among middle-aged men attributable to aging and declining health are more commonly effected by either permanent or temporary withdrawal from the labor force than through reduced hours of work per week.

Age

As might be expected, the decrease in labor force participation over the period differs as among the three five-year age categories into which the sample has been divided. Although the decline is perceptible in each age category for both color groups, it is considerably more pronounced in the oldest category than in either of the other two. It should be kept in mind in this connection that the oldest men in the sample had attained age 62 by 1969, and thus were eligible for retirement benefits under the Social Security Act as well as for early retirement under many private pension plans.

To illustrate the foregoing generalizations, the survey week labor force participation rate declined by 1.7 percentage points for the youngest group of whites, by 2.2 percentage points for the intermediate group, and by 8.3 percentage points for the oldest group. Annual number of weeks in the labor force declined very little for the two younger age groups of white men but by three weeks for the oldest.

For black men the general pattern is fairly similar to that of the whites, except that the relationships are less regular and also less pronounced. While for the total sample the declining labor force

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4 The average unemployment rate in calendar 1965 was 4.5 percent, as compared with 3.7 percent for the period July 1966 to June 1967; 3.8 percent for July 1967-June 1968; and 3.5 percent for July 1968-June 1969 Monthly Labor Review, May 1967, p. 77; September 1967, p. 88; September 1968, p. 84; September 1969, p. 79.

5 Respondents were asked how many hours per week they usually worked during those weeks in which they were employed in the relevant time period.

Table 2.4 Selected Longitudinal Measures of Labor Market Participation, 1966-1969 by Comparative Health Condition, 1966-1969, and Color

Measure	WHITES					BLACKS				
	Health affected work in:				Total or average	Health affected work in:				Total or average
	1966 and 1969	1966, not in 1969	1969, not in 1966	Neither 1966 nor 1969		1966 and 1969	1966, not in 1969	1969, not in 1966	Neither 1966 nor 1969	
Total number (thousands)	2,092	920	1,497	7,254	11,839	206	84	132	687	1,118
Comparative labor force status, survey week 1966-1969:										
In labor force both years	64.5	95.4	83.2	98.4	90.0	50.1	97.2	74.8	98.9	86.8
Out of labor force both years	20.9	0.0	0.8	0.4	4.1	34.8	0.0	1.1	0.4	6.9
In labor force 1966, out 1969	11.1	2.6	16.1	1.2	4.8	13.3	0.9	24.1	0.2	5.5
Out of labor force 1966, in 1969	3.4	2.0	0.0	0.2	1.1	1.8	1.9	0.0	0.6	0.9
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labor force participation rate, survey week, 1966	75.6	98.0	99.3	99.6	94.8	63.4	98.1	98.9	99.1	92.3
Labor force participation rate, survey week 1969	67.9	97.4	83.2	98.6	91.1	51.9	99.1	74.8	99.5	87.7
Mean number of weeks in labor force:[a]										
1965	41	50	50	51	49	36	49	49	51	48
1966-1967	46	51	50	51	50	42	50	49	51	49
1967-1968	46	50	48	50	49	39	48	46	49	47
1968-1969	43	50	42	50	48	39	50	40	51	47
Mean number of hours usually worked per week[a,b]										
1965	44	46	45	45	45	43	41	43	42	42
1966-1967	43	45	44	44	44	41	42	41	42	42
1967-1968	43	43	42	43	43	39	38	40	40	40
1968-1969	43	44	44	45	45	40	42	40	43	43

a The reference period is calendar 1965 for the 1966 survey and the 12-month period preceding the survey dates in 1967, 1968, and 1969.

b Universe is restricted to men who worked at least one week in all four periods. There are 6,556 thousand white men and 654 thousand black men in this universe.

participation is at least as great for black men as for white, this is not true of all age categories. Among the men who in 1966 were between 55 and 59 years of age participation declined perceptibly more for the whites than for the blacks.

Health Condition

The trend in labor force participation over the three-year period was considerably more strongly related to the respondents' health condition and changes therein than to their age (Table 2.4). Focusing first on the white men, the decline in survey week labor force participation between 1966 and 1969 was only 1 percentage point those who reported no health problem in either year, in contrast with 7.7 percentage points for those who had health problems in both years and 16.1 percentage points for those who reported no health problems in 1966 but health limitations in 1969. Similarly, among healthy men the number of weeks in the labor force declined by only one between 1965 and the 12 months preceding the 1969 survey. In contrast, among those who developed health problems between 1966 and 1969 the decrease was eight weeks over that same time period. Interestingly, among those whose health limited their work activity both in 1966 and 1969 average number of weeks in the labor force over the three-year period actually increased. This may mean that improvement in economic conditions has a disproportionately beneficent effect upon the employment opportunities of men with persistent health problems.

The generalizations that have been made with respect to white men in the sample are by and large applicable also to the blacks. The largest decline in survey week participation rate occurred among those men who had developed health problems between 1966 and 1969. The next largest decrease occurred among those whose health was bad in both years, although mean number of weeks in the labor force actually increased for this category of men. Once again the evidence suggests the possibility that improvements in general economic conditions over the period had differentially favorable effects upon men with persistent health problems.

Intercolor differences among healthy men Perhaps the most important revelation of the data in Table 2.4 is the fact that there was virtually no decline in survey week labor force participation or in weeks in the labor force among black men who reported no health problem in either year. Despite the lower overall level of labor market participation of black men than of white men, when only those of each color group who report no health problems are compared, the extent of participation of blacks is by most measures as high as that of whites. For example, in 1966 the labor force participation rate of black men with no health problem in either year was 99.1 percent as compared with 99.6 percent for white men. Between 1966 and 1969 the decline for healthy white men was 1 percentage point whereas the participation rate for healthy black men actually increased by four-tenths of 1

percentage point so that the 1969 labor force participation rates for healthy blacks and whites were 99.5 percent and 98.6 percent, respectively.[6] In terms of number of weeks in the labor force, there was no decline between 1965 and the 12-month period prior to the 1969 survey for black men, as compared with a one-week decrease in the case of white men. Moreover, in 1969 the mean number of weeks in the labor force for black men was 51 as compared with 50 for the white men.

The Interaction of Health and Age

Comparison of Table 2.5 with Table 2.3 reveals very clearly that the major portion of the cross-sectional relationship between age and labor market participation reflects the correlation between age and health. Consider, for example, the 1969 labor force participation rate for the total sample of white men. This stood at 95.2 percent for the youngest age category and at 82.8 percent for the oldest category--a difference of 12.4 percentage points (Table 2.3). In contrast, when only those men who reported no health problem in 1966 and 1969 are examined (Table 2.5) the difference between the 1969 participation rate of the youngest and oldest age categories is only 2.8 percentage points (99.4 versus 96.6 percent).

In the case of black men the difference is even more pronounced. Among those with no health problem in either 1966 or 1969 the 1969 labor force participation rate is only two-tenths of 1 percent lower for those 55 to 59 years of age than for those 45 to 49 years of age, standing at over 99 percent for both categories! In contrast, for the total sample of black men, there was a 10.8 percentage point difference between the two age groups (90.8 percent for those in the youngest category versus 80.0 percent for those in the oldest). Substantially the same conclusions emerge when one examines number of weeks in the labor force.

The interaction between age and health in their effect on labor market participation prevails not only cross-sectionally but also longitudinally. That is, the tendency for the decline in labor market participation between 1966 and 1969 to be greater for the older men than for the younger men is considerably more pronounced in the total sample than it is among those men who enjoyed continuously good health. To

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6 It is possible that these estimates are biased as the result of attrition. As has been seen in Chapter One, the attrition rate of blacks resulting from inability to locate is greater than that of whites. If it is assumed that those who could not be found were more likely to have left the labor force than those interviewed, the labor force participation recorded by the 1969 sample would overstate the true labor force participation rate for black men in the age category under consideration.

Table 2.5 Selected Longitudinal Measures of Labor Market Participation, 1966-1969 by Age and Color: Respondents Who Reported No Health Problems in Either 1966 or 1969

Measure	WHITES				BLACKS			
	45-49	50-54	55-59	Total or average	45-49	50-54	55-59	Total or average
Total number (thousands)	2,976	2,507	1,772	7,254	286	247	154	687
Comparative labor force status, survey week 1966-1969								
In labor force both years	99.3	98.5	96.4	98.4	98.6	98.6	99.5	98.9
Out of labor force both years	0.2	0.3	0.7	0.4	0.0	1.0	0.0	0.4
In labor force 1966, out 1969	0.4	0.9	2.6	1.2	0.3	0.0	0.5	0.2
Out of labor force 1966, in 1969	0.1	0.3	0.2	0.2	1.1	0.3	0.0	0.6
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Labor force participation rate, survey week 1966	99.7	99.4	99.0	99.6	98.9	98.6	100.0	99.1
Labor force participation rate, survey week 1969	99.4	98.8	96.6	98.6	99.7	98.9	99.5	99.5
Mean number of weeks in labor force:[a]								
1965	51	51	51	51	51	51	51	51
1966-1967	51	51	51	51	51	51	51	51
1967-1968	50	50	50	50	49	49	49	49
1968-1969	51	50	49	50	51	50	50	51
Mean number of hours usually worked per week[a,b]								
1965	45	44	45	45	42	42	41	44
1966-1967	44	44	44	44	43	42	39	42
1967-1968	43	43	42	43	42	41	40	44
1968-1969	46	45	45	45	42	42	40	43

a The reference period is calendar 1965 for the 1966 survey and the 12-month period preceding the survey dates in 1967, 1968, and 1969.

b Universe is restricted to men who worked at least one week in all four periods. There are 6,556 thousand white men and 654 thousand black men in this universe.

illustrate by reference to the survey week labor force participation rates of white men, the oldest age group experienced a decline of 8.3 percentage points as compared with a decline of 1.7 percentage points for the younger age group. Thus the interage differential in the extent of the decline in labor force participation within the total sample was 6.6 percentage points. However, among men who had no health problems in either 1966 or 1969, this interage differential was only 2.1 percentage points.

III UNEMPLOYMENT EXPERIENCE

Reflecting the improvement in general economic conditions between 1965 and 1969,[7] the average number of weeks of unemployment experienced by the respondents decreased over the period (Table 2.6). For white men, the decline was from 1.2 weeks in 1965 to 0.9 weeks in the 12-month period preceding the 1969 survey. For black men the drop was more substantial both in absolute and relative terms--from 2.3 weeks to 1.4 weeks.

Within each color group the decrease in average number of weeks of unemployment occurred in all three of the five-year age categories. The relationship that has been observed in the previous section between age and labor force participation does not prevail between age and unemployment experience. Mean number of weeks of unemployment was exactly the same for all three age categories of white men in the year preceding the 1969 survey. In the previous three years there were minor differences that were, however, not regular. Among black men, those between the ages of 50 and 54 generally experienced less unemployment than those either older or younger, and the decline in unemployment over the three-year period was smaller in the case of the intermediate age group than in either of the others.

There are few, if any, regularities in the relationship between health condition on the one hand and unemployment experience on the other. Among white men, but not among black, those whose health was consistently good in 1966 and 1969 had fewer weeks of unemployment in all four years than those who reported health problems in 1966 or 1969 (Table 2.7). Among whites, men who reported no health limitations in 1966 but whose health did limit work in 1969 were the only group whose unemployment experience worsened over the three-year period; however, among blacks, it was precisely this group that experienced the most marked decline in unemployment over the period. In the case of the blacks, those whose health improved between 1966 and 1969 showed an above-average improvement in unemployment experience; among the whites on the contrary, the 1969 unemployment experience of this group was almost identical to that of 1966. It seems clear that health condition and changes in health condition manifest no such systematic relationship with unemployment as with labor market participation.

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7 See footnote 4, above.

Table 2.6 Mean Number of Weeks of Unemployment in Year Preceding Each Survey,[a] 1966-1969, by Age in 1966 and Color

Age in 1966	Total number (thousands)	Year			
		1965	1966-1967	1967-1968	1968-1969
	WHITES				
45-49	4,382	1.2	0.9	1.0	0.9
50-54	4,048	1.0	1.1	0.8	0.9
55-59	3,409	1.3	0.9	0.9	0.9
Total or average	11,839	1.2	1.0	0.9	0.9
	BLACKS				
45-49	416	2.6	1.5	1.1	1.6
50-54	399	1.4	1.1	1.1	1.2
55-59	306	2.8	2.2	1.7	1.4
Total or average	1,118	2.3	1.5	1.2	1.4

a The reference period is calendar 1965 for the 1966 survey and the 12-month period preceding the survey dates in 1967, 1968, and 1969.

Table 2.7 Mean Number of Weeks of Unemployment in Year Preceding Each Survey[a], 1966-1969, by Comparative Health Condition 1966-1969 and Color

Comparative health condition, 1966-1969	Total number (thousands)	Year			
		1965	1966-1967	1967-1968	1968-1969
	WHITES				
Health affected work in 1966 and 1969	2,092	2.1	1.1	1.3	1.1
Health affected work in 1966, not in 1969	920	1.3	1.6	1.4	1.2
Health affected work in 1969, not in 1966	1,497	1.0	1.5	1.0	1.4
Health did not affect work in either year	7,254	0.9	0.8	0.7	0.8
Total or average	11,839	1.2	1.0	0.9	0.9
	BLACKS				
Health affected work in 1966 and 1969	206	2.1	1.7	0.6	1.5
Health affected work in 1966, not in 1969	84	2.8	2.3	3.2	1.5
Health affected work in 1969, not in 1966	132	2.7	1.9	1.3	0.9
Health did not affect work in either year	687	2.2	1.4	1.2	1.5
Total or average	1,118	2.3	1.5	1.2	1.4

a The reference period is calendar 1965 for the 1966 survey and the 12-month period preceding the survey dates in 1967, 1968, and 1969.

CHAPTER THREE

JOB CHANGES

This chapter is concerned with the job changes made between 1966 and 1969 by men who were employed at both dates and were serving as wage and salary workers at the time of the initial survey. We are particularly interested in ascertaining whether the interfirm moves that occurred over the three-year period might have been anticipated in the light of the characteristics of the respondents' jobs and employment experience. Thus, after examining the extent of interfirm movement during the period, we inquire whether such movement was related to (1) length of service in 1966 job, (2) age, (3) occupation and industry, (4) degree of job attachment, (5) job satisfaction expressed by the respondent in 1966, (6) rate of pay and pension coverage in 1966 job, and (7) unemployment experience in 1965.

I EXTENT OF INTERFIRM MOVEMENT

Approximately one-fifth of the men who were employed as wage and salary earners in 1966 had changed employers by the time of the 1969 survey.[1] Over three-fifths of these job changes were

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1 This includes those few who shifted to self-employment. It should also be noted that our measure of interfirm mobility focuses upon job changers rather than on job changes. In other words, it is based upon a comparison of the respondent's job status in the terminal years. Actually, the coding process involved comparing the respondent's employer in 1966 and 1967, in 1967 and 1968, and in 1968 and 1969. Only if there was no change in any of these two-year comparisons was the respondent classified as having remained with the same employer between 1966 and 1969. If there was at least one change of employer the individual was classified as having made a job change. Thus, a man who moved from Employer A to Employer B between 1966 and 1967 but shifted back to Employer A by 1969 would be treated as having made an employer change. The procedure, therefore, overstates the extent to which respondents were employed with different employers at the survey dates in 1966 and 1969. On the other hand, there is an offsetting downward bias in the measure resulting from attrition. Those men who dropped out of the sample since 1966 because they could not be located almost certainly had above-average rates of geographic (and probably interfirm) mobility.

voluntary.[2] There is virtually no difference between white and black men in either the extent or the character of the job movement that occurred between the two years.

It is noteworthy that the rate of employer change over the three-year period 1966 to 1969 was slightly less than double the rate of change that was observed between 1966 and 1967.[3] This should not be interpreted to mean that the annual rate of job changing declined over that period of time. It is well known that the job shifts that occur during any period of time are not distributed equally among all members of the labor force but tend to be concentrated among a minority of highly mobile individuals. Thus, many of the men who changed jobs between 1966 and 1967 doubtless did so one or more additional times between 1967 and 1969.

II CORRELATES OF INTERFIRM MOVEMENT

Tenure in 1966 Job

One of the axioms of labor mobility is that rates of both voluntary and involuntary job movement decline precipitously with increasing job tenure. The reasons are fairly clear. To begin with, the first several weeks or months on a new job are frequently sufficient to indicate to the worker, to the employer, or to both that a mistake was made in the initial placement. Turnover rates are therefore very high during the first few months of service. Beyond this probationary period the probability of a voluntary separation continues to decline with increasing service as the worker's equity in his job (e.g., seniority rights) increases and as psychological and social ties to the work place become stronger. Involuntary separations also tend to decline as tenure increases because of the protection that seniority affords against layoff.

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2 As noted above, an individual may have changed jobs more than once during the three-year period. For purposes of differentiating between voluntary and involuntary movement, the reason for leaving the job held in 1966 has been coded. Voluntary changes are those initiated by voluntary quits; involuntary changes include both layoffs and discharges. About 2 percent of the white men and almost 3 percent of the black men made job changes the character of which (voluntary or involuntary) could not be ascertained. The proportion of voluntary movement cited in the text above assumes that these undetermined types of moves were distributed in the same proportions as those whose character was ascertained.

3 Herbert S. Parnes, Karl Egge, Andrew I. Kohen, and Ronald M. Schmidt, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of Men, vol. 2, U.S. Department of Labor, Manpower Research Monograph no. 15 (Washington: U.S. Government Printing Office, 1970), p. 23.

The data in Table 3.1 are consistent with these expectations. Among white men who had less than five years of tenure in their jobs as of 1966, the rate of voluntary job change between 1966 and 1969 was over seven times as great as among those with 20 or more years of service. In the case of black men the disparity was almost as great. There are pronounced decreases in voluntary movement as length of service increases up to 20 years in the case of the whites and up to ten years in the case of the blacks. Beyond these limits, the negative relationship between length of service and rate of job movement continues, but is much smaller.

The predicted association between length of service and involuntary job separation is also evident in the data, although it is less pronounced for black men than for white. In the case of whites, those with less than five years of service were three times as likely to suffer involuntary separations as were those with 20 or more years of service. The data suggest that increasing tenure provides additional protection against layoffs only up to 20 years of service. Indeed, those with 20 or more years of service in 1966 show a somewhat higher involuntary separation rate between 1966 and 1969 than those with only 10 to 19 years, although the difference is not statistically significant. Among black men the relative advantage of the long-service workers compared with the short-service workers is somewhat smaller than for whites. Those with five years of service were only slightly more than twice as likely to experience involuntary separations as those with 20 or more years of service.

Because of the profound effect of length of service upon the probability of job separation, and because length of service is also correlated with many of the other variables whose relationship to job change will be examined below, most of the remaining tables in this section will be controlled for length of service in 1966 job.

Age

Overall, there is not a great deal of difference among the three five-year age groups covered by this survey in the extent of job movement between 1966 and 1969 (Table 3.1). In the case of white men the rate of voluntary movement declines somewhat as age increases from 12 percent of those 45 to 49 years of age to 9 percent of those 55 to 59 years of age. The rate of involuntary job change, however, is virtually constant at between 6 and 7 percent for each of the age categories. Among the blacks, the small variation in voluntary movement among the age groups is in the opposite direction of that observed for the whites. Involuntary job change is also slightly greater among the older than among the younger black men, ranging from 5 percent of those 45 to 49 years of age to 8 percent of those 55 to 59 years of age.

Table 3.1 Proportion of Respondents Making Voluntary or Involuntary Change of Employer between 1966 and 1969 Surveys, by Length of Service in 1966 Job, Age, and Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Length of service in job and age in 1966	WHITES				BLACKS			
	Total number (thousands)	Proportion changing voluntarily	Proportion changing involuntarily	Total proportion changing[a]	Total number (thousands)	Proportion changing voluntarily	Proportion changing involuntarily	Total proportion changing[a]
Less than 5 years								
45-49	890	24	10	39	82	18	8	27
50-54	651	29	15	48	79	32	11	51
55-59	418	22	12	37	59	24	9	43
Total or average	1,959	25	12	41	219	25	10	40
5-9 years								
45-49	484	13	6	23	39	8	11	23
50-54	406	18	6	26	32	4	5	12
55-59	297	11	8	20	19	b	b	b
Total or average	1,188	14	6	23	90	5	8	16
10-19 years								
45-49	965	7	4	14	100	6	0	8
50-54	715	5	3	9	83	0	5	5
55-59	461	2	2	6	48	7	12	18
Total or average	2,140	5	3	10	231	4	4	9
20 years or more								
45-49	773	3	3	7	70	2	7	10
50-54	898	2	5	7	86	4	4	9
55-59	790	5	4	11	57	5	2	9
Total or average	2,461	3	4	8	213	4	5	9
Total								
45-49	3,126	12	6	20	293	9	5	16
50-54	2,699	12	7	21	280	11	6	20
55-59	1,975	9	6	17	184	11	8	23
Total or average	7,800	11	6	20	756	10	6	19

a Includes respondents who changed jobs and whose reason for change was not ascertained.

b Percentages not shown where base is fewer than 25 sample cases.

Since age and tenure are positively related, it is important to inquire whether age exercises an independent effect upon job movement within tenure groups. Because of typical employer hiring policies one might hypothesize that, other things being equal, older men would have relatively lower rates of voluntary job change. The present sample, of course, has a very restricted age range and includes no workers below the age at which age discrimination would be expected to occur. Nevertheless, among white men in three of the four length-of-service categories those 55 to 59 years of age have perceptibly lower rates of voluntary movement than those below the age of 55. The exception is the group of men with 20 or more years of service, among whom the voluntary mobility rate of the oldest category is actually higher than that of their younger counterparts. The reasons for this need further exploration, but may be related to early retirement from the job held in 1966 and the subsequent entry into another, possibly part-time job. In the case of black men, the number of sample cases in many of the cells is too small to permit confident conclusions; nevertheless there is no apparent relationship between age and mobility rates within length-of-service categories. It should be noted that in the case of both blacks and whites, the influence of length of service that has been described in the preceding section continues to be manifested within every age category.

Occupation and Industry

There are substantial variations by occupation and by industry in the extent of job movement between 1966 and 1969. Blue-collar workers were considerably more likely than white-collar workers to have made a change (Table 3.2). The difference is 6 percentage points for the white men (21 versus 15 percent) and 9 percentage points for the black (19 versus 10 percent). In the case of white men this occupational difference is almost exclusively attributable to the substantially lower rate of involuntary job changing by white-collar as compared with blue-collar workers. Only 4 percent of white-collar workers in contrast to 8 percent of blue-collar workers made involuntary shifts. White-collar workers were also slightly less likely to make voluntary shifts, but the difference is only one percentage point (10 versus 11 percent). Among black men the higher mobility rates of blue-collar than of white-collar workers are attributable both to a substantial difference in the rate of involuntary movement (6 versus 2 percent) and to a smaller albeit perceptible difference in the rate of voluntary movement (10 versus 7 percent). The intercolor difference in the rate of voluntary job changing among white-collar workers is consistent with previous evidence that black workers are particularly reluctant to leave reasonably good jobs once they have attained them.[4]

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4 Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, Ruth S. Spitz and Associates, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of Men, vol. 1, U.S. Department of Labor, Manpower Research Monograph no. 15 (Washington: U.S. Government Printing Office, 1970), pp. 158-61.

Table 3.2 Proportion of Respondents Making Voluntary or Involuntary Change of Employer between 1966 and 1969 Surveys, by Major Occupation Group of 1966 Job and Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Occupation	Total number (thousands)	Proportion changing voluntarily	Proportion changing involuntarily	Total proportion changing[a]
	WHITES			
White collar	3,013	10	4	15
Professional, technical	957	11	2	15
Managerial	1,079	6	6	14
Clerical	539	5	2	6
Sales	437	23	5	30
Blue collar	4,131	11	8	21
Craftsmen, foremen	2,140	11	11	24
Operatives	1,628	10	4	17
Laborers	363	14	10	25
Service	460	16	2	20
Farm	177	24	18	46
Farmers, farm managers	10	b	b	b
Farm laborers, foremen	167	24	19	47
Total or average	7,800	11	6	20
	BLACKS			
White collar	92	7	2	10
Professional, technical	27	9	6	15
Managerial	13	b	b	b
Clerical	46	2	0	2
Sales	7	b	b	b
Blue collar	500	10	6	19
Craftsmen, foremen	111	12	5	23
Operatives	227	8	6	14
Laborers	162	13	8	24
Service	115	6	6	15
Farm	49	21	16	45
Farmers, farm managers	1	b	b	b
Farm laborers, foremen	47	22	16	47
Total or average	756	10	6	19

a Includes respondents who changed jobs and whose reason for change was not ascertained.

b Percentages not shown where base is fewer than 25 sample cases.

Because of the tenuous nature of the employment relationship in a substantial portion of the construction industry, it is not surprising that the mobility rate between 1966 and 1969 is substantially higher for both black and white men employed in that industry than in any other (Table 3.3). Almost half of the white men who were employed in the construction industry in 1966 were with a different employer in 1969, while the corresponding proportion of the blacks was almost two-fifths. This is the only industry division in which the rate of involuntary movement for white men exceeded the rate of voluntary movement (24 versus 18 percent). Among blacks, on the other hand, voluntary changes exceeded involuntary shifts (22 versus 12 percent).

For both color groups the rate of job shifting was well below average in manufacturing, attributable chiefly to lower rates of voluntary movement. For example, among white men 8 percent of those in manufacturing voluntarily changed jobs between 1966 and 1969 compared with 11 percent in all industries combined. For black men, the corresponding percentages were 6 and 10.

Degree of Job Attachment as Measured in 1966

In the initial survey respondents were asked "Suppose someone in this area offered you a job in the same line of work you're in now. How much would the new job have to pay for you to be willing to take it?" Each response was coded in relation to the individual's current rate of pay, and respondents were classified according to the percentage increase required to induce them to take a job with a different employer in the same labor market area. The question was designed to measure the degree of attachment of the respondent to his current employer or, what amounts to the same thing, his prospective mobility in the sense of his willingness to change jobs in response to a perceived differential in "net economic advantage." The hypothesis that this measure of mobility would be related to, but nevertheless distinct from, satisfaction with current job was supported. Moreover, the anticipated negative relationship between the mobility measure and length of service in current job was also supported by the data.[5]

If the job attachment measure is a valid indicator of propensity to change jobs in response to perceived differentials in "net economic advantage" one would expect it to be related to the probability of voluntary job change. Even if the measure is valid its relationship with actual interfirm movement may be weak, since the probability of a voluntary job change depends not only on the worker's propensity to move but also on the opportunities for movement provided by the labor market

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5 Ibid., pp. 155-60.

Table 3.3 Proportion of Respondents Making Voluntary or Involuntary Change of Employer between 1966 and 1969 Surveys, by Major Industry Division of 1966 Job and Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Major industry division of 1966 job	Total number (thousands)	Proportion changing voluntarily	Proportion changing involuntarily	Total proportion changing[a]
	WHITES			
Construction	712	18	24	48
Manufacturing	2,939	8	5	15
Trade	1,003	17	6	25
Services	880	17	2	23
All other	2,264	8	4	13
Total or average	7,800	11	6	20
	BLACKS			
Construction	75	22	12	38
Manufacturing	258	6	4	11
Trade	78	19	6	29
Services	100	9	6	21
All other	243	8	8	24
Total or average	756	10	6	19

a Includes respondents who changed jobs and whose reason for change was not ascertained.

and on his personal characteristics that determine (a) the extent of his knowledge of alternative jobs, (b) his initiative and vigor in pursuing them, and (c) his attractiveness to other employees.[6]

Table 3.4 classifies the respondents according to the measure described above. Those who indicated that they would change jobs for less than a 10 percent wage increase are classified as "highly mobile." The "moderately mobile" are those who would change jobs for a wage increase of 10 percent or more, while the "immobile" indicated that they would not change jobs for any conceivable wage increase. It will be noted that the mobility measure does have predictive validity for both whites and blacks. While there is not much difference in voluntary mobility rates between the highly mobile and the moderately mobile, those who are classified as immobile have substantially lower rates than either of the other two categories. Overall, highly mobile white men are 2.7 times as likely to have made a voluntary job change between 1966 and 1969 as are their immobile counterparts. In the case of the blacks, the corresponding ratio is 4.3 to 1. What is more important, the positive relationship between mobility as measured in 1966 and the probability of a voluntary job change between 1966 and 1969 exists within each length of service category, although the strength of the relationship varies. It is most pronounced in the case of men with 20 or more years of service. Among the white men in this long-service category the rate of voluntary job shifting was almost five times as high among the highly mobile as among the immobile category.

Job Satisfaction Expressed in 1966

Men who expressed a high degree of satisfaction with their jobs in 1966 were less likely to have voluntarily changed employers between 1966 and 1969 than those who reported lesser degrees of satisfaction (Table 3.5). In the case of the whites, however, this relationship is pronounced only among those with fewer than five years of service in their 1966 job. Among these short-service workers, approximately a fifth of those who liked their job very much made a voluntary job change over the three-year period in contrast with approximately a third of those who had expressed lesser degrees of satisfaction. In no other length-of-service category is the difference between the two satisfaction groups as great as one percentage point. This suggests that a lack of enthusiasm for one's job can cause men in this age category who have relatively little tenure to seek other alternatives. However, once substantial (i.e., five years or more) seniority is achieved, the absence of strong positive feelings toward the job is not sufficient to increase the probability of voluntary movement. This interpretation is not supported by the data for the black men, among whom the relationships

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6 For a fuller description of the hypothesized model, see Ibid., pp. 148-53.

Table 3.4 Proportion of Respondents Making Voluntary Change of Employer between 1966 and 1969 Surveys, by Length of Service and Degree of Mobility[a] in 1966 Job and by Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Length of service and degree of mobility in 1966 job	WHITES		BLACKS	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
Less than 5 years				
Highly mobile	415	32	43	37
Moderately mobile	885	26	119	23
Immobile	443	20	35	17
Total or average[b]	1,959	25	219	25
5-9 years				
Highly mobile	201	13	17	0
Moderately mobile	468	18	43	4
Immobile	393	10	20	c
Total or average[b]	1,188	14	90	5
10-19 years				
Highly mobile	291	6	30	0
Moderately mobile	844	7	90	8
Immobile	791	3	89	2
Total or average[b]	2,140	5	231	4
20 years or more				
Highly mobile	313	9	16	c
Moderately mobile	762	4	62	9
Immobile	1,107	2	101	1
Total or average[b]	2,461	3	213	4
Total				
Highly mobile	1,223	17	106	15
Moderately mobile	2,992	14	314	14
Immobile	2,746	6	246	4
Total or average[b]	7,800	11	756	10

a For method of measuring mobility, see text, p. 35 .
b Total includes those undecided about job mobility.
c Percentages not shown where base is fewer than 25 sample cases.

Table 3.5 Proportion of Respondents Making Voluntary Change of Employer between 1966 and 1969 Surveys, by Length of Service in and Attitude toward 1966 Job and by Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Length of service in and attitude toward 1966 job	WHITES		BLACKS	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
Less than 5 years				
Liked job very much	1,077	19	91	21
Other	881	33	128	27
Total or average	1,959	25	219	25
5-9 years				
Liked job very much	643	14	45	2
Other	545	14	45	8
Total or average	1,188	14	90	5
10-19 years				
Liked job very much	1,253	5	126	3
Other	887	6	104	5
Total or average	2,140	5	231	4
20 years or more				
Liked job very much	1,483	4	124	1
Other	979	3	89	7
Total or average	2,461	3	213	4
Total				
Liked job very much	4,485	9	388	7
Other	3,315	14	368	14
Total or average	7,800	11	756	10

are not as clear-cut. Indeed, the relationship between voluntary mobility and degree of satisfaction with 1966 job is strongest among those with 20 years or more service, and the smallest difference between the two attitude groups occurs among those with between 10 and 19 years of service in their 1966 jobs. Whether this anomaly represents sampling fluctuation attributable to relatively small cell sizes, or is real cannot be said with confidence at this time.

As was originally hypothesized, there is evidence in Table 3.6 that the measures of job attachment and job satisfaction are tapping different dimensions of attitudes toward job. When workers are cross-classified by degree of attachment and degree of job satisfaction it is clear that each of these measures exercises an independent effect upon the likelihood of voluntary job change. Within each job-attachment category men who reported liking their job very much are less likely than others to have made voluntary job changes between 1966 and 1969. Moreover, for each of the job-attitude categories, men classified in 1966 as immobile were less likely to have changed jobs than those who were classified either as highly mobile or moderately mobile. Combining the two measures, the immobile white men who liked their 1966 jobs very much were only about one-fourth as likely to make job changes as the highly mobile men with lesser degrees of satisfaction. In the case of blacks, the immobile highly-satisfied workers were only one-seventh as likely as the highly mobile less-satisfied workers to make such changes.

Wage Rate in 1966 Job

Turning now from attitudes to more objective descriptors of the 1966 job, the data in Table 3.7 show a marked relationship between hourly rate of pay and the likelihood of a voluntary change of employer between 1966 and 1969. Across all occupation and length-of-service categories, white men who earned less than $2.00 per hour in 1966 were almost three times as likely to make a voluntary job change over the three-year period as were those who earned more. On the other hand, there is no difference in the voluntary separation rates of those earning between $2.00 and $2.99 an hour and those earning $3.00 an hour or more. For black men the relationship is not quite so regular. Respondents earning under $2.00 per hour had voluntary separation rates of approximately 16 percent in contrast to only 2 percent for those who earned between $2.00 and $2.99 per hour. However, inexplicably, those earning $3.00 or more per hour had a voluntary separation rate of approximately 10 percent.

The patterns described above tend to persist when length of service in 1966 job is controlled. The voluntary separation rate of white men in every length-of-service category is highest among those earning less than $2.00 per hour, while the rates do not differ substantially between the two higher wage rate categories. Despite the regularity of pattern, the magnitude of the difference varies from one length-of-service category to another in a manner for which we have no explanation.

Table 3.6 Proportion of Respondents Making Voluntary Change of Employer between 1966 and 1969 Surveys by Degree of Mobility[a] in and Attitude toward 1966 Job and by Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Degree of mobility in and attitude toward 1966 job	WHITES		BLACKS	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
Highly mobile				
Liked very much	612	14	47	9
Other	612	19	60	20
Total or average	1,223	17	106	15
Moderately mobile				
Liked very much	1,639	13	143	11
Other	1,354	15	171	16
Total or average	2,992	14	314	14
Immobile				
Liked very much	1,758	5	154	3
Other	988	8	92	5
Total or average	2,746	6	246	4
Total[b]				
Liked very much	4,485	9	388	7
Other	3,315	14	368	14
Total or average	7,800	11	756	10

a For method of measuring mobility, see text, p. 35.
b Total includes those undecided about job mobility.

Table 3.7 Proportion of Respondents Making Voluntary Change of Employer between 1966 and 1969 Surveys, by Type of Occupation, Length of Service and Hourly Rate of Pay in 1966 Job and by Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Length of service in 1966 job	WHITES							
	Under $2.00 per hour		$2.00-2.99		$3.00+		Total or average	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
	Total, all occupations							
Less than 5 years	554	37	559	18	820	22	1,959	25
5-9 years	227	17	361	11	577	14	1,188	14
10-19 years	245	14	625	2	1,217	5	2,140	5
20 years or more	121	6	583	5	1,667	3	2,461	3
Total or average	1,146	25	2,152	9	4,309	9	7,800	11
	Blue-collar occupations							
Less than 5 years	282	37	298	20	437	21	1,025	25
5-9 years	114	14	235	9	221	15	577	12
10-19 years	135	16	425	2	630	6	1,198	6
20 years or more	42	a	388	3	838	3	1,301	3
Total or average	573	25	1,366	8	2,137	9	4,131	11

Table 3.7 (continued)

Length of service in 1966 job	BLACKS							
	Under $2.00 per hour		$2.00-2.99		$3.00+		Total or average	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
	Total, all occupations							
Less than 5 years	144	30	51	6	23	a	219	25
5-9 years	43	7	32	0	13	a	90	5
10-19 years	88	5	82	1	60	7	231	4
20 years or more	61	5	77	1	69	6	213	4
Total or average	337	16	242	2	165	10	756	10
	Blue-collar occupations							
Less than 5 years	93	28	26	11	17	a	137	25
5-9 years	24	a	24	a	7	a	57	5
10-19 years	53	5	62	1	44	8	159	4
20 years or more	38	6	50	2	53	7	144	5
Total or average	209	16	163	3	120	11	500	10

a Percentages not shown where the base is fewer than 25 sample cases.

Among black men with less than five years of service the voluntary separation rate for those whose 1966 wage was under $2.00 per hour was five times as high as for those with higher 1966 wage rates. On the other hand, among those with ten years or more service the lowest separation rates were among those earning $2.00 and $2.99 per hour. Those earning $3.00 or more per hour had voluntary separation rates that were actually slightly higher than those of men earning less than $2.00 per hour.

Sample size does not permit us to examine these relationships within each occupational category. There are sufficient blue-collar workers, however, for this type of analysis. By and large, the relationships for that occupational category are very similar to those that have been described for the total sample. It is worth noting that length of service in 1966 job continues to exert a substantial influence on the probability of separation even when wage rate is controlled. Among both white men and black men within each wage rate category the probability of separation between 1966 and 1969 was considerably greater for those with less than five years of service than for those with longer tenure.

Pension Coverage in 1966

Considerable attention has been given in the literature to the question whether employer-financed pension plans inhibit labor mobility.[7] To the extent that such plans are nonvested they create equities in jobs which grow with length of service and are presumed to be among the factors which cause long-service workers to be reluctant to leave their jobs even in the face of ostensibly more attractive alternatives. One of the difficulties in the empirical testing of this hypothesis is the fact that pension coverage tends to be related to other employment characteristics which are correlated with mobility, e.g., above-average wage rates, progressive personnel policy, etc. Because it has generally been impossible to control simultaneously for all of these factors, the evidence on the question has been largely inconclusive.[8]

Although our data suffer from some of the same difficulties, they may nevertheless shed some light on the question. In 1966 employed respondents were asked whether they will ever be eligible for retirement

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7 For a review of recent studies, see Herbert S. Parnes, "Labor Force Participation and Labor Mobility" in Woodrow L. Ginsburg, et al., A Review of Industrial Relations Research, vol. 1 (Madison, Wisconsin: Industrial Relations Research Association, 1970), pp. 49-51.

8 See Hugh Folk, Private Pension Plans and Manpower Policy, U.S. Department of Labor, Bureau of Labor Statistics, Bulletin no. 1359, (Washington: U.S. Government Printing Office, 1963).

benefits other than social security, "such as personal plans, private employee, government employee, or military retirement plans?"[9] As Table 3.8 indicates, the voluntary mobility rate between 1966 and 1969 overall was considerably lower for those with pension coverage than for those without. Among white men, voluntary job changers constituted 8 percent of those covered by pensions but as many as 18 percent of those who were not. Among blacks the corresponding proportions were 5 percent and 15 percent. The relationship tends to hold when respondents are classified into broad industry categories. Except in the case of services for the whites and trade for the blacks, voluntary mobility rates are higher for men who are not covered by pensions. The differences are particularly pronounced in construction (for the whites) and in manufacturing. In the latter industry division, voluntary mobility rates for those without pension coverage were almost three times as high as for those with such coverage in the case of both color groups.

When the data are controlled for length of service in 1966 job, the inverse relationship between pension eligibility and voluntary mobility persists, but is pronounced only among those with less than five years of service (Table 3.8).[10] Among white men with less than five years of service in 1966 job the voluntary mobility rate of those covered by pension plans is approximately 20 percent as compared with 30 percent for those ineligible for pensions. In no other length-of-service category is the absolute difference in these percentages as great as 5 percentage points. Nevertheless, it is noteworthy that in relative terms men with 20 or more years of service who were not covered by pensions were twice as likely as those with pension coverage to make a voluntary job change between 1966 and 1969 (6 versus 3 percent). The patterns among the black men are comparable.

With hourly rate of pay and type of occupation (white collar and blue collar) controlled, the inverse relation between pension coverage and voluntary mobility rate persists for white-collar workers earning above $3.00 per hour and for blue-collar workers earning over $2.00 per hour.[11] To illustrate, among white men in blue-collar occupations

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9 Of the employed wage and salary earners in 1966 who were covered by such plans, three-fourths of the whites and four-fifths of the blacks were covered by private employee or government employee plans only. Only 7 percent of the whites and 2 percent of the blacks were covered by personal plans only. (Parnes et al., Pre-Retirement Years, 1:174.

10 Only among black men with between five and nine years of service is the typical relationship reversed, and here the difference in mobility rates between the eligible and ineligible is less than one-half a percentage point.

11 Among blacks, there are too few white-collar workers to permit any generalization. For those in blue-collar occupations, the relationship noted in the text prevails in all rate-of-pay categories.

Table 3.8 Proportion of Respondents Making Voluntary Change of Employer between 1966 and 1969 Surveys, by Pension Plan Coverage, Major Industry Division, Length of Service, Type of Occupation and Hourly Rate of Pay of 1966 Job and by Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Major industry division, length of service and hourly rate of pay, 1966 job	WHITES					
	Covered by pension		Not covered by pension		Total or average	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
Major industry division						
Construction	371	14	320	22	712	18
Manufacturing	2,250	6	625	16	2,939	8
Trade	524	15	467	19	1,003	17
Services	580	18	284	15	880	17
All other	1,600	5	604	16	2,264	8
Total or average	5,328	8	2,301	18	7,800	11
Length of service						
Less than 5 years	992	20	899	30	1,959	25
5-9 years	779	14	375	15	1,188	14
10-19 years	1,561	5	534	7	2,140	5
20 years or more	1,959	3	477	6	2,461	3
Total or average	5,328	8	2,301	18	7,800	11
Type of occupation and rate of pay						
White collar						
Less than $2.00	126	27	102	15	228	22
$2.00-2.99	409	12	163	12	583	12
$3.00 or more	1,725	6	306	16	2,069	8
Total or average	2,352	8	612	15	3,013	10
Blue collar						
Less than $2.00	171	25	380	24	573	25
$2.00-2.99	796	5	544	13	1,366	8
$3.00 or more	1,660	8	425	15	2,137	9
Total or average	2,675	8	1,357	17	4,131	11
Total, all occupations[b]						
Less than $2.00	384	25	729	23	1,146	25
$2.00-2.99	1,351	7	759	13	2,152	9
$3.00 or more	3,454	7	759	16	4,309	9
Total or average	5,328	8	2,301	18	7,800	11

Table 3.8 continued

Major industry division, length of service and hourly rate of pay, 1966 job	BLACKS					
	Covered by pension		Not covered by pension		Total or average	
	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily	Total number (thousands)	Proportion changing voluntarily
Major industry division						
Construction	18	a	54	28	75	22
Manufacturing	154	4	93	10	258	6
Trade	26	19	47	15	78	19
Services	51	5	42	13	100	9
All other	136	4	90	14	243	8
Total or average	386	5	327	15	756	10
Length of service						
Less than 5 years	71	11	129	30	219	25
5-9 years	43	6	41	5	90	5
10-19 years	130	3	89	5	231	4
20 years or more	140	3	66	5	213	4
Total or average	386	5	327	15	756	10
Type of occupation and rate of pay						
White collar						
Less than $2.00	13	a	10	a	23	a
$2.00-2.99	24	a	3	a	26	0
$3.00 or more	31	5	6	a	40	11
Total of average	70	3	18	a	92	7
Blue collar						
Less than $2.00	56	8	139	18	209	16
$2.00-2.99	92	0	62	6	163	3
$3.00 or more	96	8	20	a	120	11
Total or average	245	5	226	15	500	10
Total, all occupations[b]						
Less than $2.00	93	8	222	17	337	16
$2.00-2.99	157	0	73	5	242	2
$3.00 or more	132	7	26	29	165	10
Total or average	386	5	327	15	756	10

a Percentages not shown where base is fewer than 25 sample cases.

b Total includes service and farm occupations not shown separately.

who were earning between $2.00 and $2.99 per hour, the rate of voluntary change of employer between 1966 and 1969 was more than twice as high for those not covered by pensions as for those with such coverage (13 versus 5 percent).

For reasons outlined at the beginning of this section, definitive conclusions about the influence of pension plans on mobility are not possible. Nonetheless, the evidence is consistent with the belief that pension plans may have an inhibiting effect on interfirm movement of labor, at least among men in the age category under consideration. Yet, perhaps even more significant is the fact that for men with the longest service--among whom the influence of pensions might be expected to be strongest--mobility rates are so very low irrespective of pension coverage that the additional influence of pensions cannot be very large in absolute terms.

Unemployment Experience Prior to 1966

One would expect men who have recently experienced unemployment in a job to be more likely to leave it than those with more stable work experience. Men who have experienced layoffs on jobs are more likely even while employed to be on the lookout for more attractive alternatives. Thus, voluntary job changes ought to be more prevalent among them. Moreover, those who have experienced layoffs in the past are more likely to be susceptible to them in the future, and rates of involuntary job change would thus also be higher among them. In the initial survey of the respondents in 1966, information was obtained on the number of weeks of unemployment each respondent experienced in the calendar year 1965. Although unemployment experience was rather uncommon among those men who were employed at the time of the survey in 1966, Table 3.9 nevertheless clearly manifests the expected relationships for the entire sample. Among white men employed at the time of the 1966 survey who had experienced one or more weeks of unemployment in calendar year 1965, exactly half had changed employers by the time of the 1969 survey in contrast with only one-sixth of those men who had experienced no unemployment. Among black men the corresponding proportions were approximately one-third and one-sixth.

Because the likelihood of unemployment decreases with increasing length of service, a substantial portion of the relationship described in the preceding paragraph might be a reflection of the influence of length of service on mobility rates rather than that of unemployment experience. The small number of men who experienced unemployment precludes a detailed control for length of service. Nevertheless, when the sample is divided between those with less than five years of service in their 1966 jobs and those with five or more years of service, the relationship between unemployment experience and mobility continues to be discernible within each of the length-of-service categories, although it is not so pronounced as for the total sample. It should be noted that, consistent with our hypothesis, the higher mobility rates among those men with some unemployment experience results both from higher rates of voluntary and of involuntary separations.

Table 3.9 Proportion of Respondents Making Voluntary and Involuntary Changes of Employer between 1966 and 1969 Surveys, by Length of Service in 1966 Job, Unemployment Experience in 1965, and Color: Respondents Employed in 1969 Who Were Employed as Wage and Salary Workers in 1966

Length of service in 1966 job and number of weeks unemployed in 1965	Total number (thousands)	Proportion changing voluntarily	Proportion changing involuntarily	Total proportion changing [a]
	WHITES			
Less than 5 years				
None	1,554	24	10	38
1 or more weeks	392	33	22	56
Total or average	1,959	25	12	41
5 or more years				
None	5,437	6	3	11
1 or more weeks	240	13	23	42
Total or average	5,789	6	4	12
Total				
None	7,028	10	5	17
1 or more weeks	636	25	23	50
Total or average	7,800	11	6	20
	BLACKS			
Less than 5 years				
None	161	23	7	38
1 or more weeks	54	25	18	43
Total or average	219	25	10	40
5 or more years				
None	479	4	5	9
1 or more weeks	49	9	10	20
Total or average	534	4	5	10
Total				
None	643	8	5	16
1 or more weeks	103	17	14	32
Total or average	756	10	6	19

a Includes respondents who changed jobs and whose reason for change was not ascertained.

CHAPTER FOUR

COLLECTIVE BARGAINING COVERAGE AND HOURLY RATE OF PAY

Previous reports in this series have given little attention to the subject matter of this chapter. Although limited data on average hourly earnings at the time of the 1966 survey were presented in the initial report,[1] data problems precluded the analysis of changes in rate of pay between 1966 and 1967 in our second report. Moreover, since information on the union status of respondents was not collected until the 1969 survey, no data on this subject has hitherto been available. In the first section of this chapter we examine the extent and incidence of collective bargaining coverage and union membership among men who were employed as wage and salary earners at the time of the survey in 1969. For the same subset of respondents, we explore in the second section some cross-sectional relationships between hourly rate of pay at the time of the 1969 survey and a number of other variables. The final section analyzes relative changes between 1967 and 1969 in the rates of pay of men who were employed as wage and salary workers in the survey weeks of both years.

I COLLECTIVE BARGAINING COVERAGE

Approximately two-fifths of wage and salary earners in our sample were covered by collective bargaining agreements in mid-1969 (Table 4.1).[2] There is, of course, substantial variation in extent of coverage according to both occupation and industry. The manual occupational

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1 Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, Ruth S. Spitz and Associates, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of Men, vol. 1, U.S. Department of Labor, Manpower Research Monograph no. 15 (Washington: U.S. Government Printing Office, 1970), pp. 45-55.

2 Respondents were asked "Are your wages on this job set by a collective bargaining agreement between your employer and a union or employee association?" Those who responded affirmatively were asked the name of the union or employee association and "Are you a member of that union or employee association?"

Table 4.1 Proportion of Respondents Covered by Collective Bargaining Agreements, by Major Occupation Group, Major Industry Division, and Color: Employed Wage and Salary Workers

Characteristic	WHITES		BLACKS		TOTAL	
	Number (thousands)	Percent covered	Number (thousands)	Percent covered	Number (thousands)	Percent covered
Occupation						
Professional	1,044	14	33	23	1,077	14
Managers	1,121	8	20	c	1,141	8
Clerical and sales	1,015	27	58	44	1,073	28
Craftsmen	2,363	53	128	46	2,491	53
Operatives	1,712	60	239	58	1,951	60
Laborers	363	50	198	50	561	50
Service	576	31	131	35	707	32
Farm laborers	156	0	44	2	200	d
Total or average[b]	8,401	38	858	45	9,259	38
Industry						
Agriculture	173	0	51	1	224	d
Mining, forestry, fisheries	128	48	9	c	137	50
Construction	825	52	91	51	916	52
Manufacturing	3,109	49	290	63	3,399	50
Transportation and utilities	925	62	103	70	1,028	63
Trade	1,022	16	80	25	1,102	17
Finance, insurance, real estate	288	21	23	c	311	22
Service	1,087	22	135	20	1,222	22
Public administration	807	17	74	27	881	18
Total or average[b]	8,401	38	858	45	9,259	38

a Total excludes all nonwhites except Negroes.
b Total includes farm managers, not shown separately.
c Percentages not shown where base is fewer than 25 sample cases.
d Less than one-half of one percent.

categories--craftsmen, operatives, and laborers--are much more heavily organized, with 50 percent or more covered by collective bargaining agreements. In contrast, the proportion for all white-collar workers combined is under 20 percent, ranging between 8 percent for managers and 28 percent for clerical and sales workers. Service workers are intermediate between the white-collar and blue-collar groups, with a rate of organization of slightly under one-third. Among farm workers, of course, the rate is virtually zero.[3]

Among the major industry divisions, transportation and public utilities has the highest percentage of organized workers (63 percent), while mining, construction, and manufacturing all stand at approximately 50 percent (Table 4.1). In contrast, only one-fifth or one-sixth of the men employed in trade, finance, service, or public administration are covered by collective bargaining agreements.

Color

Overall, relatively more of the black than of the white men are covered by collective bargaining (45 versus 38 percent), but this difference is principally a function of the difference in occupational distributions of the two color categories. For each major occupation group in which there are sufficient sample cases of both blacks and whites for reliable comparisons, the proportions of whites and blacks covered by collective bargaining are remarkably similar. The largest difference is among craftsmen, where the proportion of whites who are covered is 7 percentage points higher than that of blacks. Among service workers there is a 4 percentage point difference in the opposite direction. For operatives and laborers the proportions are virtually identical.

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3 These percentages by major occupation group are very close to those generated as of 1966 by the Survey of Economic Opportunity for men 45 to 64 years of age. In that study the percentage of each occupation group reported as union members did not differ by more than 2 percentage points from the figures shown in Table 4.1 except for clerical and sales workers, in which the difference was 6 percentage points (21 versus 27 percent). (See U.S. Department of Commerce, Bureau of the Census, "Labor Union Membership in 1966," Current Population Reports, Population Characteristics, Series P-20, no. 216, March 8, 1971, computed from data in Table 3.) A 1954 survey of a national sample of males 21 years of age and older also produced proportions of union members that are similar to those reported here. See Ruth Kornhauser, "Some Social Determinants and Consequences of Union Membership," Labor History 2, no. 1 (Winter 1961):34.

Union Membership

The fact that an individual is covered by a collective bargaining agreement does not necessarily mean that he himself is a union member. However, Table 4.2 shows that the vast majority of the men in the sample who are covered by collective bargaining are union members. Overall, this is true of 93 percent of both the white and the black men. The percentages are at least this high in each of the three blue-collar major occupation groups and, of the major industry divisions, in construction (except for blacks), manufacturing, transportation, and trade. The proportions are perceptibly lower in the other service industries and in white-collar occupations generally, although it stands at 93 percent among white clerical and sales workers.

Tenure

Within the narrow age range represented by the present sample there are no perceptible age variations in the proportion of men covered by collective bargaining; there is, however, a substantial variation according to length of service in current job (Table 4.3). Over two-fifths of the white men with more than 10 years of service, for example, are covered by collective bargaining in contrast with only one-third of those with fewer than 10 years of service; among the blacks the difference is even larger (55 versus 38 percent). This overall relationship reflects primarily the strong association between union coverage and long tenure among operatives, laborers, and service workers and, in the case of the whites, clerical and sales workers as well.

The association between collective bargaining coverage and job tenure almost certainly reflects primarily the influence of the former on the latter rather than the influence of tenure on the likelihood of unionization.[4] Jobs covered by collective bargaining agreements tend, on average, to be more attractive from a number of points of view than those which are not, and are thus likely to engender higher degrees of attachment among the employees who fill them.

Average Hourly Earnings

One of the factors that make unionized jobs more attractive than nonunionized jobs is their higher rate of compensation. While the overall average hourly rate of pay among white men is slightly higher for nonunionized than for unionized workers, this is because unionization

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4 However, the latter direction of causation may be at the root of part of the association, since new firms are less likely to be organized than those that have been in existence for some time.

Table 4.2 Proportion of Union Members among Respondents Covered by Collective Bargaining, by Major Occupation Group, Major Industry Division, and Color: Employed Wage and Salary Workers

Major occupation group and major industry division	WHITES		BLACKS	
	Number covered by collective bargaining agreements (thousands)	Percent union members	Number covered by collective bargaining agreements (thousands)	Percent union members
Occupation				
Professional	146	78	8	c
Managerial	92	79	3	c
Clerical, sales	271	93	26	84
Craftsmen	1,255	94	59	95
Operatives	1,025	97	138	97
Nonfarm laborers	176	93	98	94
Service	176	85	46	86
Total or average[a]	3,172	93	383	93
Industry				
Mining, forestry, fisheries	61	c	7	c
Construction	426	97	47	84
Manufacturing	1,505	94	183	95
Transportation, utilities	576	97	72	99
Trade	162	93	20	c
Finance, insurance, real estate	61	c	6	c
Service	236	84	26	84
Public administration	138	88	20	c
Total or average[b]	3,172	93	383	93

a Total includes farm laborers and farm managers, not shown separately.
b Total includes agricultural workers, not shown separately.
c Percentages not shown where base is fewer than 25 sample cases.

Table 4.3 Proportion of Respondents Covered by Collective Bargaining Agreements by Major Occupation Group, Length of Service in Current Job, and Color: Employed Wage and Salary Workers

Major occupation group	Less than 10 years		10 years or more		Total or average	
	Total number (thousands)	Percent covered	Total number (thousands)	Percent covered	Total number (thousands)	Percent covered
	WHITES					
Professional	467	15	529	13	1,044	14
Managerial	409	6	661	10	1,121	8
Clerical, sales	394	18	569	34	1,015	27
Craftsmen	1,060	52	1,150	54	2,363	53
Operatives	695	48	911	72	1,712	60
Laborers	214	42	123	61	363	50
Service	371	26	159	45	576	31
Farm laborers	106	0	29	b	156	0
Total or average[a]	3,736	33	4,158	43	8,401	38
	BLACKS					
Professional	16	b	15	b	33	23
Managerial	9	b	10	b	20	b
Clerical, sales	27	52	31	42	58	44
Craftsmen	67	45	59	46	128	46
Operatives	101	48	125	69	239	58
Laborers	123	43	58	69	198	50
Service	66	23	56	54	131	35
Farm laborers	27	0	16	b	44	2
Total or average[a]	437	38	371	55	858	45

a Totals include farm managers, not shown separately.
b Percentages not shown where base is fewer than 25 sample cases.

is less common among white-collar workers, who as a group earn more than blue-collar workers whether unionized or not. The clerical and sales group is the only occupational category in which unorganized men earn more than those who are organized, and this is doubtless because the relatively few men in that group who are covered by collective bargaining tend to be concentrated in lower level jobs. In the blue-collar and service occupations, white men covered by collective bargaining have a pronounced advantage in hourly rate of pay over those who are not, ranging between an 18 percent differential among craftsmen to a 45 percent differential among laborers. The pattern for black men is the same, but the pay differential between unionized and nonunionized workers is greater than among white men, ranging between 28 percent for craftsmen and 64 percent for laborers.

While a portion of these differences surely can be attributed to unionization, the total differentials cannot be interpreted as measures of the independent effects of unionism, since other factors are clearly involved. For example, it has already been seen that workers covered by collective bargaining tend disproportionately to be long-service workers, among whom wages might be expected to be higher than among shorter-service workers. Similarly, there is evidence that wages tend to be higher in large than in small communities[5] irrespective of unionism, and the extent of unionization is also positively related to size of community.[6] How much of the differentials shown by Table 4.4 are attributable directly to collective bargaining and how much are due to other factors cannot be estimated with confidence until a multivariate analysis of the data is undertaken.

Intercolor differences One of the implications of the difference between blacks and whites in the relative influence of collective bargaining on hourly earnings is that the black-white wage differential within occupations is considerably smaller for men covered by collective bargaining than for those who are not. For example, among nonorganized operatives, the white-black differential in average hourly earnings is 27 percent as compared with only 11 percent in organized firms. In the case of laborers the intercolor differential shrinks from 14 percent among unorganized workers to only 1 percent among organized workers; in the case of service workers from 23 percent to 7 percent. Significantly,

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5 See below, pp. 66-67. See also, Victor R. Fuchs, Differentials in Hourly Earnings by Region and City Size, 1959, National Bureau of Economic Research, Occasional paper 101 (New York, 1967), p. 31.

6 See Kornhauser, "Social Determinants and Consequences," p. 35.

Table 4.4 Mean Hourly Rate of Pay, by Major Occupation Group, Collective Bargaining Coverage, and Color: Employed Wage and Salary Workers

Major occupation group	Covered		Not covered		Total or average	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
	WHITES					
Professional	146	$5.98	897	$5.84	1,044	$5.86
Managerial	92	b	1,026	6.10	1,121	6.02
Clerical, sales	271	3.82	744	4.31	1,015	4.18
Craftsmen	1,255	4.55	1,108	3.87	2,363	4.22
Operatives	1,025	3.64	676	2.67	1,712	3.24
Laborers	176	3.27	179	2.25	363	2.74
Service	176	3.25	400	2.59	576	2.80
Farm laborers	0	-	156	1.42	156	1.42
Total or average[a]	3,172	4.12	5,203	4.33	8,401	4.25
	BLACKS					
Professional	8	b	25	3.69	33	4.17
Managerial	3	b	17	b	20	b
Clerical, sales	26	3.29	32	3.34	58	3.32
Craftsmen	59	3.42	69	2.66	128	3.02
Operatives	138	3.27	100	2.10	239	2.77
Laborers	98	3.22	100	1.96	198	2.59
Service	46	3.05	85	2.09	131	2.43
Farm laborers	1	b	43	1.19	44	1.19
Total or average[a]	383	3.29	475	2.35	858	2.78

a Total includes farm managers, not shown separately.

b Rates not shown where base is fewer than 25 sample cases.

among craftsmen the difference between the intercolor wage ratio in unionized and nonunionized firms is smallest, but nonetheless perceptible. In this case, the nonunionized intercolor differential is as high as 45 percent while among organized workers it is 33 percent. These results are entirely consistent with findings based upon a different body of data reported recently by Orley Ashenfelter, and support his conclusion that "there is apparently less discrimination against black workers in the average unionized labor market than in the average nonunion labor market (even though) discrimination is (not) absent from the former."[7]

Pension Coverage

Not only are hourly earnings substantially higher among organized than among nonorganized workers, but pension plan coverage is also substantially greater (Table 4.5). Among white men in our sample, three-fourths of those covered by collective bargaining agreements reported pension coverage in contrast with less than two-thirds of those not organized. For black men the corresponding fractions are seven-tenths and four-tenths. The advantage of organized workers in this respect prevails in every occupational category in which there are sufficient sample cases for reliable estimates, but is most pronounced among operatives and laborers. In these two occupational categories combined the probability of pension coverage is about twice as high among men covered by collective bargaining as among those who are not.

Attachment to Current Employer

Not only do unionized workers have longer tenure in their jobs than unorganized workers, but the strength of their attachment to their current job is also greater, as measured by our hypothetical job-offer question.[8] Overall, union men are much more likely than nonunionized workers to assert that they would be unwilling to take another job at any conceivable wage rate (Table 4.6). For example, in the case of white men these "highly attached" workers constitute 43 percent of the total number of men employed in unionized establishments but only 34 percent of those in nonunionized firms. Among blacks the difference is even greater (44 versus 27 percent). For the whites the relationship prevails only among those with five or more years of service, and becomes particularly strong after ten years of service. In the case of the blacks, it is strong in every length-of-service category, but is least pronounced for those with 20 or more years of service.

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7 Orley Ashenfelter, "Racial Discrimination and Trade Unionism," mimeographed, Industrial Relations Section, Princeton University, Working Paper no. 17, rev. (Princeton: Princeton University, 1971). See also "Labor Union Membership in 1966," p. 4.

8 See Chapter 3, p. 35, above.

Table 4.5 Proportion of Respondents Covered by Employer Pension Plan, by Major Occupation Group, Collective Bargaining Coverage, and Color: Employed Wage and Salary Workers

Major occupation group	Covered by collective bargaining		Not covered by collective bargaining	
	Total number (thousands)	Percent with pension	Total number (thousands)	Percent with pension
	WHITES			
Professional	146	97	897	88
Managerial	92	b	1,026	72
Clerical, sales	271	83	744	65
Craftsmen	1,255	72	1,108	63
Operatives	1,025	81	676	44
Laborers	176	70	179	33
Service	176	70	400	59
Farm laborers	0	-	156	2
Total or average[a]	3,172	76	5,203	63
	BLACKS			
Professional	8	b	25	80
Managerial	3	b	17	b
Clerical, sales	26	78	32	70
Craftsmen	59	69	69	49
Operatives	138	74	100	43
Laborers	98	61	100	24
Service	46	69	85	48
Farm laborers	1	b	43	0
Total or average[a]	383	70	475	41

a Total includes farm managers, not shown separately.
b Percentages not shown where base is fewer than 25 sample cases.

Table 4.6 Proportion of Respondents Highly Attached[a] to Current Job, by Length of Service and Collective Bargaining Coverage: Employed Wage and Salary Workers Who Were Working During 1966 Survey Week

Length of service	Covered by collective bargaining		Not covered by collective bargaining	
	Total number (thousands)	Percent highly attached[a]	Total number (thousands)	Percent highly attached[a]
	WHITES			
Less than 3 years	860	32	1,372	33
3-4 years	122	29	347	28
5-9 years	218	33	674	29
10-19 years	715	47	1,024	31
20 years or more	1,065	54	1,342	43
Total or average	3,099	43	5,074	34
	BLACKS			
Less than 3 years	116	38	177	25
3-4 years	22	b	36	16
5-9 years	25	20	48	7
10-19 years	95	44	79	30
20 years or more	110	60	87	52
Total or average	375	44	469	27

a Respondents who are "highly attached" are those who would not take a hypothetical job doing the same kind of work with another employer in the area for any conceivable wage increase.

b Percentages not shown where base is fewer than 25 sample cases.

The higher attachment of workers in organized than in nonorganized firms may simply reflect the influence of the higher wages and fringe benefits that characterize the former jobs. There may, however, be additional factors as well, such as the greater likelihood of formal grievance procedures in organized establishments and an additional set of social bonds that may exist in the presence of a union.

Internal versus External Locus of Control

We hypothesized that union members are less likely than nonorganized workers to be anomic in the sense of feeling powerless to control the factors affecting their lives.[9] To test this hypothesis, we used a modification of the Rotter internal-external locus of control scale, hereafter referred to as I-E scale.[10] Table 4.7 classifies respondents into three categories on the basis of their I-E scores. For purposes of testing the hypothesis, it is necessary to control for occupation, since there is substantial evidence that persons in the higher socioeconomic status levels are likely to be more internal and since these occupational categories are less likely to be unionized.

The data in Table 4.7 are consistent with the hypothesis that middle-aged men within broad occupational categories who are covered by collective bargaining are likely to be more internal than those who are not.[11] The relationship prevails in all three blue-collar categories

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9 For a discussion of the several meanings of anomie, see Melvin Seeman, "On the Meaning of Alienation," American Sociological Review 24 (1959): 782-91.

10 Internal versus external control has been defined in the following way: "Internal control refers to the perception of positive and/or negative events as being a consequence of one's own action and thereby under personal control; external control refers to the perception of positive and/or negative events as being unrelated to one's own behavior in certain situations and therefore beyond personal control" (H. M. Lefcourt, "Internal Versus External Control of Reinforcement: A Review," Psychological Bulletin 65 (1966): 206). For a discussion of the concept, the original Rotter scale, and a review of research findings using the scale, see Julian B. Rotter, "Generalized Expectancies for Internal Versus External Control of Reinforcement," Psychological Monographs 80, no. 609 (1966). For a discussion of the abbreviated Rotter scale used in this study, see Appendix F.

11 This finding is quite consistent with those reported by B. R. Strickland, who found internals to be more likely to participate in social movements than externals. ("The Prediction of Social Action from a Dimension of Internal-External Control," Journal of Social Psychology 66 (1965):353-8.)

Table 4.7 Locus of Control,[a] by Collective Bargaining Coverage, Selected Major Occupation Groups, and Color: Employed Wage and Salary Workers

(Percentage distribution)

Collective bargaining coverage and locus of control	Clerical, sales	Craftsmen	Operatives	Laborers	Total[b]
	WHITES				
Covered by collective bargaining					
Internal	20	31	25	20	27
Ambivalent	49	35	33	35	36
External	31	34	42	46	37
Total percent	100	100	100	100	100
Total number (thousands)	271	1,255	1,025	176	3,172
Not covered by collective bargaining					
Internal	35	29	20	8	30
Ambivalent	34	40	36	31	38
External	31	31	45	61	32
Total percent	100	100	100	100	100
Total number (thousands)	744	1,108	676	179	5,203
	BLACKS				
Covered by collective bargaining					
Internal	7	39	40	22	31
Ambivalent	25	37	39	47	42
External	68	24	20	31	26
Total percent	100	100	100	100	100
Total number (thousands)	26	59	138	98	383
Not covered by collective bargaining					
Internal	34	36	26	19	30
Ambivalent	24	42	46	41	42
External	42	22	28	40	28
Total percent	100	100	100	100	100
Total number (thousands)	32	69	100	100	475

a For discussion of concept, see footnote 10, p. 62. In this table, the I-E scores are divided into three categories, rather than the two categories described in footnote 10. The definition of the categories is as follows:

Whites	Blacks
Internal = 11-18	Internal = 11-22
Ambivalent = 19-24	Ambivalent = 23-28
External = 25-44	External = 29-44

b Includes professionals, managers, service workers, and farm laborers and farm managers not shown separately.

for both color groups but is most pronounced among white laborers and black operatives. To illustrate, among white laborers who are organized, one-fifth are internal and not quite one-half are external. Among their nonunionized counterparts, less than 10 percent are internal and three-fifths are external. It is interesting to note that the relationship does not obtain among clerical and sales workers. In this case, the data are probably reflecting the influence of socioeconomic status, since the higher categories of sales workers (e.g., security salesmen) are less likely to be unionized than the lower levels (e.g., retail sales).

The association between the measure of internality and unionization says nothing, of course, about the direction of causation. On the one hand, it may be that men who believe that they are masters of their own fate are more likely to organize than those who assign a larger role to chance so that they can exert an influence on their circumstances. On the other hand, it is equally plausible that those men who are organized and have an opportunity to experience the influence of unionization upon their working lives are as a consequence more likely to be internal.

II VARIATION IN HOURLY RATE OF PAY, 1969

In our report on the initial survey in 1966, we presented data on the hourly rate of pay of respondents employed as wage and salary earners in that year. The analysis showed that hourly earnings within major occupation groups were positively related to size of community, to the educational attainment, vocational training, and health condition of the respondent, and to length of service with current employer.[12] In this section we examine the relationship of the same variables with rate of pay in 1969, in several cases taking advantage of more refined controls for intercorrelated variables. In addition, we present data for the first time that explore the association with hourly earnings of (a) the amount of labor market information the respondent has and (b) his position on the internal-external continuum as measured by our modified Rotter scale.

Major Occupation Group

The mean hourly rate of pay for all men employed as wage and salary earners in mid-1969 stood at $4.25 for white men and $2.78 for black men (Table 4.8). Among whites, the range was between $6.02 for managerial workers and $2.74 for nonfarm laborers; for blacks the range was from $4.17 for professional workers to $2.59 for nonfarm laborers.

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12 Parnes, et al., Pre-Retirement Years, 1:45-55.

Table 4.8 Mean Hourly Rate of Pay, by Major Occupation Group, Size of Labor Force in Local Area, and Color: Employed Wage and Salary Workers[a]

Major occupation group	Less than 100,000		100,000-499,999		500,000 or more		Total or average	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
	WHITES							
Professional	348	$5.09	351	$6.19	317	$6.34	1,016	$5.86
Managerial	373	4.71	370	6.66	311	6.83	1,054	6.02
Clerical, sales	302	3.76	299	4.06	376	4.60	978	4.18
Craftsmen	966	4.03	670	4.32	613	4.41	2,249	4.22
Operatives	743	3.05	409	3.33	467	3.48	1,619	3.24
Nonfarm laborers	182	2.49	75	c	85	c	342	2.74
Total or average[b]	3,315	3.66	2,341	4.61	2,331	4.72	7,987	4.25
	BLACKS							
Professional	10	c	5	c	16	c	31	4.17
Managerial	4	c	7	c	7	c	19	c
Clerical, sales	9	c	16	c	27	3.83	53	3.32
Craftsmen	41	2.29	32	3.14	52	3.51	124	3.02
Operatives	75	2.11	72	2.72	81	3.42	228	2.77
Nonfarm laborers	79	1.85	60	3.01	48	3.30	188	2.59
Total or average[b]	289	2.05	236	2.85	285	3.45	810	2.78

a Respondents for whom rate of pay could not be ascertained are excluded.
b Totals include service and farm workers, not shown separately.
c Rates not shown where base is fewer than 25 sample cases.

Overall, the hourly earnings of white men were 53 percent greater than those of blacks. Much of this differential, however, reflects the difference in occupational distribution between the two categories. Within each major occupation group the differential is smaller, the ratio of white to black hourly rates of pay ranging between 106 percent for nonfarm laborers to 140 percent for professional workers and for craftsmen.

Size of Community

There is a strong positive association between size of community of residence and average hourly earnings (Table 4.8) In every occupational category containing sufficient sample cases for reliable estimates, average hourly rate of pay increases monotonically from the smallest to the largest of the three size categories into which we have divided community of residence. The differences are much more pronounced among black than among white men, probably reflecting the fact that black men living in relatively small communities are disproportionately concentrated in the South.[13] For all black men combined, the rate of pay in the largest communities is 68 percent higher than that in the smallest; the corresponding differential for white men is only 29 percent.

The stronger association between city size and rate of pay in the case of the blacks means that the intercolor difference in wage rates decreases as city size increases. For example, as has been seen, the hourly rate of pay for white men is, overall, 53 percent higher than that of blacks. However, in communities with labor forces in excess of 500,000 the differential is only 37 percent and in those with labor forces under 100,000 it is as great as 78 percent. Sample size permits comparisons only within two occupational categories: craftsmen and operatives. It is noteworthy that in the latter of these two the intercolor difference in hourly rate of pay virtually disappears in communities of the largest size (2 percent). Among craftsmen, in which case the overall differential is 40 percent, it is 26 percent in communities in the largest size group.

There is also pronounced variation among major occupation groups in the relation between size of community and rate of pay. Among white men the largest differentials according to city size are in the white-collar category, where the differential between the smallest and largest size category is as great as 45 percent in the case of managerial workers and in excess of 20 percent for both professional workers and clerical and sales workers. More moderate differences prevail for craftsmen and operatives (9 percent and 14 percent,

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13 Cf. Fuchs, "Differentials in Hourly Earnings," pp. 10-11.

respectively). For black workers there are insufficient sample cases in the white-collar occupations to permit analysis of inter-city variations in rate of pay. For all three categories of blue-collar workers the differentials are substantial, ranging between 53 percent for craftsmen and 78 percent for nonfarm laborers.

The reasons for the association between city-size and average hourly earnings are probably severalfold. In the present data it reflects the influence of regional (South-non-South differences in earnings as well as the influence of unionization, although Victor Fuchs has demonstrated that the relationship prevails even when these factors are controlled.[14] Two additional factors that may help to explain the gross relationship are the higher living costs in larger communities and the greater commuting distances between residence and work.

Length of Service in Current Job

Because experience with a particular firm contributes to the productivity of the worker in that establishment, one would expect a positive relationship between length of service with an employer and average hourly rate of pay.[15] This expectation is confirmed by the data in Table 4.9. In virtually every major occupation group and for blacks and whites alike average hourly earnings increase fairly regularly with increasing tenure. The major exception occurs in the case of white craftsmen, where men with less than one year of service actually have the highest earnings. It is likely that the unusual pattern in this case reflects the influence of the highly paid building trades, in which large proportions of workers have only tenuous attachments to particular employers. Since black workers are underrepresented in these types of jobs, the relationship between tenure and rate of pay for that occupational category of blacks is similar to that of other occupational categories.

Even aside from the special case of craftsmen, the extent to which earnings rise with increasing service varies from one occupational category to another. Among white men it is largest for professional and clerical and sales workers and smallest for managers. In the first two categories men with 20 or more years of service had average hourly earnings in 1969 that were 40 to 45 percent higher than men with less than one year of service. In contrast, among managerial workers the longest-service category had a pay advantage of only 13 percent over the shortest-service category. Among black craftsmen and nonfarm laborers the longest-service group enjoyed a wage differential of about 25 percent over the shortest service group, but the corresponding differential for operatives was only about half as great (12 percent).

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14 Ibid., p. 31.

15 It should be observed that not all of the association between length of service and wage rate is the reflection of the influence of the former on the latter. Part of the association is doubtless attributable to the higher rates of turnover in the lowest paying jobs.

Table 4.9 Mean Hourly Rate of Pay, by Major Occupation Group, Length of Service in Current Job, and Color: Respondents Employed as Wage and Salary Workers[a]

Major occupation group	Less than 1 year		1-9 years		10-19 years		20 years or more		Total or average	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
	WHITES									
Professional	122	$4.66	325	$5.81	155	$5.45	366	$6.54	1,016	$5.86
Managerial	103	5.50	279	5.54	267	6.54	359	6.20	1,054	6.02
Clerical, sales	148	3.18	235	4.29	264	4.36	279	4.62	978	4.18
Craftsmen	405	4.41	607	4.15	393	3.89	696	4.40	2,249	4.22
Operatives	237	3.03	420	3.04	420	3.20	439	3.65	1,619	3.24
Nonfarm laborers	117	2.71	82	c	63	c	53	c	342	2.74
Total or average[b]	1,314	3.68	2,230	4.11	1,686	4.24	2,269	4.85	7,987	4.25
	BLACKS									
Professional	5	c	11	c	6	c	7	c	31	4.17
Managerial	2	c	6	c	3	c	7	c	19	c
Clerical, sales	10	c	15	c	11	c	17	c	53	3.32
Craftsmen	29	2.72	37	2.95	27	3.01	30	3.40	124	3.02
Operatives	41	2.70	57	2.70	61	2.80	58	3.03	228	2.77
Nonfarm laborers	63	2.43	51	2.54	22	b	35	3.05	188	2.59
Total or average[b]	193	2.54	223	2.72	166	2.84	183	3.21	810	2.78

a Respondents for whom rate of pay could not be ascertained are excluded.

b Totals include service and farm workers, not shown separately.

c Rates not shown where base is fewer than 25 sample cases.

An intercolor comparison is possible only in the case of operatives. On the basis of this one category, it would appear that black men do not profit as much by long tenure with given employers as their white counterparts. The pay differential between the longest-service and shortest-service black men was 12 percent as compared with 20 percent for the whites.

Educational Attainment

For both black men and white men there is a pronounced relationship between highest year of school completed and hourly rate of pay even within major occupation group (Table 4.10). Dividing the sample into three educational categories (less than 12 years of schooling, exactly 12 years, and 13 or more years), the best educated group have an advantage in average hourly earnings over the least educated that amounts to 76 percent in the case of white men and 65 percent in the case of black men.

As might be expected, the earnings differential according to formal educational attainment is larger for white-collar than for blue-collar workers. For example, among white men the differential in rate of pay between high school graduates and those who did not finish high school stood at 34 percent for managerial workers, 17 percent for professional workers, 15 percent for clerical and sales workers, and 9 percent for craftsmen. While the limited number of sample cases prevents a comparable analysis for black men, the data make it clear that at least a portion of the intercolor difference in hourly rate of pay is attributable to difference in education. For example, the overall pay differential between white and black craftsmen stands at 40 percent, but it is 28 percent for those with exactly 12 years of education. Similarly, among clerical and sales workers an overall differential of 26 percent in favor of white men is reduced to 13 percent when only those with exactly 12 years of education are considered.

Health

Except for white managerial workers, men in every major occupational category who reported in 1969 that their health did not limit the kind or amount of work they could do enjoyed a relative wage differential over those who did have health problems (Table 4.11). Among whites, the differential was largest for professional and clerical and sales workers--in the neighborhood of 16 percent. For craftsmen and operatives it was approximately half that amount. In the case of black men there are only two occupational categories in which comparison can be made. Among operatives the healthy men enjoy an advantage of 6 percent over

Table 4.10 Mean Hourly Rate of Pay, by Major Occupation Group, Highest Year of School Completed, and Color: Respondents Employed as Wage and Salary Workers[a]

Major occupation group	Less than 12 years		12 years		13 years or more		Total or average	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
	WHITES							
Professional	116	$4.34	196	$5.09	704	$6.32	1,016	$5.86
Managerial	329	4.46	339	5.99	381	7.43	1,054	6.02
Clerical, sales	397	3.67	362	4.23	215	5.00	978	4.18
Craftsmen	1,489	4.02	621	4.39	139	5.59	2,249	4.22
Operatives	1,236	3.20	305	3.29	71	c	1,619	3.24
Nonfarm laborers	342	2.74	49	c	3	c	342	2.74
Total or average[b]	4,429	3.50	1,990	4.42	1,545	6.18	7,987	4.25
	BLACKS							
Professional	6	c	7	c	16	c	31	4.17
Managerial	11	c	3	c	5	c	19	c
Clerical, sales	23	c	25	3.75	3	c	53	3.32
Craftsmen	97	2.86	25	3.43	3	c	124	3.02
Operatives	196	2.75	25	2.90	7	c	228	2.77
Nonfarm laborers	179	2.56	7	c	2	c	188	2.59
Total or average[b]	658	2.59	105	3.31	41	4.28	810	2.78

a Respondents for whom rate of pay could not be ascertained are excluded.
b Totals include service and farm workers, not shown separately.
c Rates not shown where base is fewer than 25 sample cases.

Table 4.11 Mean Hourly Rate of Pay, by Major Occupation Group, Health Condition, and Color: Respondents Employed as Wage and Salary Workers[a]

Major occupation group	Health limits kind or amount of work		Health does not limit kind or amount of work		Total or average	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
	WHITES					
Professional	171	$5.20	845	$5.99	1,016	$5.86
Managerial	148	6.20	902	6.00	1,054	6.02
Clerical, sales	248	3.72	730	4.33	978	4.18
Craftsmen	442	3.96	1,808	4.28	2,249	4.22
Operatives	413	3.05	1,206	3.31	1,619	3.24
Nonfarm laborers	63	c	278	2.83	342	2.74
Total or average[b]	1,713	3.72	6,270	4.39	7,987	4.25
	BLACKS					
Professional	4	c	27	3.88	31	4.17
Managerial	5	c	14	c	19	c
Clerical, sales	4	c	49	3.27	53	3.32
Craftsmen	13	c	111	3.04	124	3.02
Operatives	46	2.65	182	2.80	228	2.77
Nonfarm laborers	38	2.28	150	2.67	188	2.59
Total or average[b]	147	2.54	662	2.83	810	2.78

a Respondents for whom rate of pay could not be ascertained are excluded.
b Totals include service and farm workers, not shown separately.
c Rates not shown where base is fewer than 25 sample cases.

the men with health problems; among nonfarm laborers the corresponding differential is as great as 17 percent.[16]

Training

In our initial report on the 1966 survey we presented data showing a positive relationship between training outside the regular school system and average rate of pay in 1966 job. We cautioned, however, that the association between training and rate of pay might simply be reflecting the influence of other factors related to training, e.g., educational attainment or personality traits (initiative or "drive") that would increase the probability of labor market success even in the absence of training. On the basis of the 1969 data we are able to introduce controls for both these factors and thus to isolate more precisely the effect of training on hourly wage rates. In Table 4.12 we restrict the data to individuals who have had exactly 12 years of schooling, and classify these men by whether they have ever had training outside the formal educational system and by their scores on the modified version of the Rotter I-E scale. To the extent that the latter measures a relatively stable personality characteristic, it may be taken as a proxy for initiative, since persons who believe that they are largely responsible for their own destinies are more likely to display initiative than those who believe that they are primarily directed by forces beyond their control.

It will be noted that among men with exactly 12 years of education, those with some training outside the regular educational system enjoyed higher average hourly earnings in 1969.[17] For white

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16 The data in Table 4.11 probably overstate the independent effect of health upon hourly earnings. This is so because of the positive relationship between good health and educational attainment and the positive relationship between educational attainment and earnings. Nevertheless, a separate analysis of men in the sample who were employed as wage and salary workers in 1966 has indicated that for white men in four of the seven categories of educational attainment (1-5, 6-7, 8, 9-11, 12, 13-15, 16 or more) those without health problems had higher average hourly earnings than men with such problems. Among black men this relationship prevailed in all three of the educational categories in which there were sufficient sample cases for comparison. See Joseph Melvin Davis, "Health, Education, and Labor Market Success" (Master's thesis, The Ohio State University, 1971), p. 50.

17 The relationship shown in Table 4.12 for individuals with exactly 12 years of schooling also obtains for those with less than 12 years of school and for those with 13 or more years. We have restricted the table to those with exactly 12 years because the other educational categories are fairly broad and leave room even within them for an association between education and training.

Table 4.12 Mean Hourly Rate of Pay, by Incidence of Training Outside Regular School, Locus of Control,[a] and Color: Respondents with Exactly 12 Years of Regular Schooling Employed as Wage and Salary Workers[b]

Incidence of training outside school and locus of control	WHITES		BLACKS	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
No training	1,107	$4.20	63	$2.95
Internal	580	4.26	29	2.91
External	410	4.04	19	c
Some training	741	4.78	33	3.90
Internal	398	4.81	17	c
External	235	4.30	13	c
Total or average	1,990	4.42	105	3.31
Internal	1,059	4.48	54	3.44
External	686	4.12	33	3.20

a For a discussion of this concept see footnote 10, p. 62 .

b Respondents for whom rate of pay could not be ascertained are excluded.

c Rates not shown where base is fewer than 25 sample cases.

men the differential is 14 percent; among blacks, it is as high as 32 percent. Moreover, although the number of sample cases becomes rather small, the positive influence of training on average hourly earnings appears to prevail both among those white men classified as internal and those classified as external according to our modified Rotter scale. In the case of the blacks there are too few sample cases for any conclusions to be drawn.

It may also be noted in Table 4.12 that the training variable operates further to reduce the intercolor difference in average hourly earnings. Among all men with exactly 12 years of education the intercolor wage differential in favor of the whites is 34 percent. Among those with some training, however, the differential is 22 percent in contrast to 42 percent among those with no training.

Labor Market Information

It is a reasonable hypothesis that men who know more about the range of job opportunities in the labor market are, other things being equal, likely to find more attractive and higher paying jobs. For our sample of middle-aged men we have not constructed a formal measure of labor market information as we have in the case of our studies of young men and young women.[18] However, information was collected in the 1966 survey that may be viewed as a proxy for extent of labor market information. Respondents were asked what they would do if they lost the job they then held. Those who said they would look for other work (a substantial majority), were asked "Are there any particular employers to whom you would apply?" Provision was made for the interviewer to list as many as three specific employer names that the respondent might mention. Of the men who were asked the question, about two-thirds of the whites and approximately three-fourths of the blacks (68 and 73 percent, respectively) were not able to cite any specific companies.

In the present analysis, we assume that men who are able to mention specific companies as prospective employers have better labor market information than those who are not. Table 4.13 classifies men with exactly 12 years of education on the basis of this measure and also according to their I-E scores.

Among both blacks and whites, men with superior labor market information appear to have enjoyed slightly higher average hourly earnings in 1969 than those with lesser information. The differential

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18 See, for example, Herbert S. Parnes, Robert C. Miljus, Ruth S. Spitz, and Associates, Career Thresholds: A Longitudinal Study of the Educational and Labor Market Experience of Male Youth, vol. 1, U.S. Department of Labor, Manpower Research Monograph no. 16 (Washington: U.S. Government Printing Office, 1970), pp. 120-21.

Table 4.13 Mean Hourly Rate of Pay, by Extent of Labor Market Information,[a] Locus of Control,[b] and Color: Respondents with Exactly 12 Years of Regular Schooling Employed as Wage and Salary Workers[c]

Extent of labor market information and locus of control	WHITES		BLACKS	
	Total number (thousands)	Mean rate of pay	Total number (thousands)	Mean rate of pay
Little labor market information[a]	772	$4.21	39	$3.06
Internal	385	4.33	18	d
External	295	3.95	13	d
Superior labor market information[a]	479	4.35	27	3.38
Internal	251	4.73	13	d
External	171	3.96	8	d
Total or average	1,990	4.42	105	3.31
Internal	1,059	4.48	54	3.44
External	686	4.12	33	3.20

a For measure of extent of labor market information, see text, p. 74.
b For a discussion of this concept see footnote 10, p. 62.
c Respondents for whom rate of pay could not be ascertained are excluded.
d Rates not shown where base is fewer than 25 sample cases.

was about 3 percent in the case of white men and about 10 percent among black. Since it is possible that the labor market information measure is merely an indication of individual initiative which may lead to higher wages even in the absence of better labor market information, it is helpful to examine the relationship between extent of labor market information and hourly rate of pay, controlling for respondent's I-E score. There are insufficient sample cases among blacks to make such a comparison. Among the whites, however, there is a pronounced interaction between labor market information and the I-E variable in their effects upon hourly wage rate. The influence of superior labor market information is pronounced in the case of the internals, leading to a wage advantage in the neighborhood of 10 percent. Among the externals, on the other hand, the differential virtually disappears.

Locus of Control

The evidence in Tables 4.12 and 4.13 clearly indicates that for men with exactly 12 years of schooling those who are above the median of their respective color group in degree of internality enjoy higher average hourly earnings than those whose score is below the median. Moreover, the relationship prevails irrespective of the extent of labor market information and irrespective of whether the respondent had training in addition to his high school education.

Although not shown in our tables, we have calculated the mean average hourly wage rate for internals and for externals within all categories of educational attainment, major occupation group, health condition, and length of service in current job. With each of these controls, internals have higher average hourly rates of pay than externals among both white men and black men.

The persistence of the relationship between I-E score and hourly rate of pay suggests that it is real. Nevertheless, this does not shed light on the causal direction of the association. There is evidence in other studies that internal individuals are more likely than external to have information about matters that are related to their well-being and also to make more effective use of such information.[19] On the other hand, at least one researcher has argued that

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19 See, for example, M. M. Seeman and J. N. Evans, "Alienation and Learning in a Hospital Setting," American Sociological Review 27 (1962):772-82. Also, see M. M. Seeman, "Powerlessness and Knowledge: A Comparative Study of Alienation and Learning," Sociometry 30 (1967): 105-23. In the earlier study, it was reported that internals are more knowledgeable than externals on a variety of matters relevant to their welfare and that internals more actively search their environment for relevant information than their external counterparts. In the later study, additional support was found for this hypothesis. Regarding utilization of information, Phares reports that although internals put available information to better use than externals under a variety of

defense mechanisms induce individuals to take credit for success and to blame external forces for failures.[20] To the extent that this occurs, labor market success as indicated by high wages may produce internality rather than being caused by it. We may ultimately be able to shed some light on this difficult question of causation by exploiting longitudinal data, since our modified Rotter scale was readministered to the sample in the final interview survey conducted in 1971.

III CHANGES IN RATE OF PAY, 1967-1969

The average white worker in the cohort who was employed as a wage or salary worker in 1967 and 1969 increased his hourly earnings between the dates of the two surveys by 19 percent (Table 4.14). For black males the corresponding percentage increase was 22 percent.

Variation According to 1967 Occupation

There is considerable variation in the rate of improvement in hourly earnings among the major occupational categories,[21] especially in the case of blacks. Fastest growing hourly earnings among the whites were in the service occupations, where rates of pay averaged 32 percent higher in 1969 than 1967. White-collar workers as a group registered a somewhat larger relative gain than blue-collar workers (20 versus 17 percent). Within the white-collar occupational category, wage increases varied according to major occupation group, with sales workers experiencing the greatest growth and managerial workers the least. However, among blue-collar workers growth in earnings did not vary with skill level. Among blacks, those in white-collar jobs also fared better than their blue-collar counterparts; the differential was much more pronounced than in the case of white men.

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controlled situations, they are not more likely to acquire or retain information than externals. (E. J. Phares, "Differential Utilization of Information as a Function of Internal--External Control," Journal of Personality 36 (1968):649-62.) Our findings presented in Table 4.13 appear to be consistent with those of Phares. That is, internals are only slightly more likely than externals to have superior labor market information. Among white men, 40 percent of the internals and 37 percent of the externals have superior information. Among blacks the corresponding percentages are 60 and 50. However, of those who have superior information, only the internals convert it to a wage advantage.

20 See Victor Vroom, Work and Motivation (New York: Wiley, 1964), p. 129.

21 There was, of course, some movement of workers from one major occupation group to another from 1967 to 1969. The patterns reported here, based on 1967, do not differ substantially from those observed when respondents were classified according to 1969 occupation.

Table 4.14 Mean Relative Change in Hourly Rate of Pay between 1967 and 1969 Surveys, by Major Occupation Group of 1967 Job and Color: Respondents Employed as Wage and Salary Workers in 1967 and 1969[a]

Major occupation group, 1967 job	WHITES		BLACKS	
	Total number (thousands)	Mean ratio of 1969 to 1967 rate of pay	Total number (thousands)	Mean ratio of 1969 to 1967 rate of pay
White collar workers	2,640	1.20	92	1.32
Professional	921	1.20	25	1.59
Managerial	902	1.18	14	b
Clerical	497	1.19	51	1.16
Sales	320	1.26	3	b
Blue collar workers	3,821	1.17	492	1.18
Craftsmen	1,974	1.17	99	1.12
Operatives	1,468	1.17	223	1.20
Laborers	380	1.17	169	1.19
Service workers	487	1.32	118	1.25
Farm workers	149	1.17	31	1.46
Total or average	7,120	1.19	733	1.22

a Respondents whom rate of pay could not be ascertained in both years are excluded.

b Percentage not shown where base is fewer than 25 sample cases.

Variation According to Comparative Job Status

If voluntary movement of workers performs its economic function of shifting human resources in the direction of jobs in which their productivity will be greater, one would expect workers who make voluntary moves to experience somewhat greater-than-average wage gains. On the other hand, it would not be surprising if workers who change jobs involuntarily were to fare worse than those who remain with the same employer.

The data in Table 4.15 confirm these expectations for white men, but only partially for black. In the case of the former, voluntary movers had an average wage gain over the two-year period of 28 percent, as compared with a 19 percent gain for "stayers" and a 17 percent gain for involuntary movers. Among the blacks, on the other hand, while those who changed employers voluntarily averaged a 29 percent wage increase as compared with a 20 percent increase for stayers, those who moved involuntarily inexplicably experienced the greatest gain of all--37 percent.

Table 4.15 Mean Relative Change in Hourly Rate of Pay between 1967 and 1969 Surveys, by Comparative Job Status, 1967-1969, and Color: Respondents Employed as Wage and Salary Workers in 1967 and 1969[a]

Comparative job status, 1967-1969	Total number (thousands)	Mean ratio of 1969 to 1967 rate of pay
	WHITES	
With same employer	6,126	1.19
With different employer	857	1.23
Voluntary	489	1.28
Involuntary	319	1.17
Total or average	7,120	1.19
	BLACKS	
With same employer	612	1.20
With different employer	82	1.32
Voluntary	45	1.29
Involuntary	32	1.37
Total or average	733	1.22

a Respondents whose rate of pay could not be ascertained in both years are excluded.

CHAPTER FIVE

SUMMARY AND CONCLUSION

With the execution of the 1969 interview survey, the five-year period of surveillance of our national sample of middle-aged men, begun in 1966, was somewhat more than half completed. Of the approximately 5,000 members of the sample originally interviewed, 94 percent were alive at the time of the reinterview in 1969, and of these over 90 percent participated. Our purpose in this progress report has been to analyze the major types of change in the labor market status of the men that had occurred between 1966 and 1969, and in addition to present some cross-sectional data on extent of unionization and on hourly rates of pay in 1969.

I PERSONAL CHARACTERISTICS

The process of aging three years produces some changes in the personal characteristics of middle-aged men that are likely to have effects upon various aspects of their labor market experience. By all odds the most important of these is health. Although a majority of the respondents (about six-tenths) reported no health problems affecting work in either 1966 or 1969, as many as an eighth of the men had developed such a problem between the two dates, while one in twelve experienced an improvement in this respect. Deterioration of health was more common than improvement in each of the three five-year age categories, but the disparity was by far the greatest among the oldest group of men--those who in 1966 had been between 54 and 59 years of age (pp. 5-7).[1]

Relatively little change in marital status occurred over the three-year period. The proportion of men who were married dropped by 1 percentage point among white and about 3 percentage points among blacks. On the other hand, more than a fourth of the respondents had fewer children living in the household at the time of the 1969 survey than in 1966 (p. 5). The net asset position of the men improved over the three-year period by about 50 percent for the white

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1 Throughout this chapter page numbers refer to the sections of the report containing the material being summarized.

men but only by 5 percent for the black (p. 14). One might very briefly, and at the risk of oversimplification, summarize these trends by noting that both the ability and the economic need to work declined somewhat for the average man in the sample, but the latter much less for blacks than whites.

II LABOR MARKET PARTICIPATION AND UNEMPLOYMENT

In interpreting changes over the three-year period in measures of labor market participation and unemployment for the sample it is necessary to keep in mind that general economic conditions were improving during the period. For example, the seasonally adjusted unemployment rate for men 25 to 54 years of age dropped from 2.2 percent to 1.6 percent between June of 1966 and June of 1969, the dates of the surveys. Thus, except for the effects of the aging process with all that it entails, one might have expected the labor market participation of the men to have increased and their unemployment to have decreased over the period.

While the data do show some improvement in the unemployment situation as between calendar year 1965 and the 12 months preceding the 1969 survey (pp. 26-28), labor force participation registers a substantial decline over the three-year period. For example, the survey week labor force participation rate dropped by almost 4 percentage points for white men and by somewhat more than 4 percentage points for blacks. These reductions were most pronounced for the oldest of the three five-year age categories of men. They were even more pronounced among men with health problems, and particularly those who developed a work-limiting condition between the dates of the 1966 and 1969 interviews (pp. 19-23).

There are fascinating interactions among age, health condition, and color. For one thing, it is clear that both the cross-sectional and longitudinal relationships between age and labor force participation are to a substantial degree reflections of the greater incidence of health problems among older men in the sample. In the cross-section, for example, there is a 12.4 percentage point difference in the 1969 labor force participation rate of white men between 48 and 52 years of age and those 58 to 62 years of age. But among men who reported no health problems in either 1966 or in 1969 this difference is less than 3 percentage points. Longitudinally, the tendency for the decline in labor force participation from 1966 to 1969 to be greater for older than for younger men is much more marked in the total sample than it is when only those men who enjoyed continuously good health over the period are considered (pp. 24-26).

It is also true that the black-white difference in labor force participation both cross-sectionally and longitudinally is primarily a reflection of the differential impact of health problems on black and white men. In the cross-section, the higher labor force participation

rate that prevails on the average for white men does not exist when the comparison is confined to men in each color category who enjoyed continuously good health between 1966 and 1969. Indeed, the 1969 labor force participation rate of such blacks exceeds that of their white counterparts. Longitudinally, while the decline in labor force participation is greater on average for black than for white men, the situation is reversed when only the healthy whites and blacks are considered (pp. 23-24).

III THE MOBILITY OF EMPLOYED WAGE AND SALARY WORKERS

Even among men in their middle years there is a considerable amount of movement among jobs during the course of a three-year period. Of men in the sample employed as wage and salary earners in 1966, as many as a fifth were with a different employer by the time of the 1969 survey. Because this measure ignores both the number of intervening moves that these individuals may have made, and also any workers who left and then returned to their 1966 employers, it clearly understates the total amount of job shifting over the three-year period by the men who remained in the sample in 1969. Furthermore, since job changers were probably disproportionately numerous among men who disappeared from the sample because they could not be located in 1969, the estimate of job changers even as defined here is probably downwardly biased. Over three-fifths of the interfirm shifts that occurred during the three-year period were initiated by the workers (pp. 29-30).

Substantial differences in mobility rates exist among occupations. In general white-collar workers were less likely than blue-collar workers to have changed employers between 1966 and 1969. This is true both of white men and of black men. In the case of the whites, however, it is attributable almost exclusively to the lower rates of involuntary movement among white-collar workers as compared with blue-collar workers; among blacks, on the other hand, voluntary mobility was also lower among white-collar workers than blue-collar workers. The evidence from this survey reinforces our previous finding that black men are particularly unlikely to quit reasonably good jobs once they have found them (pp. 33-34).

The probability of a job change between 1966 and 1969 was inversely related to the respondent's tenure in his 1966 job, reflecting increasing equities in jobs, the strengthening of social and psychological ties to the work place, and the increasing protection against layoff as length of service increases. Even though the age range of the present sample is relatively small, there is also evidence of at least a slight effect of age upon voluntary mobility, reflecting the greater difficulty that workers in their late 50's have in finding jobs, as well, perhaps, as their shorter "pay-off" periods for an "investment" in job change (pp. 30-33).

In addition to tenure and age, a number of other characteristics of the 1966 jobs or of their incumbents were related to the probability of a voluntary job change between 1966 and 1969. One of these was our measure of the strength of respondents' attachment to their 1966 jobs. Those whom we had classified in 1966 as "highly attached" to their jobs (i.e., immobile) were less likely--even within length-of-service categories--to have made voluntary job changes between 1966 and 1969. Moreover, there is also evidence that the job attachment measure describes a somewhat different attitude toward the job than the degree of satisfaction the respondent expresses, for when workers are cross-classified by "degree of attachment" and "degree of satisfaction" with their 1966 job, each measure is seen to exercise an independent effect upon the likelihood of a voluntary job change (pp. 35-40).

Consistent with expectations, those who were low-paid in 1966 were considerably more likely to change employers between 1966 and 1969 than those whose wages were higher. While the relationship between wage rate and mobility is not monotonic, there is a sharp difference, at least among white men, between those earning under $2.00 per hour and those earning $2.00 per hour or more. Moreover, the relationship prevails both within length-of-service categories and within occupational categories to the extent that sample size permits the analysis to be made. Overall, white men earning under $2.00 per hour in 1966 were almost three times as likely to have voluntarily left their jobs by 1969 as those whose earnings were higher. Among black men the relationship between wage rate and voluntary mobility was somewhat less regular than in the case of the white. Nevertheless, even for them it is generally true that those earning under $2.00 per hour in 1966 had higher mobility rates between 1966 and 1969 than those in other wage categories (pp. 40-44).

Men covered by pension plans (other than Social Security and Railroad Retirement) in their 1966 jobs were considerably less likely than others to have made voluntary job changes by 1969. Although it has not been possible to control simultaneously for all of the factors that may be intercorrelated both with pension plan coverage and voluntary mobility, the evidence is at least consistent with a widely held belief that (non-vested) pension plans tend to inhibit the voluntary movement of labor. It must be emphasized however, that men in the sample with the longest service--who, if covered, would have the greatest equities in pension plans and would thus be most likely to be influenced by those that are not vested--moved very infrequently in any case (pp. 44-48).

Stability is another characteristic of a job that affects the likelihood of a worker's leaving it. Respondents who had experienced unemployment in calendar year 1965 were much more likely than those with no unemployment experience to have made both voluntary and involuntary job changes between 1966 and 1969. Moreover, this relationship prevailed also within broad length-of-service categories (pp. 48-49).

The fact that rates of voluntary movement are above average from jobs that are less attractive from the standpoint of wages, fringe benefits, and stability suggests that the labor market for middle-aged men is operating so as to improve both the allocation of labor and also the well-being and satisfaction of the workers themselves. This conclusion is reinforced by the relationship that has been found between the workers' mobility status on the one hand and rate of wage improvement between 1966 and 1969 on the other. By and large, among black men and white men alike, those who voluntarily changed employer between 1966 and 1969 experienced a more substantial rate of increase in average hourly earnings than those who remained with the same employer (p. 79).

IV COLLECTIVE BARGAINING COVERAGE

As of mid-1969, approximately two-fifths of middle-aged male wage and salary earners were covered by collective bargaining agreements, and of these, 93 percent were themselves union members. These proportions, of course, vary considerably both occupationally and industrially, being much higher among blue-collar than white-collar workers, and in transportation, mining, construction, and manufacturing than in trade, finance, service, or public administration. As a result of occupational differences in the incidence of unionization and of the substantial difference in occupational composition between white and black men, the proportion of black middle-aged wage earners who are organized is somewhat higher than that of their white counterparts (45 versus 38 percent). Within the blue-collar occupations, however, there is very little difference in the extent of union membership between white men and black men, except among craftsmen where the proportion of whites who are organized is 7 percentage points higher than of blacks (pp.51-53).

While the tabular analysis to which we have thus far been restricted makes it rather difficult to quantify the independent effects of collective bargaining, there are nevertheless fairly clear indications that unionization makes a difference with respect to the characteristics of jobs as well as with respect to workers' attitudes toward them. For one thing, there is a substantial differential in hourly rate of pay between unionized and nonunionized jobs. This differential increases in relative terms as one moves down the occupational hierarchy within the blue collar category and is also greater for black men than for white. Thus, the black-white wage differential tends to be smaller within the organized sector of the labor market than in the unorganized sector (pp. 54-59).

Not only do organized firms tend to pay higher wages, but they are much more likely than unorganized firms to have pension plans. Of white respondents covered by collective bargaining, three-fourths have pension plan coverage as compared with less than two-thirds of those who are

unorganized. Among black men the differential is even greater. As is true in the case of wages, the difference in pension coverage between organized and unorganized workers becomes greater as one moves down the occupational ladder, so that for operatives and laborers combined the probability of pension coverage is about twice as high among organized as among unorganized workers (pp.59-60).

In view of these differences, and even recognizing that not all of them represent the independent effects of unionism, it is nevertheless not surprising to find that organized workers tend to have longer tenure in their jobs than those who are not organized. Just as their longer tenure attests to their greater past attachment to their jobs, there is also evidence of lower prospective mobility among organized workers as indicated by our measure of job attachment. Unionized men are much more likely than others to indicate that they would be unwilling to take another job at any conceivable improvement in wage rate. Moreover, the relationship prevails within each length-of-service category except among white men with less than five years of service (pp. 54; 59-62).

Finally, on the basis of a modified version of the Rotter I-E scale there is evidence that unionized workers differ in some aspects of personality from those who are not organized. Generally speaking, workers covered by collective bargaining tend to feel a greater command over their own destiny than unorganized workers. Whether this relationship reflects a selective process whereby less anomic workers tend to form unions, or whether the experience of union membership tends to generate a greater degree of "internality" cannot at this point be said (pp. 62-64).

V RATE OF PAY IN 1969 JOB

Average hourly earnings for all men in the sample as of the survey date in 1969 were $4.25 for white men and $2.78 for black. The substantial relative pay differential enjoyed by white men over black men, amounting to 53 percent, is in large part a reflection of the different occupational distributions of the two color categories. Nevertheless, the difference remains substantial in many of the major occupation groups, ranging between 40 percent among professional workers and among craftsmen to 6 percent in the case of nonfarm laborers (pp. 64-66).

Several factors found to be correlated with hourly rate of pay in 1966 bear similar relationships to the level of compensation in 1969. There is, for example, a pronounced relationship between hourly rate of pay and the population size of the labor market area in which the respondent resides. There is also a clear and fairly regular relationship between average hourly earnings and length of service in current job, although there is limited evidence at least for semi-skilled workers that longer job tenure does not increase the earnings of black men to

the same extent as white men. It also appears to be true that men who report no health problems enjoy higher average hourly earnings than those who suffer health limitations, although the influence of health upon rate of pay is not nearly so profound as its influence on labor force participation. Finally, there is a pronounced relationship between educational attainment and rate of pay, even within major occupation groups (pp.66-72).

As indicated above, these relationships between rate of pay and size of city, job tenure, educational attainment, and health replicate with 1969 data analyses that had earlier been reported on the basis of 1966 data. In several respects, however, we have been able to move beyond our earlier findings. For example, there is evidence in the 1969 survey that men who have had vocational training outside the formal educational system are likely to enjoy higher rates of pay than those without such training even when controls are introduced for the level of formal educational attainment and the individual's initiative or "drive." Thus, of all men with exactly 12 years of education those with training enjoyed wage differentials over those without training amounting to 14 percent in the case of white men and 32 percent in the case of black. Moreover, the positive influence of training on average hourly earnings appears to prevail both among men classified as "internal" and those classified as "external" on the basis of their I-E scores (pp. 72-74).

There is evidence in the present study that the more a man knows about the job opportunities in the local labor market the more likely he is to receive higher wages. Men in the sample who were able in 1966 to identify specific firms as prospective employers should they lose their jobs had higher average hourly earnings in 1969 than those who could not. This relationship appears to prevail, however, only among those men whose I-E scores classify them as "internal" (pp. 74-76).

Finally, it may be noted that there is a persistent relationship between degree of "internality" as measured by the modified I-E scale and average hourly earnings. Here again, although we are confident of the relationship, it is not possible to say whether the higher degree of internality has led to a higher degree of labor market success or whether the I-E score simply reflects the kind of labor market experience that the respondents have had (pp. 76-77).

VI CONCLUDING OBSERVATIONS

Since the publication of the second volume in this series of the Pre-Retirement Years we have moved two years closer to our goal of being able to analyze a five-year span in the work lives of middle-aged men. It is hardly surprising that most of the tendencies that were already discernible over the one-year period 1966-1967 continue to be

apparent, although perhaps in bolder relief, as the sample has aged an additional two years. As was true on the basis of the 1967 data, it remains true as of 1969 that whether the passage of time has been kind to this cohort of men depends upon what facet of their experience one examines.

On the one hand, there was a perceptible decline in the capacity to work over the period and there is little question that this was responsible for a substantial portion of the actual decrease in labor market participation that occurred. On the other hand, if one confines his attention to men who remained economically active, the evidence suggests that on average their situation improved, although there is a substantial minority for whom this is not the case. The increase in average hourly earnings over the period exceeded the rise in the Consumer Price Index, so that real earnings rose.

The difference discernible over the 1966-1967 period in the experience of blacks and whites also continues to be apparent over the longer time period. In terms of labor market participation, the relative disadvantage of the blacks has widened over time. And it is reasonably clear that this is a matter of disadvantage rather than choice, since the intercolor difference does not exist when only healthy men are considered. On the other hand, the relative position of those blacks who have remained in the labor force has improved somewhat, at least as measured by hourly earnings. Moreover, while rates of both voluntary and involuntary job change are fairly similar as between blacks and whites, black men who changed jobs made economic gains relatively greater than those of white. To what extent this shrinkage over time in the economic differential between white and black men is attributable to the general improvement in economic conditions between 1966 and 1969 and to what extent is it attributable to the impact of the civil rights movement cannot at this juncture be known.

Several new variables, most notably the I-E scale and collective bargaining coverage, became available as the result of the 1969 survey and have permitted interesting new kinds of analysis in this report. This will be true to an even greater extent when the results of the final (1971) survey become available. First, we will have at that time a much more comprehensive and detailed description of each respondent's physical condition, including the specific respects, if any, in which his work activity is limited. Second, we will have for the entire sample a retrospective evaluation of the five years covered by the survey, including each respondent's perception of whether and in what respects he is better or worse off; the extent to which he has experienced discrimination; the degree to which the physical and psychological demands of his job have increased or decreased; and, for those who remained with the same employer during the entire five years, the extent to which alternative opportunities presented themselves or were sought. Third, the fact that the modified Rotter test was readministered in 1971 means that we should be able to make some progress

in ascertaining the direction of causation involved in the relationship between I-E score and various measures of labor market behavior.

Finally, and perhaps most important of all, we shall be able to examine the impact of a substantial change in the economic environment upon the labor market experiences of the cohort of men under consideration. The study in a sense will have been the beneficiary of the cost that the nation has borne by virtue of looser labor markets and higher unemployment rates experienced since 1969. The fact that we have detailed records for the same group of individuals over a two-year period in which the economy was improving and for an adjacent two-year period over which it was declining means that we shall be able to address ourselves to a number of important labor market questions.

For example, to what extent is the impact of involuntary job separations on middle-aged men affected by the level of economic activity? To what degree does the effect of deteriorating health differ depending whether the economy is moving upward or downward? How is the black-white earnings differential affected by changes in the level of economic activity? Information on the latter question may shed some light on the extent to which the shrinking of the differential between 1966 and 1969 was attributable to improvement in the economy and to what extent to the civil rights movement. For all of these reasons we look forward with keen anticipation to the preparation of our final report on the basis of the 1971 data.

APPENDIXES

APPENDIX A

NOTES ON TABLES

The tables in this report have a number of characteristics that deserve some comment. In a study of this kind, interest generally focuses on relative rather than absolute magnitudes, e.g., the proportions of white men and of black men who have a given characteristic, rather than their numbers. Accordingly, data in virtually all tables are presented in terms of percentages. In all cases, however, the base of each percentage is shown, so that its statistical reliability can be estimated. In calculating percentage distributions, cases for which no information was obtained are excluded from the total. This amounts to assuming that those who did not respond to a particular question do not differ in any relevant respect from those who did.[1] All percentage distributions, therefore, should add up to 100 percent; when they do not, it is because of rounding. It should be observed, however, that when absolute numbers do not add to the indicated total, the difference is attributable (unless otherwise noted) to cases for which no information was obtained, as well as to rounding.

Percentages in most tables have been rounded to the nearest whole percentage point. To record them to the nearest tenth would clutter the tables unnecessarily and create the impression of a degree of accuracy that does not in fact exist. To be statistically significant, differences in percentages in this study generally have to be at least several percentage points; thus, there is not much purpose in expressing percentages to the nearest tenth of a point. There are a few exceptions to this general rule. For example, because labor force participation rates are so high and their bases so large, their standard errors are quite small; hence very small differences may be significant.

With rare exceptions, our tables involve at least three-way cross-classifications in which color is almost always one of the variables. Our purpose is generally to ascertain how an independent variable interacts with color to "explain" some aspect of labor market behavior. For example, are changes in health and changes in labor force participation related in the same way for black men as for white men? Since we are much more interested in this type of question than in the relation between two variables for the total population

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1 Nonresponse rates exceed 10 percent in only a very few variables. In these cases, nonresponse bias, if suspected, has been taken into account in the interpretation.

irrespective of color, most of our tables omit the totals for blacks and whites combined. It might be mentioned that because of the overwhelming numerical importance of the whites, the distribution of the total population by any variable resembles very closely the distribution of the whites.

Percentages and means are not shown where the absolute number of sample cases on which they would be based is smaller than 25. Nevertheless, some of the measures that are shown have high sampling error as the result of the small number of cases on which they are based. For example, the standard error of a percentage in the neighborhood of 50 is about 10 percentage points when the base is 50 sample cases; for percentages near 5 or 95, the standard error is about 4 percentage points (see Appendix D). As a rule, we are not inclined to place much emphasis on percentages based on fewer than 50 sample cases. The reader who wishes to observe the same cautions in interpreting the tables should keep in mind that the "blown up" population figure corresponding to 50 sample cases is approximately 200 thousand for whites and about 50 thousand for blacks.

APPENDIX B

GLOSSARY

AGE

Age of respondent as of last birthday prior to April 1, 1969.

ATTACHMENT TO JOB

This concept refers to the propensity of a worker to remain with his employer despite his perception of more economically rewarding jobs elsewhere in the local community; in other words, the converse of mobility. It is measured by the relative increase in rate of pay for which an employed respondent would be willing to accept a hypothetical offer of employment with a different employer.

ATTITUDE TOWARD JOB

Respondent's report of his feelings toward his job at the time of interview when confronted with the following four alternatives: "like it very much, like it fairly well, dislike it somewhat, dislike it very much."

ATTRITION RATE

The attrition rate between year X and year Y is the proportion of respondents interviewed in year X who were not reinterviewed, for whatever reason, in year Y. See NONINTERVIEW RATE.

AVERAGE HOURLY EARNINGS: See HOURLY RATE OF PAY

CLASS OF WORKER

Wage and Salary Worker

A person working for a rate of pay per unit-time, commission, tips, payment in kind, or piece rates for a private employer or any government unit.

Self-employed Worker

A person working in his own unincorporated business, profession, or trade, or operating a farm for profit or fees.

Unpaid Family Worker

A person working without pay on a farm or in a business operated by a member of the household to whom he is related by blood or marriage.

COLOR

The term "blacks" refers exclusively to Negroes in this report, and "whites" refers only to Caucasians. The relatively small number of sample cases representing non-Caucasians other than Negroes have been excluded from the tables.

COMPARATIVE JOB STATUS

Comparative job status is a comparison of the employer for whom the respondent worked at two specified survey dates. Respondents are classified into two major categories: "same employer" and "different employer." The latter category is further divided according to whether the job change was voluntary or involuntary. Where a worker has had several jobs between the two survey dates in question, the reason for the separation from the job held in the earlier survey week is used to classify the change as voluntary or involuntary. See MOBILITY; VOLUNTARY JOB CHANGE; INVOLUNTARY JOB CHANGE.

EDUCATIONAL ATTAINMENT

The highest year of school completed by the respondent in "regular" school.

EMPLOYED: See LABOR FORCE AND EMPLOYMENT STATUS

FAMILY NET ASSETS

The market value of all family assets--real and financial--(except automobile) minus the value of debts outstanding.

HEALTH CONDITION

On the basis of respondents' assessment of whether their health or physical condition prevents them from working or limits the kind and/or amount of work they can do, they are classified into two groups: those whose health affects work and those with no health limitations affecting work.

HOURLY RATE OF PAY

Usual gross rate of compensation per hour on job held by wage and salary workers during survey week. If a time unit other than an hour was reported, hourly rates were computed by first converting the reported figure into a weekly rate and then dividing by the number of hours usually worked per week on the job.

HOURS USUALLY WORKED

This variable measures the usual number of hours per week worked in calendar year 1965 or during the 12-month period prior to a survey data for those who worked at least one week during the period.

I-E SCALE: See Appendix F

INDUSTRY

Respondents' jobs are classified according to the major industry divisions in the industrial classification system.

INTERFIRM MOBILITY

Interfirm mobility in this report refers to a change of employers between two survey dates. See COMPARATIVE JOB STATUS.

INVOLUNTARY JOB CHANGE

A job change initiated by the employer, as in a layoff, the ending of a temporary job, and a discharge. See VOLUNTARY JOB CHANGES.

JOB

A continuous period of service with a given employer. Thus, a job change is a move from one employer to another. A change of occupation within a given firm is not included among job changes.

Current or Last Job

For those respondents who were employed during the survey week, the job held during the survey week. For those respondents who were either unemployed or out of the labor force, the most recent job.

JOB SATISFACTION: See ATTITUDE TOWARD JOB

LABOR FORCE AND EMPLOYMENT STATUS

In the Labor Force

All respondents who were either employed or unemployed during the survey week:

Employed

All respondents who during the survey week were either (1) "at work"--those who did any work for pay or profit or worked without pay for 15 hours or more on a family farm or business; or (2) "with a job but not at work"--those who did not work and were not looking for work, but had a job or business from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or because they were taking time off for various other reasons.

Unemployed

All respondents who did not work at all during the survey week and either were looking or had looked for a job in the four-week period prior to the survey, all respondents who did not work at all during the survey week and were waiting to be recalled to a job from which they were laid off, and all respondents who did not work at all during the survey week and were waiting to report to a new job within 30 days.

Out of the Labor Force

All respondents who were neither employed nor unemployed during the survey week.

LABOR FORCE PARTICIPATION RATE

The proportion of the total civilian noninstitutional population or of a demographic subgroup of that population classified as "in the labor force."

LABOR MARKET INFORMATION

Respondents are classified into two categories, as having "Little labor market information" or "Superior labor market information" on the basis of their ability in 1966 to identify specific employers in the community to whom they would apply for jobs if they lost the one they had at that time.

LENGTH OF SERVICE IN JOB

The total number of years spent by the respondent in his job at the time in question.

MARITAL STATUS

Respondents were classified into the following categories: married, spouse present; married, spouse absent; divorced; separated; widowed; and never married. When the term "married" is used in this report, it includes the first two of these categories.

MIGRATION

Whether a respondent has "migrated" during a specified time period is ascertained by comparing his county (SMSA) of residence in the two relevant survey weeks. Thus, migration is defined as a situation in which the county (SMSA) of residence differs at these two survey dates, and ignores intervening moves and returns that may have occurred.

MOBILITY: See ATTACHMENT TO CURRENT JOB, INTERFIRM MOBILITY, AND MIGRATION

NONINTERVIEW RATE

The noninterview rate between year X and year Y is the proportion of respondents interviewed in year X who were not reinterviewed in year Y because of refusal, inability of the interviewer to locate the respondent, or because the respondent was otherwise inaccessible. The noninterview rate plus the percentage of respondents who have died between year X and year Y equals the total ATTRITION RATE.

NUMBER OF CHILDREN

The number of the respondent's children who resided in his household at the time of interview.

OCCUPATION

Respondents' jobs are classified into the major occupation groups of Bureau of the Census' classification system used for the 1970 Census. The four types of occupation are white collar (professional and technical workers; managers, officials, and proprietors; clerical workers; and sales workers); blue collar (craftsmen and foremen, operatives, and nonfarm laborers); service; and farm (farmers and farm managers, and farm laborers).

OCCUPATIONAL TRAINING

Program(s) taken outside the "regular" school system for other than social or recreational purposes. Sponsoring agents include government, unions, and business enterprises. A training course sponsored by a company must last at least six weeks to be considered a "program."

OUT OF THE LABOR FORCE: See LABOR FORCE AND EMPLOYMENT STATUS

PENSION COVERAGE

Respondents' coverage by pensions as of the 1966 survey date refers to all types of pension plans other than Social Security and Railroad Retirement, including private employer, civil service, and private annuity plans. As of the 1969 survey date, pension coverage refers exclusively to an employer program (see Interview Schedule, item 32a).

PSU (PRIMARY SAMPLING UNIT)

One of the 235 areas of the country from which the sample for this study was drawn; usually an SMSA (Standard Metropolitan Statistical Area) or a county.

REACTION TO HYPOTHETICAL JOB OFFER: See ATTACHMENT TO JOB

ROTTER SCORE (LOCUS OF CONTROL)

This score is based on a respondent's answers to an abbreviated version (11 items) of Rotter's 23-item "Internal-External" scale. Each of the 11 responses was assigned a score of 1 to 4 points. The scores were then summed and consequently ranged in value from 11 to 44 points. See Appendix F.

SELF-EMPLOYED: See CLASS OF WORKER

SURVEY WEEK

For convenience, the term "survey week" is used to denote the calendar week preceding the date of interview. In the conventional parlance of the Bureau of the Census, it means the "reference week."

TENURE: See LENGTH OF SERVICE IN JOB

TOTAL FAMILY INCOME

Income from all sources (including wages and salaries, net income from business or farm, pensions, dividends, interest, rent, royalties, social insurance, and public assistance) received by any family member living in the household. Income of nonrelatives living in the household is not included.

UNEMPLOYED: See LABOR FORCE AND EMPLOYMENT STATUS

UNEMPLOYMENT EXPERIENCE IN 12-MONTH PERIOD

In 1966 survey, cumulative number of weeks in calendar year 1965 that the respondent reported he was looking for work or on layoff from a job. In 1967, 1968, and 1969 surveys, reference periods are the 12-month period prior to interview.

UNEMPLOYMENT RATE

The proportion of the labor force classified as unemployed.

VOLUNTARY JOB CHANGE

A job change other than one initiated by the employer. See INVOLUNTARY JOB CHANGE.

WAGE AND SALARY WORKERS: See CLASS OF WORKER

WAGE RATE: See HOURLY RATE OF PAY.

WEEKS IN THE LABOR FORCE IN 12-MONTH PERIOD

In 1966 survey, cumulative number of weeks in calendar year 1965 that the respondent reported that he either worked, looked for work, or was on layoff from a job. In 1967, 1968, and 1969 surveys, reference periods are the 12-month periods prior to interview.

APPENDIX C*

SAMPLING, INTERVIEWING AND ESTIMATING PROCEDURES

The Survey of Work Experience of Mature Men is one of four longitudinal surveys sponsored by the Manpower Administration of the U.S. Department of Labor. Taken together these surveys constitute the National Longitudinal Surveys.

The 1969 survey was the third of four interviews conducted for the Survey of Work Experience of Mature Men.[1] The respondents were between the ages of 45 and 59 at the time of the first interview conducted in 1966; thus, the age range in 1969 was 48 to 62.

The Sample Design

The National Longitudinal Surveys are based on a multi-stage probability sample located in 235 sample areas comprising 485 counties and independent cities representing every state and the District of Columbia. The 235 sample areas were selected by grouping all of the nation's counties and independent cities into about 1,900 primary sampling units (PSU's) and further forming 235 strata of one or more PSU's that are relatively homogeneous according to socioeconomic characteristics. Within each of the strata a single PSU was selected to represent the stratum. Within each PSU a probability sample of housing units was selected to represent the civilian noninstitutional population.

Since one of the survey requirements was to provide separate reliable statistics for Negroes and other races, households in predominantly Negro and other race enumeration districts (ED's) were selected at a rate three times that for households in predominantly white ED's. The sample was designed to provide approximately 5,000 interviews for each of the four surveys--about 1,500 nonwhites and 3,500 whites. When this requirement was examined in light of the expected number of persons in each age-sex-color group it was found that approximately 42,000 households would be required in order to find the requisite number of nonwhites in each age-sex group.

An initial sample of about 42,000 housing units was selected and a screening interview took place in March and April, 1966. Of this number

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* This Appendix was written by Rachel Cordesman and Dorothy Koger, of the Longitudinal Surveys Branch, Demographic Surveys Division, U.S. Bureau of the Census.

1 A mail questionnaire was utilized in 1968.

about 7,500 units were found to be vacant, occupied by persons whose usual residence was elsewhere, changed from residential use, or demolished. On the other hand, about 900 additional units were found which had been created within existing living space or had been changed from what was previously nonresidential space. Thus 35,360 housing units were available for interview; of these, usable information was collected for 34,662 households, a completion rate of 98.0 percent.

Following the initial interview and screening operation, 5,522 males age 45 to 59 were designated to be interviewed for the Survey of Work Experience. These were sampled differentially within four strata: whites in white ED's (i.e., ED's which contained predominantly white households), nonwhites in white ED's, whites in nonwhite ED's and nonwhites in nonwhite ED's.

The Field Work

Three hundred twenty interviewers were assigned to this survey. Many of the procedures and the labor force and socioeconomic concepts used in this survey are identical with or similar to those used in the Current Population Survey; the interviewers selected for this survey had CPS experience and most of them (92 percent) also had previously worked on at least one of the earlier panels of the National Longitudinal Surveys. Consequently, a staff of well trained interviewers was maintained, with the costs and time required for training being kept at a minimum.

Interviewer training consisted of a home study, which incorporated a set of exercises covering the procedures and concepts explained in the reference manual. The home study was reviewed by a survey supervisor. In addition, those interviewers who had no previous experience with the longitudinal surveys attended one day of classroom training conducted by a supervisor.

The supervisor was provided with a "verbatim" training guide which included lecture material and a number of structured practice interviews designed to familiarize the interviewers with the questionnaire. All training materials were prepared by the Bureau staff and reviewed by the Manpower Administration and the Center for Human Resource Research of The Ohio State University. Twenty-five interviewers were trained in six training sessions held around the country. Professional staff members of the participating organizations observed the training sessions, and later, the actual interviewing.

Training began on July 28, 1969 and the interviewing therafter. The interviewing continued until the middle of October. Completion of the field work was delayed for several reasons:

1. The interviewers had to work on the CPS one week a month, and a number of them had assignments for other surveys which were to be completed during the same time period.

2. At least one year had passed since the respondent was contacted and the listed addresses were obsolete for a number of respondents. Therefore, a great deal of time had to be spent in locating respondents.

3. Most of the respondents were employed and, thus, were potentially available for interviewing only at certain times of the day or on weekends.

Of the 5,522 respondents originally selected for the sample, 5,034 were interviewed in 1966 for a completion rate of 91.2.

Summary, 1966 Interview

	Total sample selected	Total interviews	Nonresponse			
			Refusals	Unable to contact	Other	Total
Total number	5,522	5,034	146	209	133	488
Percent of workload	100.0	91.2	2.6	3.8	2.4	8.8
Percent of nonresponse			29.9	42.8	27.3	100.0

The 5,034 men who were interviewed in 1966 constituted the panel for the 1967 survey. Those cases which were nonresponses in 1966 were permanently dropped from the sample because there would be no base year data for them. Sixty persons died between the 1966 and 1967 surveys, leaving 4,974 persons eligible to be interviewed in 1967. Interviews were obtained from 4,762 respondents for a completion rate of 95.7.

Summary, 1967 Interview

	Total eligible for interview	Total interviews	Nonresponse			
			Refusals	Unable to contact	Other	Total
Total number	4,974	4,762	107	88	17	212
Percent of workload	100.0	95.7	2.2	1.8	0.3	4.3
Percent of nonresponse			50.5	41.5	8.0	100.0

If a respondent was a nonresponse in 1967 for reasons other than refusal, another attempt was made in 1968 to obtain a response from him. Of the 4,867 men eligible for reinterview in 1968 (4,974 minus 107 refusals in 1967), 72 died between the 1967 and 1968 panels. Responses were obtained from 4,661 of the remaining 4,795 respondents for a completion rate of 97.2.

Summary, 1968 Mail Questionnaire

	Total eligible for interview	Total contacted	Nonresponse			
			Refusals	Unable to contact	Other	Total
Total number	4,795	4,661	49	85	0	134
Percent of workload	100.0	97.2	1.0	1.8	0.0	2.8
Percent of nonresponse			36.6	63.4	0.0	100.0

All eligible respondents who were nonresponses for two consecutive surveys along with refusals, were permanently dropped from the sample. Twenty-four respondents were dropped from the sample because they were nonresponses in both 1967 and 1968, along with 49 refusals in 1968 and 102 who died between the 1968 and 1969 surveys, leaving 4,620 eligible for interview in 1969. Of these, 4,404 were interviewed for a completion rate of 95.3.

Summary, 1969 Interview

	Total eligible for interview	Total interviews	Nonresponse			
			Refusals	Unable to contact	Other	Total
Total number	4,620	4,404	88	87	41	216
Percent of workload	100.0	95.3	1.9	1.9	0.9	4.7
Percent of nonresponse			40.7	40.3	19.0	100.0

A preliminary edit to check the quality of the completed questionnaires was done by the Data Collection Center staffs. This consisted of a "full edit" of each questionnaire returned by each interviewer. The editor reviewed the questionnaires from beginning to end to determine if the entries were complete and consistent and whether the skip instructions were being followed.

The interviewer was contacted by phone concerning minor problems, and, depending on the nature of the problem, was either merely told of her error and asked to contact the respondent for further information or clarification, or, for more serious problems, was retrained, either totally or in part, and the questionnaire was returned to her for completion.

Estimating Methods

The estimation procedure adopted for this survey was a multi-stage ratio estimate. The first step was the assignment to each sample case of a basic weight which was equal to the reciprocal of the sampling fraction of the stratum from which it was selected. Thus, from the Survey of Work Experience of Mature Men there were four different base weights reflecting differential sampling by color within stratum (i.e., white ED's versus nonwhite ED's).

1. Noninterview Adjustment

The weight was computed for all persons interviewed in 1966. Weights for all interviewed persons were adjusted to the extent needed to account for persons for whom no information was obtained because of absence, refusal, or unavailability for other reasons. This adjustment was made separately for each of eight groupings: Census region of residence (Northeast, North Central, South, West) and place of residence (urban, rural). No additional noninterview adjustment was made for persons who were not interviewed in any of the subsequent panels.

2. Ratio Estimates

The distribution of the population selected for the sample may differ somewhat, by chance, from that of the nation as a whole, in such characteristics as age, color, sex and residence. Since these population characteristics are closely correlated with the principal measurements made from the sample, the latter estimates can be substantially improved when weighted appropriately by the known distribution of these population characteristics. This was accomplished through two stages of ratio estimation, as follows:

a. First-Stage Ratio Estimation

This is a procedure in which the sample proportions were weighted by the known 1960 Census data on the color-residence distribution of the population. This step took into account the difference existing at the time of the 1960 Census between the color-residence distribution for the nation and for the sample areas.

b. Second-Stage Ratio Estimation

In this step, the sample proportions were weighted by independent current estimates of the population by age and color. These estimates were prepared by carrying forward the most recent Census data (1960) to take account of subsequent aging of the population, mortality, and migration between the United States and other countries. The adjustment was made by color within three age groupings: 45 to 49, 50 to 54, and 55 to 59.

After this step, each sample person has a weight which remains unchanged throughout the five-year life of the survey. The universe of study was thus fixed at the time of interview for the first cycle. No reweighting of the sample is made after subsequent cycles since the group of interviewed persons is an unbiased sample of the population group (in this case, males age 45 to 59) in existence at the time of the first cycle only.

Coding and Editing

Most of the data could be punched directly from the questionnaire, since many of the answers were numerical entries or in the form of precoded categories. However, the Bureau's standard occupation and industry codes which are used in the monthly CPS were also used for the job description questions, and these codes are assigned clerically. In addition, the answers for all the "open-end" questions had to be clerically coded, using categories which were previously developed in conjunction with the Center for Human Resource Research from hand tallies of a subsample of completed questionnaires.

The consistency edits for the questionnaire were completed on the computer. A modification of the CPS edit was used for the parts of the questionnaire which were similar to CPS; separate consistency checks were performed for all the other sections. None of the edits included an allocation routine which was dependent on averages or random information from outside sources, since such allocated data could not be expected to be consistent with data from subsequent surveys. However, where the answer to a question was obvious from others in the questionnaire, the missing answer was entered on the tape. For example, if item 32b ("Is there a compulsory retirement plan where you work; that is, do you have to stop working at your present job at a certain

age?") was blank but legitimate entries appeared in 32c and d ("At what age?" and "Would you work longer than that if you could?") a "Yes" was inserted in 32b. In this case, only if 32b was marked "Yes" could 32c and d be filled; therefore the assumption was made that either the key punch operator failed to punch the item or the interviewer failed to mark it.

Further, some of the status codes which depend on the answers to a number of different items were completed using only partial information. For example, the current employment status of the respondent (that is, whether he was employed, unemployed, or not in the labor force) is determined by the answers to a number of related questions. However, if one or more of these questions is not completed, but the majority are filled and consistent with each other, the status is determined on the basis of the available answers. This procedure accounts for an artificially low count of "NA's" for certain items.

APPENDIX D

SAMPLING VARIATION

As in any survey based upon a sample, the data in this report are subject to sampling error, that is, variation attributable solely to the fact that they emerge from a sample rather than from a complete count of the population. Because the probabilities of a given individual's appearing in the sample are known, it is possible to estimate the sampling error, at least roughly. For example, it is possible to specify a "confidence interval" for each absolute figure or percentage, that is, the range within which the true value of the figure is likely to fall. For this purpose, the standard error of the statistic is generally used. One standard error on either side of a given statistic provides the range of values which has a two-thirds probability of including the true value. This probability increases to about 95 percent if a range of two standard errors is used.

Standard Errors of Percentages

In the case of percentages, the size of the standard error depends not only on the magnitude of the percentage, but also on the size of the base on which the percentage is computed. Thus, the standard error of 80 percent may be only 1 percentage point when the base is the total number of white men, but as much as 8 or 9 percentage points when the base is the total number of unemployed white men. Two tables of standard errors, one for whites and one for blacks, are shown below (Tables D_1 and D_2).

The method of ascertaining the appropriate standard error of a percentage[1] may be illustrated by the following example. There are about 5,000,000 white men in the age category 45 to 49 of whom 91 percent are estimated by our survey results to be married. Entering the table for white men with the base of 5,000,000 and the percentage 90, one finds the standard error to be 1.2 percent. Thus, chances are

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1 Because the sample is not random, the conventional formula for the standard error of a percentage cannot be used. The entries in the tables have been computed on the basis of a formula suggested by the Bureau of the Census statisticians. They should be interpreted as providing an indication of the order of magnitude of the standard error, rather than a precise standard error for any specific item.

Table D_1 : Standard Errors of Estimated Percentages of Whites
(68 chances out of 100)

Base of percentage (thousands)	Estimated percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
100	2.8	6.1	8.4	11.2	13.9
200	2.0	4.3	5.9	7.9	9.9
350	1.5	3.2	4.5	6.0	7.4
500	1.2	2.7	3.7	5.0	6.2
1,000	0.9	1.9	2.6	3.5	4.4
5,000	0.4	0.9	1.2	1.6	2.0
13,600	0.2	0.5	0.7	1.0	1.2

Table D_2: Standard Errors of Estimated Percentages of Blacks
(68 chances out of 100)

Base of percentage (thousands)	Estimated percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
25	2.7	6.0	8.2	10.9	13.7
50	1.9	4.2	5.8	7.7	9.7
100	1.4	3.0	4.1	5.5	6.8
200	1.0	2.1	2.9	3.9	4.8
750	0.5	1.1	1.5	2.0	2.5
1,400	0.4	0.8	1.1	1.5	1.8

about two out of three that a complete enumeration would have resulted in a figure between 89.8 and 92.2 percent (91 ± 1.2), and 19 out of 20 that the figure would have been between 88.6 and 93.4 (91 ± 2.4).

Standard Errors of Differences Between Percentages

In analyzing and interpreting the data, interest will perhaps most frequently center on the question whether observed differences in percentages are "real," or whether they result simply from sampling variation. If, for example, one finds on the basis of the survey that 3.3 percent of the whites, as compared with 7 percent of the blacks, are unable to work, the question arises whether this difference actually prevails in the population or whether it might have been produced by sampling variation. The answer to this question, expressed in terms of probabilities, depends on the standard error of the difference between the two percentages, which, in turn, is related to their magnitudes as well as to the size of the base of each. Although a precise answer to the question would require extended calculation, it is possible to construct charts that will indicate roughly, for different ranges of bases and different magnitudes of the percentages themselves, whether a given difference may be considered to be "significant," i.e., is sufficiently large that there is less than a 5 percent chance that it would have been produced by sampling variation alone. Such charts are shown below.

The magnitude of the quotient produced by dividing the difference between any two percentages by the standard error of the difference determines whether that difference is significant. Since the standard error of the difference depends only on the size of the percentages and their bases, for differences centered around a given percentage it is possible to derive a function which relates significant differences to the size of the bases of the percentages. If a difference around the given percentage is specified, the function then identifies those bases which will produce a standard error small enough for the given difference to be significant. The graphs which follow show functions of this type; each curve identifies combinations of bases that will make a given difference around a given percentage significant. For all combinations of bases on or to the northeast of a given curve, the given difference is the maximum difference necessary for significance.

Thus, to determine whether the difference between two percentages is significant, first locate the appropriate graph by selecting the one labeled with the percentage closest to the midpoint between the two percentages in question. When this percentage is under 50, the base of the larger percentage should be read on the horizontal axis of the chart and the base of the smaller percentage on the vertical axis. When the midpoint between the two percentages is greater than 50, the two axes are to be reversed. (When the midpoint is exactly 50 percent, either axis may be used for either base.) The two coordinates identify a point on the graph. The relation between this point and the curves

indicates the order of magnitude required for a difference between the two percentages to be statistically significant at the 5 percent confidence level.[2]

All this may be illustrated as follows. Suppose in the case of white men the question is whether the difference between 27 percent (on a base of 6,000,000)[3] and 33 percent (on a base of 5,000,000) is significant. Since the percentages center on 30 percent, Figure 4 should be used. Entering the vertical axis of this graph with 6,000,000 and the horizontal axis with 5,000,000 provides a coordinate which lies to the northeast of the curve showing combinations of bases for which a difference of 5 percent is significant. Thus the 6 percentage point difference (between 27 and 33 percent) is significant.

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2 The point made in footnote 1 is equally relevant here. The graphs should be interpreted as providing only a rough (and probably conservative) estimate of the difference required for significance.

3 Each of the curves in the graphs of this appendix illustrates a functional relationship between bases expressed in terms of actual sample cases. For convenience, however, the axes of the graphs are labeled in terms of blown up estimates which simply reflect numbers of sample cases multiplied by a weighting factor.

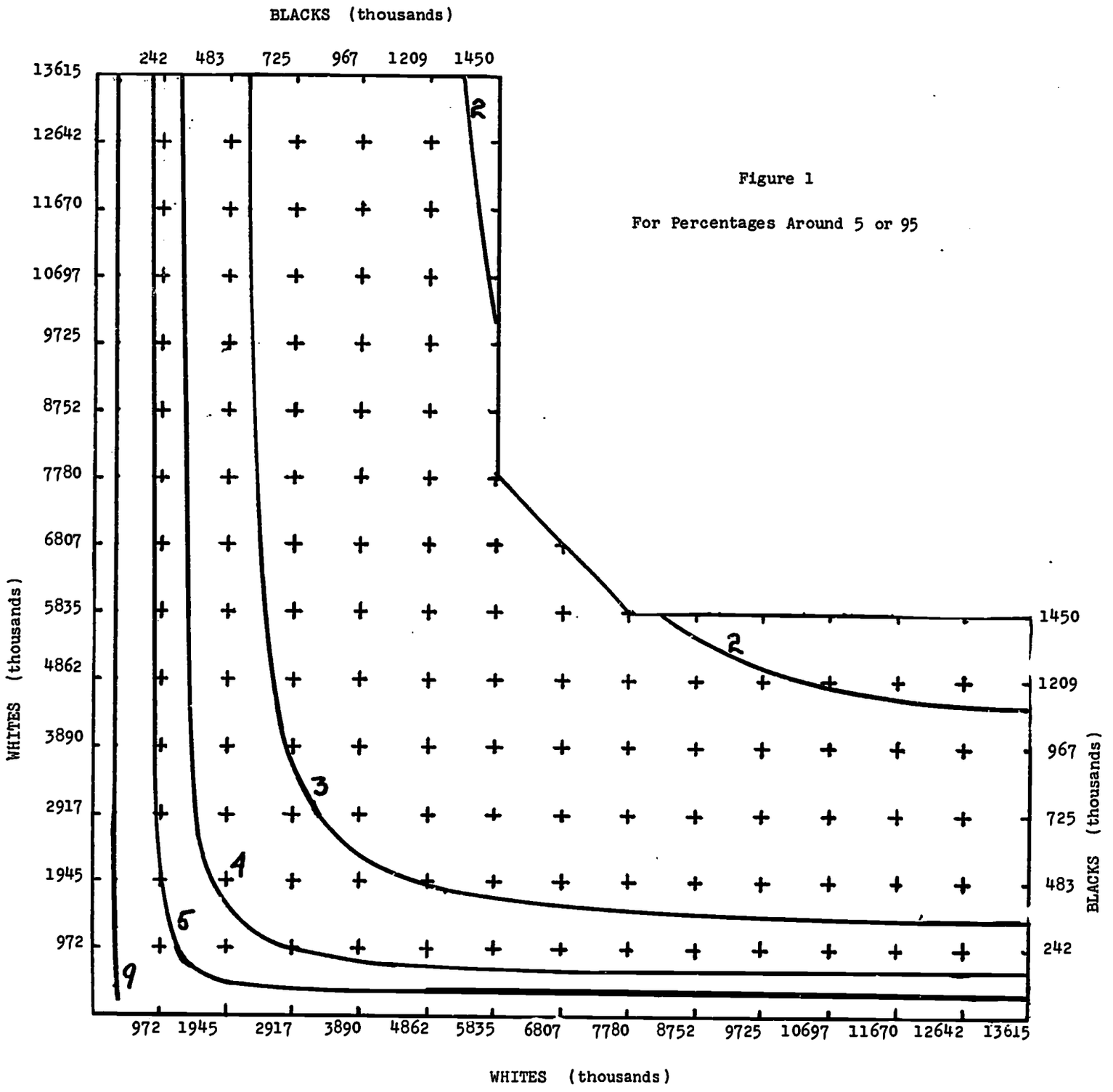

Figure 1

For Percentages Around 5 or 95

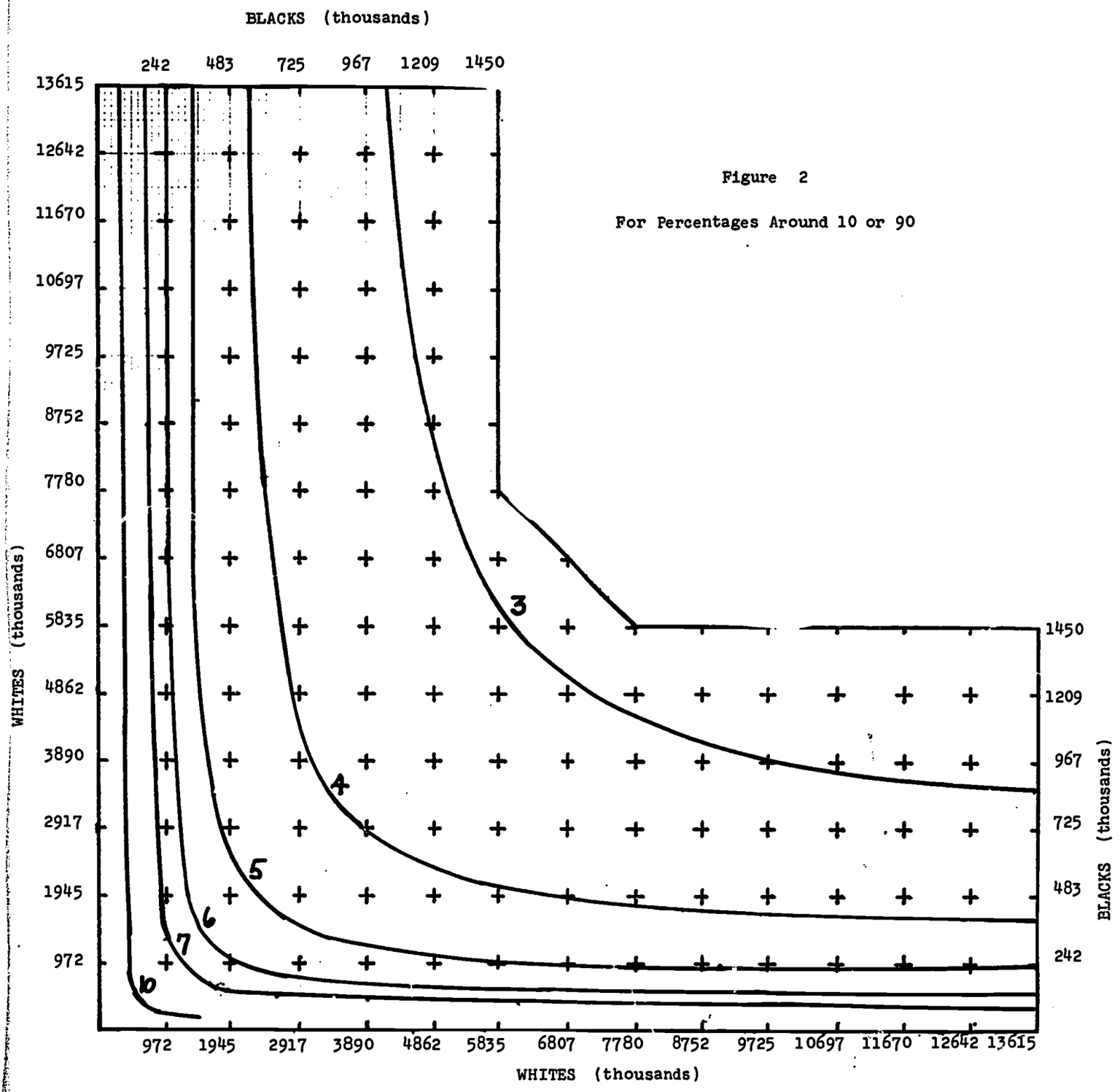

Figure 2

For Percentages Around 10 or 90

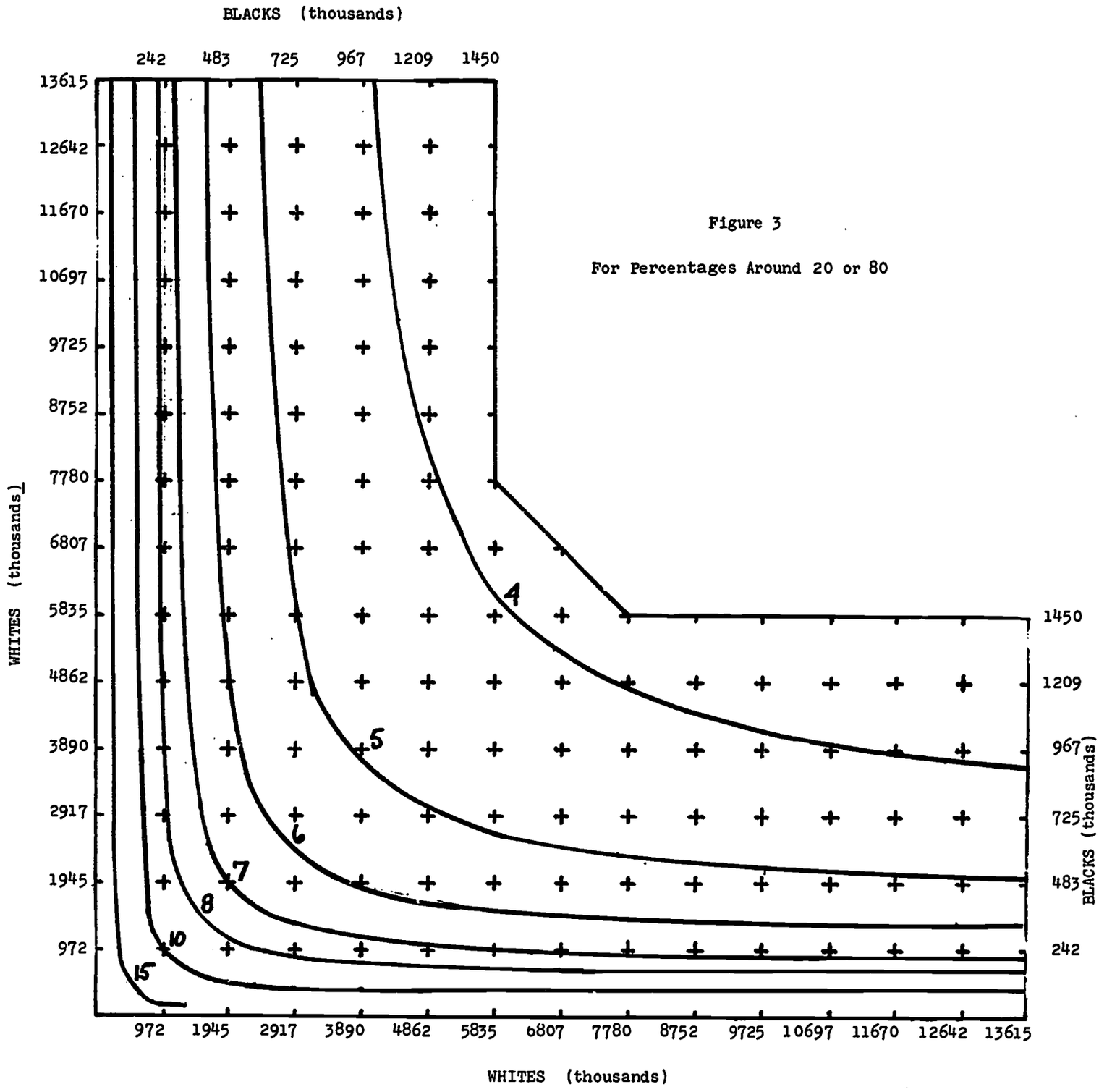

Figure 3

For Percentages Around 20 or 80

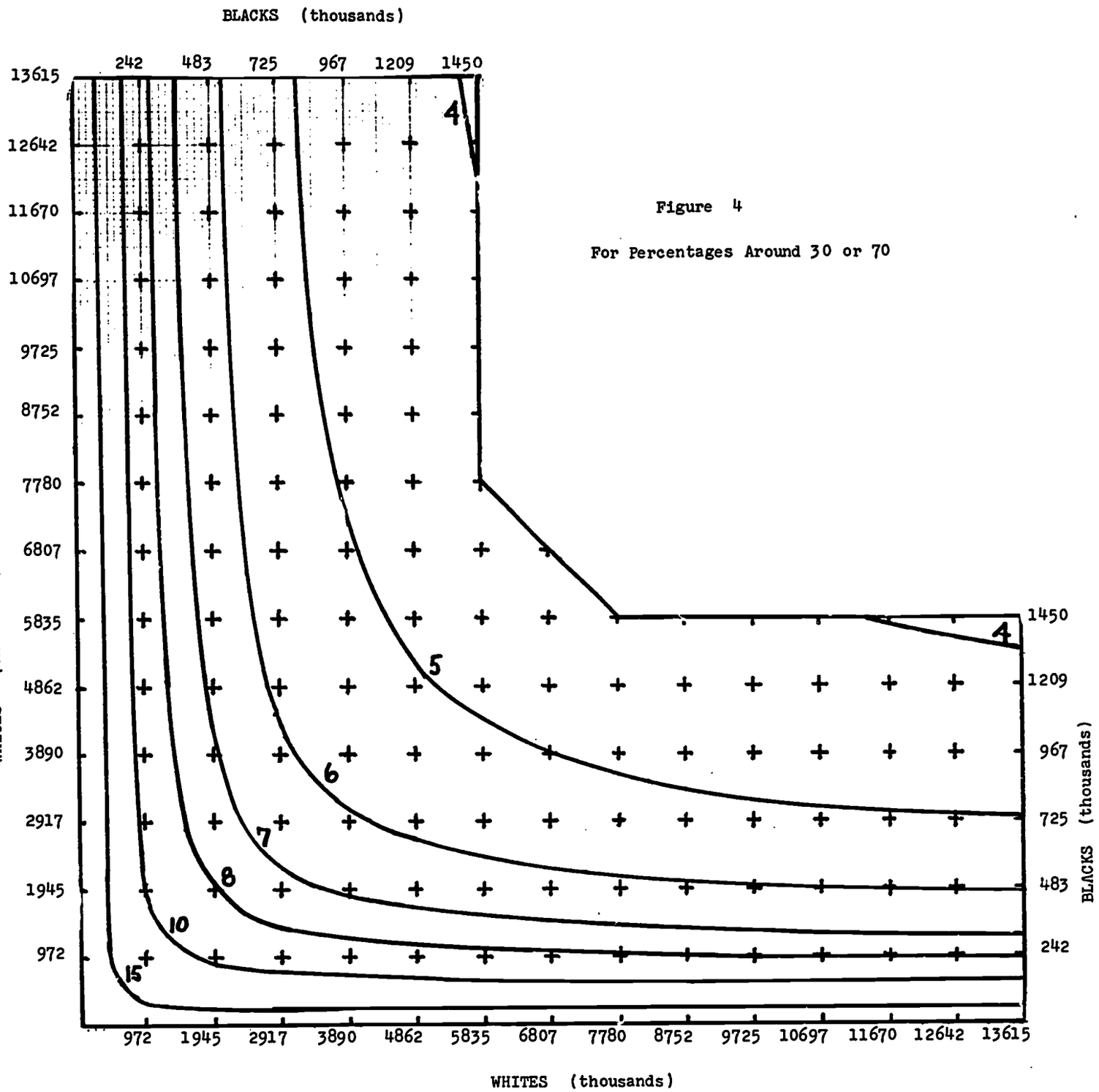

Figure 4

For Percentages Around 30 or 70

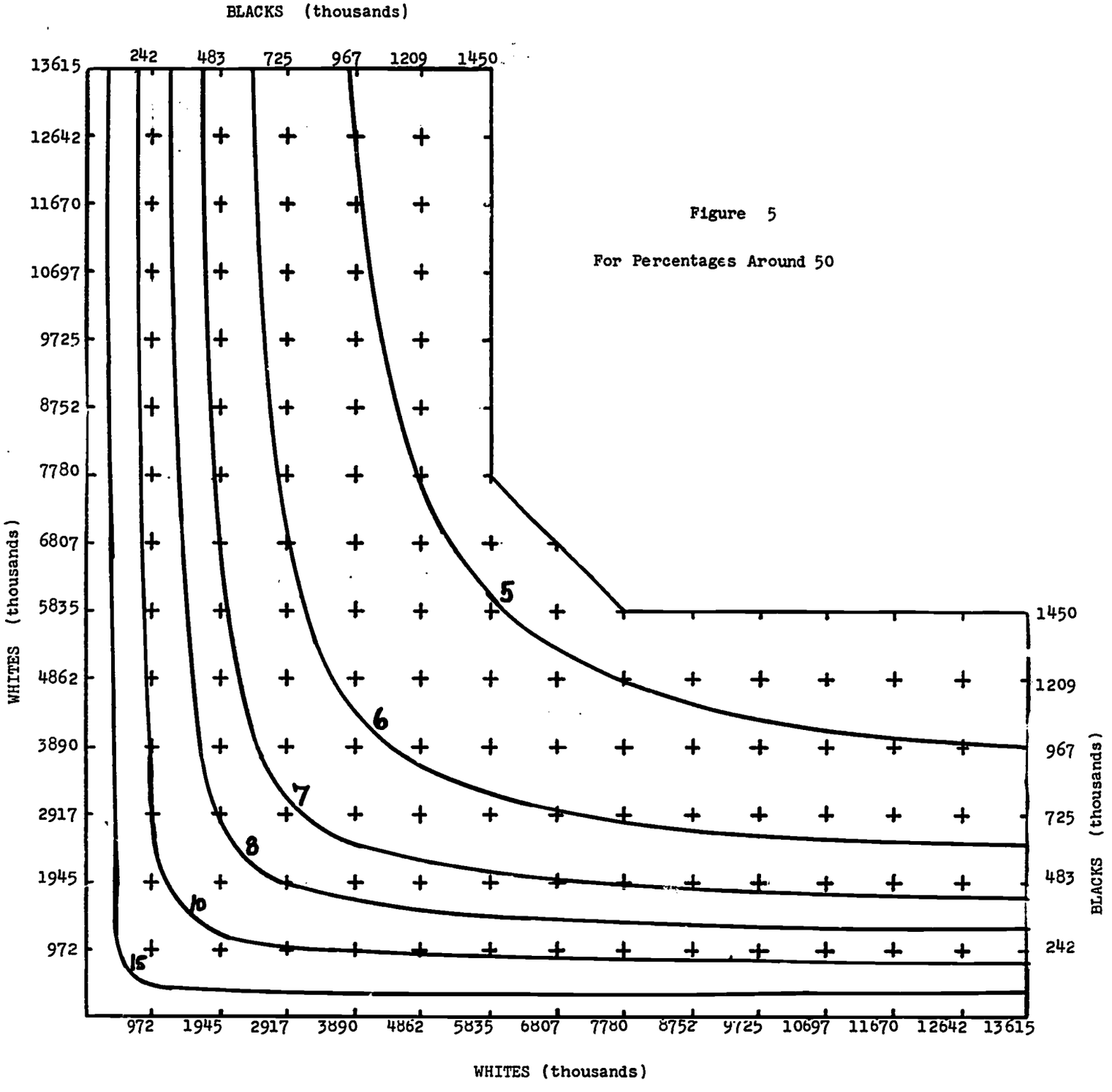

Figure 5

For Percentages Around 50

APPENDIX E

ATTRITION RATE

Attrition Rate, 1969 Survey, by Reason and by Selected Characteristics of Respondents in 1966

Characteristic, 1966	Total number[a] 1966 (thousands)	Percent deceased, 1969	Noninterview rate, 1969			Total attrition rate, 1969
			Refusal	Unable to locate[b]	Total	
All respondents[c]	15,020	5.9	4.3	3.0	7.3	13.2
Whites	13,615	5.9	4.3	2.8	7.1	13.0
Blacks	1,305	5.4	4.1	4.7	8.8	14.2
55-59 years of age[c]	4,418	7.3	5.5	2.5	8.0	15.3
Whites	4,019	7.4	5.6	2.3	7.9	15.2
Blacks	361	5.2	5.5	4.7	10.2	15.4
Nonmarried[c]	1,635	9.2	3.6	7.0	10.6	19.7
Whites	1,361	9.3	3.7	6.6	10.3	19.5
Blacks	254	6.7	3.6	8.6	12.2	19.0
Less than 12 years of school completed[c]	8,884	5.8	4.5	2.9	7.4	13.2
Whites	7,737	5.8	4.6	2.6	7.2	12.9
Blacks	1,088	5.6	4.3	4.8	9.1	14.8
13 or more years of school completed[c]	2,623	6.4	3.7	2.5	6.2	12.5
Whites	2,534	6.5	3.8	2.4	6.2	12.7
Blacks	66	5.1	1.0	6.5	7.5	12.1
Out of labor force, survey week[c]	925	11.9	8.3	3.6	11.9	23.9
Whites	789	11.4	8.2	3.4	11.6	23.0
Blacks	128	15.0	9.7	5.1	14.8	29.9
Employed in agriculture[c]	1,374	3.4	1.6	2.2	3.8	7.2
Whites	1,210	3.2	1.2	2.1	3.3	6.5
Blacks	147	4.5	4.7	3.6	8.3	12.7
Employed in construction[c]	1,692	6.6	6.2	4.8	11.0	17.6
Whites	1,511	6.3	6.8	4.6	11.4	17.6
Blacks	174	8.4	1.9	6.7	8.6	17.0
White-collar workers[c]	5,372	7.0	3.9	2.7	6.6	13.6
Whites	5,183	7.1	3.9	2.7	6.6	13.7
Blacks	152	3.2	4.7	2.1	6.8	9.9
Blue-collar workers[c]	7,332	5.4	4.9	3.2	8.1	13.5
Whites	6,486	5.3	5.1	2.9	8.0	13.3
Blacks	818	5.3	3.9	5.6	9.5	14.8
Total family income in 1965						
Under $10,000[c]	7,224	5.6	4.2	2.7	6.9	12.5
Whites	6,261	4.1	3.2	1.8	5.0	9.1
Blacks	912	5.2	4.0	4.6	8.6	13.8
$10,000 or more[c]	4,325	5.2	3.6	2.3	5.9	11.1
Whites	4,198	5.3	3.6	2.3	5.9	11.2
Blacks	109	0.9	2.8	5.4	8.2	9.2
Home renters[c]	3,060	5.9	4.6	6.1	10.7	16.6
Whites	2,526	5.8	4.4	6.0	10.4	16.2
Blacks	492	5.4	5.8	6.7	12.5	17.9

a Figures in this column are population estimates based on number of respondents in 1966.

b Includes a small number of cases in which the respondent was inaccessible to the interviewer even though his location was ascertained.

c Includes a small number of nonwhites other than Negroes.

APPENDIX F

ABBREVIATED ROTTER I-E SCALE

The 11-item abbreviated version of Rotter's internal-external locus of control scale used in this study was first administered in the 1969 interview, and was administered again in the 1971 survey.[1] The abbreviated scale was constructed by including only those items of the 23-item Rotter scale which appeared to be more general, adult-oriented, and work related. Since the omission of 12 items from the original Rotter test implied an approximate halving of the possible range of scores (from 23-46 to 11-22), the format of the 11 items selected was elaborated to avoid such a shrinkage. The modification consisted of obtaining from the respondent his opinion as to how closely his force-choice response on each item represented his own view on the issue. ("Is this statement much closer or slightly closer to your opinion?" See item 31 in the interview schedule, Appendix G.) Thus, four scores are possible for each of the 11 items in the scale, instead of just two as in the original Rotter format:

"1" for internal response "much closer"
"2" for internal response "slightly closer"
"3" for external response "slightly closer"
"4" for external response "much closer"

The total score is then obtained by summing the values of all 11 items, with the range of scores consequently being 11 to 44. Individuals within each color group who scored below the median for that color group are designated as "internals" and those above the median as "externals."[2]

The abbreviated scale was pretested along with the original Rotter scale on 56 students at the Columbus Area Technical School, Columbus, Ohio. The purpose of the pretest was to determine the equivalence of the measure of locus of control produced by the 11-item scale and the

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1. For a definition of the concept of locus of control, see footnote 10, p. 62 of Chapter IV.

2 We are grateful to Professor Thomas M. Ostrom of the Department of Psychology, The Ohio State University, for his advice in developing the abbreviated scale and in devising the scoring procedure.

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complete 23-item Rotter scale. It was decided that the abbreviated version would be an acceptable substitute for the complete test if two conditions were met. First, the correlation between the abbreviated-and complete-version scores was required to be comparable with either the test-retest correlation coefficient or the split-half correlation coefficient obtained by Rotter in the pretests of his scale. A correlation coefficient of .7 was selected as representative of the test-retest and split-half correlations obtained by Rotter.[3] Second, the abbreviated version was required to be internally consistent, to be demonstrated by an item analysis of the scale.

The data acquired through the pretest revealed a near equivalence of the abbreviated scale to the complete version. The correlation between the two versions was found to be .69, and the coefficient between the complete test and the unelaborated 11-item scale was .71. The item analysis of the abbreviated scale was conducted by correlating the score on each item with the score on the test, and all of the item correlations were found to be positive yet none was extremely large. On the basis of these findings, it was concluded that the measure of locus of control produced by the 11-item scale was nearly equivalent to the measure yielded by the complete Rotter scale.[4]

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3 Julian B. Rotter, "Generalized Expectancies for Internal versus External Control of Reinforcement," Psychological Monographs 80, no. 609 (1966).

4 For a more complete description of the Rotter scale instrument, the abbreviated version, and the pretest, see Gopal K. Valecha, "Construct Validation of Internal-External Locus of Control as Measured by An Abbreviated 11-Item I-E Scale," (Ph.D. dissertation, The Ohio State University, 1972).

APPENDIX G

1968 MAIL QUESTIONNAIRE

1969 INTERVIEW SCHEDULE

Budget Bureau No. 41-R2316; Approval Expires December 1969

FORM LGT-121
(3-25-68)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

If the address shown below is incorrect, please enter your correct address here.

Number and Street

City | State | ZIP code

NATIONAL LONGITUDINAL SURVEYS

SURVEY OF WORK EXPERIENCE OF MATURE MEN (1968)

Dear Sir:

Let me express our appreciation for your cooperation in the survey of work experience of men which we are conducting for the Department of Labor. The purpose of this study is to examine, over time, changes in work status and related activities among men in your age group. During our last interview, we obtained information about the jobs you have held, your retirement plans, and similar subjects.

At this time, therefore, we are interested in any changes in your situation over the past year.

All information, of course, is held in strict confidence and cannot, by law, be used for any purpose except to compile statistical totals.

Since this study is based on a sample of the population, it is important that everyone fill in and return his questionnaire. Please complete this form and mail it within five days in the enclosed envelope, which does not require postage.

Your cooperation in this survey is greatly appreciated.

Sincerely yours,

A. Ross Eckler

A. Ross Eckler
Director
Bureau of the Census

Enclosure

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1. Whot were you doing LAST week?
(Mark EACH box that applies to you.)

1 ☐ I worked at a job, in my business or profession, or on a farm

2 ☐ I had a job, profession, or business from which I was temporarily absent for reasons other than layoff

3 ☐ I was looking for work or on layoff from a job

4 ☐ I am retired

5 ☐ I am permanently unable to work

6 ☐ None of the above applies to me

2. Please describe the job you held LAST week.

If you had more than one job, describe the one at which you worked the most hours.

If you did not have a job LAST week, but you have worked since June 1, 1967, describe the LAST JOB you held. Otherwise, skip to question 3.

a. For whom did you work?

(Name of company, business organization, or other employer)

b. Whot kind of business or industry wos this?

(For example: County junior high school, auto assembly plant, TV and radio service, retail store, road construction, farm, etc.)

c. Whot kind of work were you doing?

(For example: 8th grade English teacher, house painter, TV repairman, salesclerk, civil engineer, farmer, farm hand, etc.)

d. Were you – *(Mark one box)*

1 ☐ An employee of a private company, business, or individual for wages, salary, or commissions?

2 ☐ A government employee (Federal, State, or local)?

3 ☐ Self-employed in your own business, professional practice, or farm?

4 ☐ Working without pay in a family business or farm?

3. During the past 12 months:

o. In how many different weeks did you work altogether? Count any week in which you did any work ot oll.

Number of weeks_____

b. During the weeks you worked, how many hours per week did you usually work?

Hours per week_____

c. Did you lose any FULL weeks of work because you were on loyoff from o job or lost o job?

1 ☐ Yes – How many weeks? . . . . . _____

2 ☐ No

d. Were there ony weeks, other thon those mentioned in items 3o ond 3c obove, when you spent time trying to find work?

1 ☐ Yes – How many weeks? . . . . . _____

2 ☐ No

4a. Do the weeks entered in items 3a, 3c, ond 3d add up to 52?

1 ☐ Yes – *Skip to question 5*

2 ☐ No

b. Whot wos the main reoson you were not working or looking for work during these other weeks? *(Mark one box.)*

1 ☐ I was sick or disabled and could not work

2 ☐ I was retired

3 ☐ No suitable jobs available, would not have done any good to look

4 ☐ I was on vacation

5 ☐ Other – *Specify*

FORM LGT-121 (3-25-68)

5. During the past 12 months have you worked for any employer other than the one you mentioned in question 2?

1 ☐ Yes – How many?_____ *Go to question 6*

2 ☐ No

3 ☐ Did not work

} *Skip to question 7*

6a. For whom did you work? If you worked for more than one other employer, describe the longest job?

(Name of company, business, organization, or other employer)

b. What kind of business or industry was this?

(For example: County junior high school, auto assembly plant, TV and radio service, retail store, road construction, farm, etc.)

c. What kind of work were you doing?

(For example: 8th grade English teacher, house painter, TV repairman, salesclerk, civil engineer, farmer, farm hand, etc.)

d. Were you – *(Mark one box)*

1 ☐ An employee of a private company, business, or individual for wages, salary, or commissions?

2 ☐ A government employee (Federal, State, or local)?

3 ☐ Self-employed in your own business, professional practice, or farm?

4 ☐ Working without pay in a family business or farm?

e. When did you start working at that job?

Month_____ Year_____

f. When did you stop working at that job?

Month_____ Year_____

7. What was the total income of this family during 1967? Include wages and salaries, net income from business or farm, pensions, dividends, interest, rent, and any other money income received by you and all family members living with you.

01 ☐ Under $2,000

02 ☐ $2,000 – 2,999

03 ☐ $3;000 – 3,999

04 ☐ $4,000 – 4,999

05 ☐ $5,000 – 5,999

06 ☐ $6,000 – 6,999

07 ☐ $7,000 – 7,999

08 ☐ $8,000 – 9,999

09 ☐ $10,000 – 14,999

10 ☐ $15,000 – 24,999

11 ☐ $25,000 and over

Remarks

USCOMM-DC

Budget Bureau No. 41-R2316; Approval Expires June 30, 1970

NOTICE – Your report to the Census Bureau is confidential by law (Title 13, U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes.

FORM LGT-131
(5-15-69)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NATIONAL LONGITUDINAL SURVEYS

SURVEY OF WORK EXPERIENCE OF MATURE MEN

1969

(001) 1 ☐ Respondent a noninterview in 1967 – *Go to page 23*
2 ☐ Respondent a noninterview in 1968 – *Go to page 23*

RECORD OF CALLS

	Date	Time	Comments
1.		a.m. p.m.	
2.		a.m. p.m.	
3.		a.m. p.m.	
4.		a.m. p.m.	

METHODS OF LOCATING RESPONDENT WHO HAS MOVED

		Successful	Unsuccessful
New occupants	002	1 ☐	2 ☐
Neighbors	003	1 ☐	2 ☐
Apartment house manager	004	1 ☐	2 ☐
Post office	005	1 ☐	2 ☐
School	006	1 ☐	2 ☐
Persons listed on information sheet	007	1 ☐	2 ☐
Other – *Specify*	008	1 ☐	2 ☐

RECORD OF INTERVIEW

Interview time Begun	Interview time Ended	Date completed	Interviewed by
a.m. p.m.	a.m. p.m.		

NONINTERVIEW REASON

(009)
☐ Unable to contact respondent – *Specify*
6 ☐ Temporarily absent – *Give return date*
8 ☐ Institutionalized – *Specify type*
9 ☐ Refused
0 ☐ Deceased
A ☐ Other – *Specify*

TRANSCRIPTION FROM HOUSEHOLD RECORD CARD

(010) **Item 13 – Marital status of respondent (verified)**

1 ☐ Married, spouse present
2 ☐ Married, spouse absent
3 ☐ Widowed
4 ☐ Divorced
5 ☐ Separated
6 ☐ Never married

If respondent has moved, enter new address

1. Number and street		(011)
2. City	3. County	(012)
4. State	5. ZIP code	(013)

I. CURRENT LABOR FORCE STATUS

1. What were you doing most of LAST WEEK – working, looking for work, or something else?

(014)
1 ☐ WK – Working – *SKIP to 2b*
2 ☐ J – With a job but not at work
3 ☐ LK – Looking for work
4 ☐ S – Going to school
5 ☐ R – Retired
6 ☐ U – Unable to work – *SKIP to 5a*
7 ☐ OT – Other – *Specify*

_____

2a. Did you do any work at all LAST WEEK, not counting work around the house?

(Note: *If farm or business operator in household, ask about unpaid work.*)

(017) 1 ☐ Yes 2 ☐ No – *SKIP to 3a*

2b. How many hours did you work LAST WEEK at all jobs?

(018) _____

CHECK ITEM A

☐ 49 or more – *SKIP to 6*
☐ 1 – 34 – *ASK 2c*
☐ 35 – 48 – *ASK 2d*

2c. Do you USUALLY work 35 hours or more a week at this job?

(015) 1 ☐ Yes – **What is the reason you worked less than 35 hours LAST WEEK?**
2 ☐ No – **What is the reason you USUALLY work less than 35 hours a week?**

(Mark the appropriate reason)

(016)
01 ☐ Slack work
02 ☐ Material shortage
03 ☐ Plant or machine repair
04 ☐ New job started during week
05 ☐ Job terminated during week
06 ☐ Could find only part-time work
07 ☐ Holiday (legal or religious)
08 ☐ Labor dispute
09 ☐ Bad weather
10 ☐ Own illness
11 ☐ Illness of family member
12 ☐ On vacation
13 ☐ Too busy with housework
14 ☐ Too busy with school, personal business, etc.
15 ☐ Did not want full-time work
16 ☐ Full-time work week under 35 hours
17 ☐ Other reason – *Specify*

_____

(If entry in 2c, SKIP to 6 and enter job worked at last week.)

2d. Did you lose any time or take any time off LAST WEEK for any reason such as illness, holiday, or slack work?

(019) ☐ Yes – **How many hours did you take off?** ____

00 ☐ No

(Correct 2b if lost time not already deducted; if 2b reduced below 35, fill 2c, otherwise SKIP to 6.)

2e. Did you work any overtime or at more than one job LAST WEEK?

(020) ☐ Yes – **How many extra hours did you work?** _____

00 ☐ No

(Correct 2b if extra hours not already included and SKIP to 6.)

(If "J" in 1, SKIP to b)

3a. Did you have a job (or business) from which you were temporarily absent or on layoff LAST WEEK?

(021) 1 ☐ Yes 2 ☐ No – *SKIP to 4a*

3b. Why were you absent from work LAST WEEK?

(022)
01 ☐ Own illness
02 ☐ On vacation
03 ☐ Bad weather
04 ☐ Labor dispute
05 ☐ New job to begin within 30 days – *ASK 4c and 4d (2)*
06 ☐ Temporary layoff (under 30 days)
07 ☐ Indefinite layoff (30 days or more if no definite recall date) – *ASK 4d (3)*
08 ☐ Other – *Specify*

_____

3c. Are you getting wages or salary for any of the time off LAST WEEK?

(023)
1 ☐ Yes
2 ☐ No
3 ☐ Self-employed

3d. Do you usually work 35 hours or more a week at this job?

(024) 1 ☐ Yes 2 ☐ No

(SKIP to 6 and enter job held last week.)

Notes

I. CURRENT LABOR FORCE STATUS – Continued

(If "LK" in 1, SKIP to b)

4a. Have you been looking for work during the past 4 weeks?

(025) 1 ☐ Yes 2 ☐ No – *SKIP to 5a*

b. What have you been doing in the last 4 weeks to find work?

(Mark all methods used; do not read list)

(026) 00 ☐ Nothing – *SKIP to 5a*

Checked with
- 01 ☐ State employment agency
- 02 ☐ Private employment agency
- 03 ☐ Employer directly
- 04 ☐ Friends or relatives

05 ☐ Placed or answered ads

06 ☐ Other – *Specify – e.g. MDTA, union or professional register, etc.*

_____

c. Why did you start looking for work? Was it because you lost or quit a job at that time *(pause)* or was there some other reason?

(027)
1 ☐ Lost job
2 ☐ Quit job
3 ☐ Wanted temporary work
4 ☐ Health improved
5 ☐ Other – *Specify*

_____

d. (1) How many weeks have you been looking for work?
(2) How many weeks ago did you start looking for work?
(3) How many weeks ago were you laid off?

(028) Weeks _____

e. Have you been looking for full-time or part-time work?

(029)
1 ☐ Full-time
2 ☐ Part-time

f. Is there any reason why you could not take a job LAST WEEK?

(030) Yes →
1 ☐ Already has a job
2 ☐ Temporary illness
3 ☐ Going to school
4 ☐ Other – *Specify*

_____

5 ☐ No

g. When did you last work at a regular job or business lasting two consecutive weeks or more, either full-time or part-time?

(031)
1 ☐ June 1, 1968 or later – *Specify both*
(032) Month _____
(033) Year _____
SKIP to 6a
3 ☐ All others – *SKIP to 17a*

5. When did you last work at a regular job or business lasting two consecutive weeks or more, either full-time or part-time?

(034)
1 ☐ June 1, 1968 or later – *Specify both*
(035) Month _____
(036) Year _____
ASK 6a
2 ☐ Before June 1, and UNABLE in item 1 and item 85R on Information Sheet – *SKIP to 31*
3 ☐ All others – *SKIP to 17a*

DESCRIPTION OF JOB OR BUSINESS

6a. For whom did you work? *(Name of company, business, organization or other employer)*

(037) **b. In what city and State is . . . located?**

City _____ State _____

(038) **c. What kind of business or industry is this?** *(For example: TV and radio manufacturer, retail shoe store, State Labor Department, farm)*

d. Were you –

(039)
10 ☐ P – An employee of a PRIVATE company, business, or individual for wages, salary, or commissions?
20 ☐ G – A GOVERNMENT employee (Federal, State, county, or local)?
30 ☐ O – Self-employed in your OWN business, professional practice, or farm?
(If not a farm)
Is this business incorporated?
31 ☐ Yes 32 ☐ No
40 ☐ WP – Working WITHOUT PAY in family business or farm?

(040) **e. What kind of work were you doing?** *(For example: electrical engineer, waiter, stock clerk, farmer)*

f. What were your most important activities or duties? *(For example: selling cars, operating printing press, finishing concrete, cleaning buildings)*

g. What was your job title?

CHECK ITEM B

☐ "P" or "G" in item 6d – *ASK 7a*
☐ "O" or "WP" in item 6d – *SKIP to Check Item C*

I. CURRENT LABOR FORCE STATUS – Continued

7a. Altogether, how much do (did) you usually earn at this job before deductions?

(041) 7a. $ _____ . _____ Per: (042)
(Dollars) *(Cents)*

1 ☐ Hour
2 ☐ Day
3 ☐ Week
4 ☐ Biweekly
5 ☐ Month
6 ☐ Year
7 ☐ Other 7

$ _____ Per:
(Dollars only)

Specify _____

b. How many hours per week do (did) you usually work at this job?

(043) b.
Hours _____

c. Are (were) your wages (salary) on this job set by a collective bargaining agreement between your employer and a union or employee association?

(044) c. 1 ☐ Yes – *ASK d*
2 ☐ No – *SKIP to f*

d. What is the name of the union or employee association?

d.

e. Are you a member of that union or employee association?

(045) e. 1 ☐ Yes
2 ☐ No

f. Do (did) you receive extra pay when you work(ed) over a certain number of hours?

(046) f. 1 ☐ Yes – *ASK g*
2 ☐ No
3 ☐ No, but receive compensating time off
4 ☐ Never work overtime
SKIP to Check Item C

g. After how many hours do (did) you receive extra pay?

(047) g. _____ Hours per day
(048) _____ Hours per week

h. For all hours worked over *(entry in 7g)* are (were) you paid straight time, time and one-half, double time, or what?

(049) h. 1 ☐ Compensating time off
2 ☐ Straight time
3 ☐ Time and one-half
4 ☐ Double time
5 ☐ Other – *Specify* _____

*

CHECK ITEM C

Respondent is currently in Labor Force Group A ("WK" or "J" in I or "Yes" in 2a or 3a AND *(Refer to 82R on Information Sheet)*

☐ Respondent was in Labor Force Group A in 1968 – *GO to Check Item D*
☐ Respondent was in Labor Force Group B or C in 1968 – *SKIP to Check Item E*
☐ All others – *SKIP to Check Item E*

Notes

* A question which applies to respondents who were working in 1967 but were either not working or were working for different employers in 1968 was omitted from this questionnaire. Interviewers were instructed to write in and ask the following question of such respondents:

7i. "Two years ago you were working at (name of employer in 86R). Why did you happen to leave that job?"

(050)
(051)
(052)

II. WORK EXPERIENCE

CHECK ITEM D

(053) Current employer SAME as last year *(Entries in 6a and item 83R of the Information Sheet are the same)* AND

1 ☐ a. Current kind of work SAME as last year *(Entries in 6e and item 84R of the Information Sheet are the same) – SKIP to 9a*

2 ☐ b. Current kind of work DIFFERENT from last year *(Entries in 6e and item 84R of the Information Sheet are different) – ASK 8*

3 ☐ Current employer DIFFERENT from last year – *(Entries in 6a and item 83R of the Information Sheet are different) – SKIP to 10a*

8. I see that you are not doing the same kind of work you were doing at this time last year.

Why would you say you are no longer doing this kind of work?

(054) 8.
1 ☐ Promotion
2 ☐ Job was eliminated
3 ☐ "Bumped" from job
4 ☐ Other – *Specify* _____

9a. During the past 12 months, have you worked any place other than *(entry in 6a)*?

(055) 9a.
☐ Yes – How many other places?_____ *ASK b*
0 ☐ No – *SKIP to 15a*

b. For whom did you work? *(If more than one, ask about longest)*

b.

c. Were you working for *(entry in 6a)* and *(entry in 9b)* at the same time?

(056) c.
1 ☐ Yes – *SKIP to 15a*
2 ☐ No – *SKIP to 14b*

10a. Last year at this time you were working at *(name of company in item 83R on Information Sheet)*. Why did you happen to leave that job?

☐☐

(057) 10a.

b. When did you start working at your present job or business?

b.
(058) Month _____
(059) Year _____

c. Have you held any jobs other than *(entry in 6a)* in the past 12 months?

c.
(060) ☐ Yes – How many other jobs?_____ *ASK d*
0 ☐ No – *SKIP to 15a*

d. Now I'd like to know about the longest job you held. For whom did you work?

d.
_____ *SKIP to 14b*

CHECK ITEM E

☐ Respondent was in Labor Force Group B or C in 1968 *(Item 82R on Information Sheet) – ASK 11a*
☐ All others – *SKIP to 12a*

11a. When did you start working at your present (last) job or business?

11a.
(061) Month _____
(062) Year _____

b. Last year at this time you weren't working. Have you worked at more than one job since then?

b.
(063) ☐ Yes – How many jobs?_____ *ASK c*
0 ☐ No – *SKIP to 15a*

c. Including your current (last) job, did you hold more than one of these jobs at the same time?

c.
(064) 1 ☐ Yes
2 ☐ No

d. Now I'd like to know about the longest job you held. For whom did you work?

d.
(065) 1 ☐ _____ *SKIP to 14b*
0 ☐ Same as current (last) job in 6a – *SKIP to 15a*

II. WORK EXPERIENCE – Continued

12a. Last year at this time you were working at *(name of company in item 83R on Information Sheet).* When did you stop working there?

066 **12a.** Month _____

067 Year _____

b. Why did you happen to leave that job?

068 **b.** _____

c. Last year, you were working as *(kind of work in item 84R on Information Sheet).* Did you do any other kind of work at that job before you left it?

069 **c.** ☐ Yes – How many other kinds? _____ *ASK 13a*

0 ☐ No – *SKIP to 13b*

13a. What kind of work did you do? *(If more than one, ask about longest)*

070 **13a.** _____

b. How many jobs have you held since you stopped working at *(name of company in item 83R on Information Sheet)* and started your present (last) job?

071 **b.** Number _____

0 ☐ None – *SKIP to 15a*

c. Did you hold any of these jobs including your current (last) one at the same time?

072 **c.** 1 ☐ Yes

2 ☐ No

14a. *(If more than one, ask about longest)* Now I'd like to know about the job you had since you stopped working at *(entry in 83R).* For whom did you work?

073 **14a.** 1 ☐ _____

b. What kind of business or industry was that?

074 **b.** _____

c. Were you –

(1) An employee of a **PRIVATE** company, business, or individual for wages, salary, or commission? . . . . .

(2) A **GOVERNMENT** employee (Federal, State, county, or local)? . . . . . .

(3) Self-employed in your **OWN** business, professional practice, or farm? . . . . . .

(4) Working **WITHOUT PAY** in family business or farm? . . .

075 **c.**

1 ☐ P – Private

2 ☐ G – Government

3 ☐ O – Self-employed

4 ☐ WP – Without pay

d. How many hours per week did you usually work?

076 **d.** Hours _____

e. When did you **START** working at that job?

077 **e.** Month _____

078 Year _____

f. When did you **STOP** working at that job?

079 **f.** Month _____

080 Year _____

g. How did you happen to leave that job?

081 **g.** _____

h. What kind of work were you doing when you left that job?

082 **h.** _____

i. Did you ever do any other kind of work at that job?

083 **i.** ☐ Yes – How many other kinds? _____ *ASK j*

0 ☐ No – *SKIP to 15a*

j. What kind of work? *(If more than one, ask about longest)*

084 **j.** _____

II. WORK EXPERIENCE – Continued

15a. During the past 12 months, in how many different weeks did you do any work at all?

(085) Weeks_____

oo ☐ None – *SKIP to 17a*

b. During the weeks that you worked in the last 12 months, how many hours per week did you usually work?

(086) Hours _____

CHECK ITEM F

☐ 52 weeks in 15a – *ASK 16a*

☐ 1–51 weeks in 15a – *SKIP to 16b*

16a. Did you lose any full weeks of work during the past 12 months because you were on layoff from a job or lost a job?

(087) ☐ Yes – How many weeks? _____ *(Adjust item 15a and skip to c)*

oo ☐ No – *SKIP to Check Item G*

b. You say you worked *(entry in 15a)* weeks during the past 12 months. In any of the remaining *(52 minus entry in 15a)* weeks were you looking for work or on layoff from a job?

(088) ☐ Yes – How many weeks?_____

oo ☐ No – *SKIP to Check Item G*

c. Were all of these weeks in one stretch?

(089) 1 ☐ Yes, 1

2 ☐ No, 2

3 ☐ No, 3 or more

} *SKIP to Check Item G*

17a. Even though you did not work during the past 12 months, did you spend any time looking for work?

(090) 1 ☐ Yes – *ASK b*

2 ☐ No – *SKIP to 18*

b. How many different weeks during the last 12 months were you looking for work?

(091) Weeks_____

CHECK ITEM G

Refer to items 15a, 16a, 16b, and 17b

☐ All weeks accounted for – *SKIP to Check Item H*

☐ Some weeks not accounted for – *ASK 18*

18. Now let me see. During the past 12 months there were about *(52 minus entries in items 15a, 16a, 16b, 17b)*_____weeks that you were not working or looking for work. What would you say was the main reoson that you were not looking for work?

(Specify below, then mark one box)

_____

(092) Weeks_____

(093)

1 ☐ Ill or disabled, unable to work

2 ☐ Retired

3 ☐ Couldn't find work

4 ☐ Vacation

5 ☐ Did not want to work

6 ☐ Other

CHECK ITEM H

Respondent is in

☐ Labor Force Group A ("WK" or "J" in 1 or "Yes" in 2a or 3a) – *GO to Check Item I*

☐ Labor Force Group B ("LK" in 1 or "Yes" in 4) – *SKIP to item 24*

☐ Labor Force Group C (All others) – *SKIP to 25*

CHECK ITEM I

Refer to item 82R on Information Sheet

Respondent

☐ Was in Labor Force Group B in 1968 – *ASK 19*

☐ Was in Labor Force Group C in 1968 – *SKIP to 20a*

☐ All others – *SKIP to Check Item J*

II. WORK EXPERIENCE – Continued

19. Last year you told us that you were looking for work. How did you happen to find out about the job you now have?

(Mark all methods used)

(094) 19.

- 01 ☐ Checked with State employment agency
- 02 ☐ Checked with private employment agency
- 03 ☐ Checked directly with employer
- 04 ☐ Placed or answered ads
- 05 ☐ Checked with friends or relatives
- 06 ☐ Other – *Specify* _____

SKIP to Check Item J

20a. Last year when we contacted you, you were not looking for work. What made you decide to take a job?

(095) 20a.

- 1 ☐ Recovered from illness
- 2 ☐ Bored
- 3 ☐ Needed money
- 4 ☐ Heard about job I qualified for
- 5 ☐ Other – *Specify* _____

b. How did you happen to find out about the job you have now?
(Mark all methods used)

(096) b.

- 01 ☐ Checked with State employment agency
- 02 ☐ Checked with private employment agency
- 03 ☐ Checked directly with employer
- 04 ☐ Placed or answered ads
- 05 ☐ Checked with friends or relatives
- 06 ☐ Other – *Specify* _____

Notes

(097)

(098)

(099)

III – ATTITUDES TOWARD WORK

CHECK ITEM J

Refer to item 85R on Information Sheet

☐ Respondent was in Labor Force Group A in 1967 – *SKIP to 27*

☐ Respondent was in Labor Force Group B or C in 1967 – *ASK 21*

21. How do you feel about the job you have now? Do you . . .

(100) 21.
1 ☐ Like it very much?
2 ☐ Like it fairly well?
3 ☐ Dislike it somewhat?
4 ☐ Dislike it very much?

22. What are the things you like best about your job?

a. _____ (101)

b. _____ (102)

c. _____ (103)

23. What are the things about your job that you don't like so well?

a. _____ (104)

b. _____ (105)

c. _____ (106)

SKIP to Check Item K

24. If you were offered a job in this area at the same pay as your last job, would you take it?

(107) 24.
1 ☐ Yes, definitely
2 ☐ It depends on type of work
3 ☐ It depends if satisfied with company
4 ☐ It depends – Other – *Specify below* →
5 ☐ No, pay not high enough
6 ☐ No, other – *Specify* →

_____

SKIP to Check Item K

25a. Do you intend to look for work of any kind in the next 12 months?

(108) 25a.
1 ☐ Yes, definitely
2 ☐ Yes, probably
3 ☐ Maybe, it depends – On what? →
4 ☐ No
5 ☐ Don't know

_____

b. Is there any particular reason why you are not looking for work at this time?

(Record reply below, then mark one box)

_____

(109) b.
1 ☐ Personal or family
2 ☐ Health reasons
3 ☐ Believe no work available
4 ☐ Do not want to work at this time of year
5 ☐ Retired
6 ☐ Other or no reason

III. ATTITUDES TOWARD WORK – Continued

26a. If you were offered a job by some employer in THIS AREA, do you think you would take it?

(110) **26a.**
1 ☐ Yes, definitely
2 ☐ It depends on right kind of work
3 ☐ It depends on satisfactory wages
} *ASK b–c*

4 ☐ It depends on hours
5 ☐ It depends – *Specify below* →
6 ☐ No, health won't permit it
7 ☐ No, retired; don't want to work
8 ☐ No, other – *Specify* →
} *SKIP to Check Item K*

b. What kind of work would it have to be?

(111) **b.** ☐☐☐ _____

c. What would the wage or salary have to be?

(112) **c.** $_____ . _____ Per: (113)
(Dollars) *(Cents)*

$_____ Per:
(Dollars only)

1 ☐ Hour
2 ☐ Day
3 ☐ Week
4 ☐ Biweekly
5 ☐ Month
6 ☐ Year
7 ☐ Other – *Specify* →

SKIP to Check Item K

27. How do you feel about the job you have now? Do you . . .

(114) **27.**
1 ☐ Like it very much?
2 ☐ Like it fairly well?
3 ☐ Dislike it somewhat?
4 ☐ Dislike it very much?

28a. The last time we talked to you was two years ago. Would you say you like your present job more, less, or about the same as the job you held at that time?

(115) **28a.**
1 ☐ More
2 ☐ Less
} *ASK b*
3 ☐ Same – *SKIP to Check Item K*

b. What would you say is the main reason you like your present job (more, less)?

(116) **b.** ☐☐ _____

CHECK ITEM K

(117) *Refer to name and address label on cover page*
1 ☐ Respondent lives in same area (SMSA, county) as in 1968 – *SKIP to 31*
2 ☐ Respondent lives in different area (SMSA, county) than in 1968 – *ASK 29a*

29a. When we last contacted you you were living in *(city in address on cover page)*. About how many miles from here is that?

29a.
(118) Miles _____

b. How did you happen to move here?

(119) **b.** ☐ _____

30a. ☐ Respondent is not currently employed – *SKIP to 31*

Did you have a job lined up here at the time you moved?

(120) **30a.**
1 ☐ Yes, different from job held before moving
2 ☐ Yes, same as job held at time of move
3 ☐ Yes, transferred job in same company
} *SKIP to 31*
4 ☐ No

b. How many weeks did you look before you found work?

(121) **b.**
Weeks _____
99 ☐ Still have not found work

31. We would like to find out whether people's outlook on life has ony effect on the kind of jobs they have, the way they look for work, how much they work, and motters of thot kind. On each of these cords is o pair of statements, numbered 1 ond 2. For each poir, pleose select the ONE statement which is closer to your opinion. In oddition, tell us whether the statement you select is MUCH CLOSER to your opinion or SLIGHTLY CLOSER.

In some coses you moy find thot you believe both stotements, in other coses you may believe nelther one. Even when you feel this way obout o pair of statements, select the one stotement which is more neorly true in your opinion.

Try to consider eoch poir of statements separately when making your choices; do not be influenced by your previous choices.

---

a. 1 ☐ Many of the unhappy things in people's lives are partly due to bad luck.

2 ☐ People's misfortunes result from the mistakes they make.

(*122) Is this statement much closer or slightly closer to your opinion?

8 ☐ Much 9 ☐ Slightly

---

b. 1 ☐ In the long run, people get the respect they deserve in this world.

2 ☐ Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

(*123) Is this stotement much closer or slightly closer to your opinion?

8 ☐ Much 9 ☐ Slightly

---

c. 1 ☐ Without the right breaks, one cannot be an effective leader.

2 ☐ Capable people who fail to become leaders have not taken advantage of their opportunities.

(*124) Is this statement much closer or slightly closer to your opinion?

8 ☐ Much 9 ☐ Slightly

---

d. 1 ☐ Becoming a success is a matter of hard work; luck has little or nothing to do with it.

2 ☐ Getting a good job depends mainly on being in the right place at the right time.

(*125) Is this statement much closer or slightly closer to your opinion?

8 ☐ Much 9 ☐ Slightly

---

e. 1 ☐ What happens to me is my own doing.

2 ☐ Sometimes I feel that I don't have enough control over the direction my life is taking.

(*126) Is this stotement much closer or slightly closer to your opinion?

8 ☐ Much 9 ☐ Slightly

III. ATTITUDES TOWARD WORK – Continued

31f. 1 ☐ When I make plans, I am almost certain that I can make them work.

2 ☐ It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow.

(*127) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

---

g. 1 ☐ In my case, getting what I want has little or nothing to do with luck.

2 ☐ Many times we might just as well decide what to do by flipping a coin.

(*128) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

---

h. 1 ☐ Who gets to be boss often depends on who was lucky enough to be in the right place first.

2 ☐ Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

(*129) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

---

i. 1 ☐ Most people don't realize the extent to which their lives are controlled by accidental happenings.

2 ☐ There is really no such thing as "luck."

(*130) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

---

j. 1 ☐ In the long run, the bad things that happen to us are balanced by the good ones.

2 ☐ Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

(*131) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

---

k. 1 ☐ Many times I feel that I have little influence over the things that happen to me.

2 ☐ It is impossible for me to believe that chance or luck plays an important role in my life.

(*132) **Is this statement much closer or slightly closer to your opinion?**

8 ☐ Much 9 ☐ Slightly

IV. RETIREMENT PLANS

CHECK ITEM L

Respondent is in –

☐ Labor Force Group A and "P" or "G" in 6d – *ASK 32a*

☐ All others – *SKIP to 33*

32a. Does your employer have a pension program, other than Social Security, or Railroad Retirement, that will provide some income to you when you reach retirement age?

(133) 32a. 1 ☐ Yes
2 ☐ No
3 ☐ Don't know

b. Is there a compulsory retirement plan where you work; that is, do you have to stop working at your present job at a certain age?

(134) b. 1 ☐ Yes – *ASK c*
2 ☐ No
3 ☐ Don't know. } *SKIP to 33*

c. At what age?

c.
(135) Age _____

d. Would you work longer than that if you could?

(136) d. 1 ☐ Yes – *ASK e*
2 ☐ No – *SKIP to f*

e. If there were no compulsory retirement, at what age would you expect to stop working at your regular job?

e.
(137) Age _____ – *SKIP to 34a*

(138) 1 ☐ Don't plan to stop working – *SKIP to Check Item M*
2 ☐ Don't know – *SKIP to 34a*

f. Do you expect to retire before this age?

(139) f. 1 ☐ Yes – *ASK 33*
2 ☐ No – *SKIP to 34a*

33. At what age do you expect to stop working at your (a) regular job?

33.
(140) Age _____ – *ASK 34a*

(141) 1 ☐ Don't plan to stop working } *SKIP to Check Item M*
2 ☐ Already stopped }
3 ☐ Don't know – *ASK 34a*

34a. Have you given any thought to what you will do after you retire from your (a) regular job?

(142) 34a. 1 ☐ Yes – *ASK b*
2 ☐ No – *SKIP to Check Item M*

b. What do you think you will do?
(Mark all that apply)

(143) b. 1 ☐ Travel, visit friends
2 ☐ Enjoy a hobby
3 ☐ Relax; take it easy
4 ☐ Take another job; go into business
5 ☐ Other – *Specify* _____

CHECK ITEM M

Refer to Item 88R on Information Sheet

(144)
1 ☐ Response in items 32 or 33 is consistent with or same as response in 1967 – *SKIP to Check Item N*
2 ☐ Response in 1967 was NA – *SKIP to Check Item N*
3 ☐ Response in items 32 or 33 is inconsistent with or different from response in 1967 – *ASK 35*

35. When we talked to you two years ago, you said that you *(entry in item 88R on Information Sheet)*. Is there any particular reason why you've changed your mind?

☐

(145) 35. _____

V. HEALTH

CHECK ITEM M

Respondent is in

☐ Labor Force Group A or B – *SKIP to 37*

☐ Labor Force Group C – *ASK 36*

(146)

(147)

36. Does your health or physical condition keep you from working?

(148) 36.
1 ☐ Yes – *SKIP to 39a*
2 ☐ No – *ASK 37*

37. Does your health or physical condition limit the kind of work you can do?

(149) 37.
1 ☐ Yes – *SKIP to 39a*
2 ☐ No – *ASK 38*

38. Does your health or physical condition limit the amount of work you can do?

(150) 38.
1 ☐ Yes – *ASK 39a*
2 ☐ No – *SKIP to 40*

39a. In what way are you limited?

39a. _____

_____

b. How long have you been limited in this way?

(151) b.
Years _____

40. Would you rate your health compared with other men of about your age as excellent, good, fair, or poor?

(152) 40.
1 ☐ Excellent
2 ☐ Good
3 ☐ Fair
4 ☐ Poor

41. ☐ Respondent not married – *SKIP to 46a*

Does your wife's health or physical condition keep her from working?

(153) 41.
1 ☐ Yes – *SKIP to 45a*
2 ☐ No – *ASK 42*

42. Does your wife's health or physical condition limit the kind of work she can do?

(154) 42.
1 ☐ Yes – *SKIP to 45a*
2 ☐ No – *ASK 43*

43. Does your wife's health or physical condition limit the amount of work she can do?

(155) 43.
1 ☐ Yes – *SKIP to 45a*
2 ☐ No – *ASK 44*

44. Does your wife's health or physical condition limit the kind or amount of housework she can do?

(156) 44.
1 ☐ Yes – *ASK 45a*
2 ☐ No – *SKIP to 46a*

45a. In what way is she limited?

45a. _____

b. How long has she been limited in this way?

(157) b.
Years _____

Notes

VI. EDUCATION AND TRAINING

46a. Since we interviewed you last time have you taken any training courses or educationol programs of any kind, either on the job or elsewhere?

(158) 46a.
1 ☐ Yes – *ASK b–i*
2 ☐ No – *SKIP to 47*

b. What kind of training did you take?
(Specify below, then mark one box)

_____

_____

(159) b.
1 ☐ Professional, technical
2 ☐ Managerial
3 ☐ Clerical
4 ☐ Skilled manual
5 ☐ Other

c. Where did you take this training?
(Record reply below, then mark one box)

_____

_____

(160) c.
1 ☐ University or college
2 ☐ Business college, technical institute
3 ☐ Company training school
4 ☐ Correspondence course
5 ☐ Adult education or night school
6 ☐ Other – *Specify* _____

d. How long did you attend this course?

(161) d.
Weeks _____

e. How mony hours per week did you spend on this program?

(162) e.
1 ☐ 1–4
2 ☐ 5–9
3 ☐ 10–14
4 ☐ 15–19
5 ☐ 20 or more

f. Did you complete this program?

(163) f.
1 ☐ Yes – *SKIP to h*
2 ☐ No, dropped out – *ASK g*
3 ☐ No, still enrolled – *SKIP to h*

g. Why didn't you complete this program?

(164) g.
1 ☐ Found a job
2 ☐ Too much time involved
3 ☐ Too expensive
4 ☐ Too difficult, uninteresting
5 ☐ Other – *Specify* _____

h. Why did you decide to take this program?

(165) h.
1 ☐ To get another job
2 ☐ To get ahead in job
3 ☐ For general knowledge
4 ☐ Complete requirements for diploma
5 ☐ Other – *Specify* _____

i. ☐ Respondent not employed – *SKIP to 47*
Do you use this training on your present job?

(166) i.
1 ☐ Yes
2 ☐ No

VII. ASSETS AND INCOME

47. Is this house (apartment) owned or being bought by you (or your wife), or is it rented?

If "Other," specify here

_____

(167) **47.**
1 ☐ Owned or being bought by respondent (or wife) — *ASK 48a*
2 ☐ Rented
3 ☐ No cash rent
4 ☐ Other
} *SKIP to 49a*

48a. About how much do you think this property would sell for on today's market?

(168) **48a.** $ _____

b. How much do you (or your wife) owe on this property for mortgages, back taxes, loans, etc.? (Mortgages include deeds of trust, land contracts, contracts for deed, etc.)

(169) **b.** $ _____
☐ None

49a. Do you (or your wife) rent, own, or have an investment in a farm?

49a. ☐ Yes — *ASK b*
☐ No — *SKIP to 50a*

b. What is the total market value of your farm operation? (Include value of land, buildings, house, if you own them, and the equipment, livestock, stored crops, and other assets. Do not include crops held under Commodity Credit Loans.)

(170) **b.** $ _____

c. Does that include the value of this house?

(171) **c.** 1 ☐ Yes
2 ☐ No

d. How much do you owe on mortgages or other debts in connection with the farm itself, the equipment, livestock, or anything else? (Do not count Commodity Credit Loans.)

(172) **d.** $ _____
☐ None

50a. Do you (or your wife) own or have an investment in a business or professional practice?

50a. ☐ Yes — *ASK b*
☐ No — *SKIP to 51a*

b. What is the total market value of all assets in the business, including tools and equipment? In other words, how much do you think this business would sell for on today's market? *(Obtain value of respondent's and wife's share only.)*

(173) **b.** $ _____

c. What is the total amount of debts or liabilities owed by the business? *(Include all liabilities, as carried on the books. Respondent's and wife's share only.)*

(174) **c.** $ _____
☐ None

51a. Do you (or your wife) own any other real estate — not counting the property on which you are living?

51a. ☐ Yes — *ASK 51b*
☐ No — *SKIP to 52a*

b. About how much do you think this property would sell for on today's market?

(175) **b.** $ _____

c. How much is the unpaid amount of any mortgages on this property?

(176) **c.** $ _____
☐ None

d. How much other debt do you have on this property, such as back taxes or assessments, unpaid amounts of home improvement loans, or home repair bills, etc.?

(177) **d.** $ _____
☐ None

VII. ASSETS AND INCOME – Continued

52a. Do you (or your wife) own an automobile?

(178) **52a.** ☐ Yes – How many? _____ – *ASK b*
o ☐ No – *SKIP to 53*

b. What is the make and model year of this automobile? *(If more than 1 car, ask about newest car.)*

(179) **b.** Make _____
Model Year _____

53. Do you (or other members of your family living here) have any money in savings or checking accounts, savings and loan companies, or credit unions?

(180) **53.** ☐ Yes – How much? $ _____
☐ No

54. Do you (or any other members of your family living here) have any of the following –

a. U.S. Savings Bonds?

(181) **54a.** ☐ Yes – What is their face value? $ _____
☐ No

b. Stocks, bonds, or shares in mutual funds?

(182) **b.** ☐ Yes – What is their face value? $ _____
☐ No

c. Personal loans to others or mortgages you hold (money owed to you by other people)?

(183) **c.** ☐ Yes – How much? $ _____
☐ No

55. Aside from any debts you have already mentioned, do you (and your wife) now owe any money to stores, doctors, hospitals, banks, or anyone else, excluding 30-day charge accounts?

(184) **55.** ☐ Yes – How much altogether? $ _____
☐ No

56a. ☐ Respondent a noninterview in 1968 – *SKIP to 57a*

So far as your overall financial position is concerned, would you say you (and your wife) are better off, about the same, or worse off now than you were when we contacted you last year?

(185) **56a.** 1 ☐ About the same – *SKIP to 57a*
2 ☐ Better off } *ASK b*
3 ☐ Worse off }

b. In what ways are you (better, worse) off?

(186) ☐ **b.** _____

Notes

VII. ASSETS AND INCOME – Continued

57a. ☐ Respondent a noninterview in 1967 – *SKIP to 58a*

So far as your overall financial position is concerned, would you say you (and your wife) are better off, about the same, or worse off now than you were when we interviewed you TWO years ago?

57a. (187) 1 ☐ About the same – *SKIP to 58a*
2 ☐ Better off
3 ☐ Worse off
} *ASK b*

b. In what ways are you (better, worse) off?

(188) b. _____

---

58. Now I'd like to ask a few questions on your income in 1968.

a. In 1968 how much did you receive from wages, salary, commissions, or tips from all jobs before deductions for taxes or anything else?

58. (189) a. $_____
☐ None

b. ☐ Respondent not married – *SKIP to c*

In 1968, how much did your wife receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?

b. (190) $_____
☐ None

c. ☐ No other family members 14 years or older – *SKIP to 59a*

In 1968, how much did all other family members living here receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?

c. (191) $_____
☐ None

59a. In 1968, did you receive any income from working on your own or in your own business, professional practice, or partnership?

$_____ (*Gross income*) less $_____ (*Expenses*) = $_____ (*Net income*)

59a. (192) ☐ Yes – How much? $_____
☐ No

b. ☐ No other family members 14 years or older – *SKIP to 60*

In 1968, did any other family members living here receive any income from working on their own or in their own business, professional practice, or partnership?

$_____ (*Gross income*) less $_____ (*Expenses*) = $_____ (*Net income*)

b. (195) ☐ Yes – How much? $_____
☐ No

---

60. In 1968, did your family receive any income from operating a farm?

$_____ (*Gross income*) less $_____ (*Expenses*) = $_____ (*Net income*)

60. (198) ☐ Yes – How much? $_____
☐ No

---

61. In addition, during 1968, did anyone in this family living here receive any rental income from roomers and boarders, an apartment in this house, or another building, or other real estate?

$_____ (*Gross income*) less $_____ (*Expenses*) = $_____ (*Net income*)

61. (201) ☐ Yes – How much? $_____
☐ No

VII. ASSETS AND INCOME – Continued

62. In 1968, did anyone in this family living here receive interest or dividends on savings, stocks, bonds, or income from estates or trusts?

62.
(204) ☐ Yes – How much? $_____
☐ No

63a. In 1968, did you receive any unemployment compensation?

63a.
(205) ☐ Yes — How many weeks? _____
(206) How much did you receive altogether? _____
☐ No

b. ☐ No other family members 14 years or older – *SKIP to 64*

In 1968, did any other family members living here receive any unemployment compensation?

b.
(207) ☐ Yes – How much? $_____
☐ No

64. In 1968, did anyone in this family living here receive income as a result of disability or illness such as *(read list)*:

(If "Yes" to any items in list, enter amount, indicating whether received by respondent or other family member.)

64.

	(Mark one) Yes	No	Respondent	Other family member
(1) Veteran's compensation or pension?	☐	☐	(208) $	(213) $
(2) Workmen's compensation?	☐	☐	(209) $	(214) $
(3) Aid to the Permanently and Totally Disabled or Aid to the Blind?	☐	☐	(210) $	(215) $
(4) Social Security disability payment?	☐	☐	(211) $	(216) $
(5) Any other disability payment? *Specify type*	☐	☐	(212) $	(217) $

_____

_____

65. In 1968, did anyone in this family living here receive any other Social Security payments such as old age or survivor's insurance?

65.
☐ Yes – Who?
(218) ☐ Respondent How much? $_____
(219) ☐ Wife How much? $_____
(220) ☐ Other How much? $_____
☐ No

VII. ASSETS AND INCOME – Continued

66. In 1968, did anyone in this family living here receive any (other) public assistance or welfare payments?

66. (221)
- ☐ Yes – How much $ _____
- ☐ No

67a. In 1968, did anyone in this family living here buy any food stamps under the Government's Food Stamp Plan?

67a.
- ☐ Yes – *ASK b*
- ☐ No – *SKIP to 68a*

b. In how many months during 1968 did you buy stamps?

b. (222) Months _____

c. How much was your monthly bonus?

c. (223) $ _____

68a. In 1968, did anyone in this family living here receive any pensions from local, State, or Federal Government?

68a. (224)
- ☐ Yes – How much? $ _____
- ☐ No

b. In 1968, did anyone in this family living here receive any other retirement pensions, such as private employee or personal retirement benefits?

b. (225)
- ☐ Yes – How much? $ _____
- ☐ No

69. In 1968 did anyone in this family living here receive any other type of income; for example, royalties, annuities, contributions from family members living elsewhere, etc.?

69. (226)
- ☐ Yes – How much? $ _____
- ☐ No

Notes

VIII. FAMILY BACKGROUND

CHECK ITEM O

Refer to item 89R on Information Sheet

☐ Respondent's parents are dead – *SKIP to Check Item P*

☐ All other – *ASK 70*

70. Now I have some questions on your family background. Are your mother and father living?

(227) **70.**

1 ☐ BOTH parents alive
2 ☐ MOTHER alive, father dead
3 ☐ FATHER alive, mother dead
4 ☐ NEITHER parent alive

CHECK ITEM P

Refer to item 90R on Information Sheet and item 13, Cover Page

☐ Respondent not married
☐ Respondent's wife's parents are dead
} *SKIP to 72a*

☐ All other – *ASK 71*

71. Are your wife's mother and father living?

(228) **71.**

1 ☐ BOTH parents alive
2 ☐ MOTHER alive, father dead
3 ☐ FATHER alive, mother dead
4 ☐ NEITHER parent alive

72a. How many persons, not counting yourself (or your wife), are dependent upon you (or your wife) for at least one-half of their support?

(229) **72a.**

Number_____ – *ASK b*

o ☐ None – *SKIP to 73a*

b. Do any of these dependents live somewhere else other than here at home with you?

(230) **b.**

☐ Yes – How many?_____ – *ASK c*

oo ☐ No – *SKIP to 73*

c. What is their relationship to you?

☐

(231) **c.**_____

Notes

(232)

(233)

(234)

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Now I have a few questions about the education and work experience of the other family members living here.

Line number	Name — List below all persons living here who are related to respondent. *Enter line number from the Household Record Card in column 73.*	Relationship to respondent — *Example: wife, son, daughter-in-law, brother, etc.*	Age — *As of April 1, 1969*	Persons 6–24 years old			Persons 14 years old and over			
				Is . . . attending or enrolled in school? *Circle Y – Yes N – No*	*If "Yes" –* What grade (year)? *If "No" –* What is the highest grade (year) . . . ever attended?	Did . . . finish this grade (year)?	In the past 12 months how many weeks did . . . work either full or part-time (not counting work around the house)?	If person worked at all in the past 12 months – In the weeks that . . . worked, how many hours did . . . usually work per week?	What kind of work was . . . doing in the past 12 months? *If more than one, record the longest.*	
73	74a	74b	74c	75	76	77	78	79	80	
		235 Respondent								
		236		237 Y N		Y N	238			239
		240		241 Y N		Y N	242			243
		244		245 Y N		Y N	246			247
		248		249 Y N		Y N	250			251
		252		253 Y N		Y N	254			255
		256		257 Y N		Y N	258			259
		260		261 Y N		Y N	262			263
		264		265 Y N		Y N	266			267
		268		269 Y N		Y N	270			271
		272		273 Y N		Y N	274			275
		276		277 Y N		Y N	278			279
		280		281 Y N		Y N	282			283
		284		285 Y N		Y N	286			287
		288		289 Y N		Y N	290			291
		292		293 Y N		Y N	294			295
		296		297 Y N		Y N	298			299
		300		301 Y N		Y N	302			303
		304		305 Y N		Y N	306			307
		308		309 Y N		Y N	310			311
		312		313 Y N		Y N	314			315
		316		317 Y N		Y N	318			319
		320		321 Y N		Y N	322			323
		324		325 Y N		Y N	326			327

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81. When we last interviewed you, you mentioned *(read names from item 91R on Information Sheet)* as persons who will always know where you can be reached even if you moved away. Is this still true? *(If so, verify the addresses and telephone numbers and enter below. If not, enter information about other persons who will know the respondent's whereabouts.)*

	Name	Relationship to respondent	Address	Telephone number
(1)				
(2)				

NONINTERVIEWS IN 1967 OR 1968

Ask the following questions of all respondents who were noninterviews in 1967 or 1968. Transcribe the answers to the appropriate item on the Information Sheet, then proceed with the regular interview.

A. What were you doing at this time last year (two years ago) – working, looking for work, or something else?

1 ☐ Working
2 ☐ With a job, not at work
} *ASK B*

3 ☐ Looking for work, on layoff
4 ☐ Retired
5 ☐ Unable to work
6 ☐ Other – *Specify*
} *END OF QUESTIONS*

B. For whom did you work?

C. What kind of work were you doing?

TRANSCRIPTION INSTRUCTIONS

1968 Noninterviews

Item

A – 1. If box 1 or 2 is checked, mark "Labor Force Group A" in 82R.

2. If box 3 is checked, mark "Labor Force Group B" in 82R and "Not employed in 1968" in 83R.

3. If box 4 or 6 is checked, mark "Labor Force Group C" in 82R, and "Not employed in 1968" in 83R.

4. If box 5 is checked, mark "Unable to work" in 82R, and "Not employed in 1968" in 83R.

B – Transcribe entry to 83R.

C – Transcribe entry to 84R.

1967 Noninterviews

Item

A – 1. If box 1 or 2 is checked, mark "Labor Force Group A" in 85R.

2. If box 3 is checked, mark "Labor Force Group B" in 85R and "Not employed in 1967" in 86R.

3. If box 4 or 6 is checked, mark "Labor Force Group C" in 85R, and "Not employed in 1967" in 86R.

4. If box 5 is checked, mark "Unable to work" in 85R, and "Not employed in 1967" in 86R.

B – Transcribe entry to 86R.

C – Transcribe entry to 87R.

INFORMATION SHEET
DATA FROM 1967 AND 1968 INTERVIEWS

82R. Labor Force Group in 1968 (328)

1 ☐ A
2 ☐ B
3 ☐ C
4 ☐ Unable to work

83R. Name of employer in 1968

_____

☐ Not employed in 1968

84R. Kind of work done in 1968

_____

85R. Labor Force Group in 1967 (329)

1 ☐ A
2 ☐ B
3 ☐ C
4 ☐ Unable to work

86R. Name of employer in 1967

_____

☐ Not employed in 1967

87R. Kind of work done in 1967

_____

88R. Retirement plans in 1967 (330)

1 ☐ Older than age _____
2 ☐ Age _____
3 ☐ Don't plan to stop working
4 ☐ Already stopped
5 ☐ Don't know
6 ☐ NA

89R. Status of respondent's parents in 1967 (331)

1 ☐ Both parents of respondent are dead
2 ☐ All other

90R. Status of wife's parents in 1967 (332)

1 ☐ Respondent not married
2 ☐ Both parents of the respondent's wife are dead
3 ☐ All other

91R. Names and addresses of persons who will always know where the respondent can be reached.

1. _____

_____

_____

2. _____

_____