

DURATION-OF-RESIDENCE ANALYSIS OF INTERNAL MIGRATION IN THE UNITED STATES¹

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KNOWLEDGE of migration can be advanced by the collection and analysis of new types of data, as well as by further analysis of the existing types of data. Much effort can be profitably devoted to the development of new approaches to available data. (1, 2) Nevertheless, many of the questions we may pose about internal migration cannot be answered by analysis of the census data or the Current Population Survey annual residential mobility series. New types of migration data are needed, based on additional migration questions. This paper discusses the migration information provided by a question on duration of residence, and presents the first national migration data derived from this approach.

Comparisons of current residence with residence at a fixed previous time, as in the migration questions in the 1940 and 1950 censuses and in the CPS, overlook multiple (including circular) migrations by individuals. From decennial censuses can be derived estimates only of net migration. Both approaches are thus directly concerned with population redistributions, and only inferentially with specific moves. Both approaches permit the delineation of some of those persons who have made at least one move, but do not differentiate the migration experiences of the great majority who have the same residence at one, five, or ten-year intervals. The duration-of-residence approach, on the other hand, provides direct information on a portion of the actual migration history of each individual. The duration of residence represents the length of time since the last move. Duration-of-residence data thus provide information on the latest segment of the residence history of each individual.

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In the United States, duration-of-residence data for particular groups have been collected occasionally. Four examples may be cited. In the Massachusetts State Census of 1895, durations of residence in the town, the State, and the United States were ascertained. (3) The data were collected primarily because of the need for knowledge about immigrants. Durations of residence were listed separately for native born and foreign born, with more detail on durations in the State and in the country than in the town of current residence. Discussion of the data focused on the relationship between stability of residence, "the question of citizenship," and "various other problems of our social economy."

When, therefore, an appeal is made to those who may possibly hold the elective franchise in Barnstable County, there are less than four in every 100 to whom such an appeal may be addressed who are of foreign birth of less than 10 years' residence in the United States; but in Middlesex County there are about 15 in every 100, nearly one in six, of this class, whose acquaintance, by direct contact, with our institutions, and with the civic policy of the United States does not antedate the beginning of the decade ending in 1895.

Goldstein also utilized duration data in the context of a concern with the problems of the maintenance of social and cultural stability in communities characterized by high migration rates. (4) He was studying internal migration rather than immigration. On the basis of the presence of names in successive city registers, Norristown, Pennsylvania, residents were divided into those with durations of residence in the City of less than 10 years, 10 to 20 years, and more than 20 years. These data contributed to one of his major conclusions: "Thus it was only the migrant group which was highly unstable; and a large segment of the population, through its continuous residence in Norristown, gave continuity and stability to the population of the community." Data only on current migration rates do not distinguish the existence of a residentially stable segment.

Rider and Badger used a duration-of-residence approach to

draw conclusions about a general feature of residential mobility. (5) The data were derived from a sample of dwelling units in the Baltimore Eastern Health District which was surveyed annually for three years. Of the original householders, 84 per cent, 75 per cent, and 69 per cent were still in the same dwellings at the end of one, two, and three years, respectively. These and other data support the conclusion that, "the probability of moving within a specified time . . . decreases as the length of maintaining the same residence increases." Thus residential mobility during a given time period is not independent of previous mobility experience. Persons who have not moved recently are less likely to move in the future than are those who have moved recently. This is a more general statement of Goldstein's proposition that a small proportion of frequent migrants accounts for a high proportion of all migration.

A recent paper describes procedures for collecting residence histories of decedents. (6) The paper included some discussion of the duration of residence at the usual place of residence listed on the death certificate, for the purpose of evaluating the utility of usual place of residence as an etiological factor in analyses of causes of death. Duration-of-residence data were used to distinguish those with short durations at the usual place from those with long durations. Approximately three-fourths of the sample of 400 decedents had durations of 20 years or more, but few of them had lived their entire lives in one place.

The study of 400 decedents in Pennsylvania served as a pretest for a National Lung Cancer Mortality Study. The Study is being undertaken to ascertain the interrelations between residence, tobacco smoking habits, and lung cancer mortality. Residence information was collected for a national sample of decedents from lung cancer. To permit computation of death rates, corresponding data were required for the living population. The data were collected in a Supplement to the Current Population Survey of May, 1958. This Residence History and Smoking Habits Schedule was sponsored by the National Cancer Institute, in cooperation with the National Office of Vital Statistics

and the Bureau of the Census. The schedule represents a unique attempt to gather a complete history of the places of residence and time at each place from a representative national sample. The duration at the current place of residence is only a part of the residence history. Later reports will take up other portions of these data. The present tabulations are only of duration at current place, without regard to previous place of residence or any other residence history items. Obviously the complete residence histories offer much scope for the development of longitudinal analysis of the migration experience of individuals. The duration-at-current-place data may be regarded as a link between the comparison-of-residences approach to current migration and population redistribution and the complete residence history approach to lifetime patterns of migration.

The meaning of duration-of-residence data, like other migration data, depends on the way migration is defined. The duration data in the three local studies cited derive from three different definitions of what constitutes the previous move. In the analysis of the Massachusetts data, familiarity of immigrants with the political process was assumed to depend not on residence in a particular town so much as on residence any place in the State. Thus the analysis focused on duration of residence since moving from elsewhere into Massachusetts. Goldstein was studying the patterns of mobility of residents of a particular city, and his duration data refer to length of continuous residence in Norristown. For the Eastern Health District, the data record duration of residence within individual dwelling units. Any residential mobility, whether a shift from one apartment to another or a cross-country move, thus interrupts the span of continuous residence.

The procedures described for the Residence History Supplement record duration of residence in an urban or rural place.³

³ Questions for Determining Duration of Residence.

1. Location of present residence:
 - A. City or other urban place:
Place _____
County _____

(Continued on page 120)

Local moving within a place is ignored. This procedure focuses on length of residence within a political unit, the duration since moving into the city or other place. It corresponds most closely to Goldstein's approach in the Norristown study. This definition sharply differentiates the 1958 data from those collected in the 1960 Census on duration of residence in the house or apartment. The new Census data emphasize total residential mobility, and are designed primarily to provide information on housing turnover rather than population mobility.

The difference between the two approaches can be demonstrated by a comparison of the 1958 duration-in-place data with duration-in-dwelling data for April, 1952. Table 1 presents data for roughly comparable categories from the two Surveys. Durations in dwellings are considerably shorter than durations in places. The greatest differences between the two types of data occur for the duration category, entire life. Twenty-six per cent of those 18 and over report having lived their entire lives in one place, whereas only 2 per cent have remained in the same dwelling unit. The differentials between these two sets of data are somewhat larger than expected from the magnitude of the differences between total mobility and inter-county migration in the annual Current Population Survey data. If the several types of data could be compared for corresponding categories for the same time period, speculations about the reasons for the differentials might be fruitful. Here it is sufficient to note that the duration-in-place and duration-in-dwelling data portray quite different aspects of residential mobility.

The 1958 duration-in-place data may also be contrasted with data from the Current Population Survey on change of residence between April 1, 1957, and April 1, 1958. Persons with a

Is this residence inside the limits of (Place)?

If no, is it inside the limits of some other city,
town, or village?

B. Not in city or other urban place:

County _____

Is this residence on a farm?

2. Have you lived in (Entry in Item 1) all your life?

If no, how many years have you lived continuously in
(Entry in Item 1)? _____ Years.

| DURATION IN PLACE DURATION IN DWELLING | | ALL DURATIONS | (MONTHS) | | | | |
|---|----------|------------------|--------------|----------------|------------------|--------------|--------------|
| | | | 0-11 0-11 | 12-59 12-63 | 60-119 64-135 | 120+ 136+ | Life Life |
| 18+ | Place | 100 | 5.3 | 16.0 | 13.0 | 39.6 | 26.1 |
| | Dwelling | 100 | 19.7 | 35.7 | 19.9 | 22.8 | 1.8 |
| 18-24 | Place | 100 | 11.3 | 22.5 | 10.0 | 15.4 | 40.8 |
| | Dwelling | 100 | 36.2 | 34.5 | 13.2 | 11.3 | 4.8 |
| 25-34 | Place | 100 | 8.0 | 26.9 | 17.2 | 19.9 | 28.0 |
| | Dwelling | 100 | 28.8 | 49.5 | 14.3 | 6.1 | 1.2 |
| 35-44 | Place | 100 | 4.2 | 16.5 | 17.6 | 37.0 | 24.7 |
| | Dwelling | 100 | 17.6 | 39.5 | 25.3 | 16.4 | 1.1 |
| 45-64 | Place | 100 | 3.0 | 9.4 | 10.5 | 54.4 | 22.7 |
| | Dwelling | 100 | 11.5 | 27.6 | 23.8 | 35.8 | 1.3 |
| 65+ | Place | 100 | 2.5 | 7.9 | 7.9 | 62.6 | 19.2 |
| | Dwelling | 100 | 9.0 | 24.8 | 18.4 | 45.5 | 2.2 |

Source of duration-in-dwelling data: *Current Population Reports*, Series P-20, No. 47, Sept., 1953.

Table 1. Duration-of-residence in current place, 1958, and duration-of-residence in current dwelling unit, 1952. Percentage distribution by age.

duration of residence of less than 1 year correspond with the mobility status category, movers. If all other survey procedures corresponded, these two figures should be equal. The durations, however, refer to length of continuous residence in places, whereas the category of movers includes all local movers as well as migrants between places. The subdivisions of movers into same-county and different-county does not make complete equivalence possible. The residence history schedule calls for all moves between counties to be reported. In addition, some moves within counties should be reported: any move between cities or between a rural residence and a city constitutes a change of place. The number of persons with a duration less than one year would be expected to be intermediate between the numbers of same-county and different-county movers.

Table 2 reveals that durations of less than one year are less frequent than either same-county or different-county moves. The duration data, however, are similar both in magnitude and

in the patterning by age to the mobility data. Considering the wide divergence in survey questions, the differences between the two sets of data are not surprising. The inference that the less-than-one-year-duration data represent an undercount is plausible if three features of the survey procedures are noted. The Residence History Schedule emphasized "places where you have lived one year or longer," thus perhaps encouraging an overstatement of some durations. Secondly, the query for length of *continuous* residence may have been answered sometimes in terms of total life-time residence in the place, even if discontinuous. Thirdly, the Schedule requires the respondent to specify both when and where he has lived previously, whereas the one-year-mobility question requires recall only of residence at a specified prior time. Further quality checking of these data must await additional tabulations.

In a United Nations Seminar paper, Bogue has discussed the relative merits of several possible questions on migration. (7) As an alternative, rather than a supplement, to other approaches, a main function of duration data would be to permit estimates not only of current migration, but to permit "rough measures to be made of comparative differences in rates of immigration in past years. . . ." Coupling the duration question

Table 2. Duration-of-residence in current place, 1958, and residential mobility, 1957-1958. Percentage distributions by age.

| | 18+ | 18-44 | 45-64 | 65+ |
|--------------------------|------|-------|-------|------|
| <i>Duration</i> | | | | |
| All Durations | 100 | 100 | 100 | 100 |
| More Than 1 Year | 94.7 | 92.7 | 97.0 | 97.5 |
| Less Than 1 Year | 5.3 | 7.3 | 3.0 | 2.5 |
| <i>Mobility</i> | | | | |
| All Classes | 100 | 100 | 100 | 100 |
| Non-Movers | 80.0 | 72.7 | 88.4 | 90.2 |
| Movers, Same County | 12.8 | 16.9 | 8.0 | 7.0 |
| Movers, Different County | 7.2 | 10.4 | 3.7 | 2.7 |

Source of mobility data: *Current Population Reports*, Series P-20, No. 85, Oct., 1958.

with a question on previous place of residence in a nationwide survey would permit estimates of out-migration as well. These estimates, however, could only be rough. Any survey approach for estimating past mobility omits the moves of those who have not survived to the present, thus understating the amount of past mobility and distorting the pattern by age. In addition, data on duration only in current residence conceal any previous mobility of those with short durations. A person who moved 5 years ago and again 2 years ago is counted only for the 2 year duration; a move made 5 years ago is recorded only if no later move has been made. Residence history data, providing information on all prior residences, would be needed to permit direct estimates of the previous migration rates of those still alive.

For the United States, data only on duration at current place are more useful in other ways than estimating previous migration. When cross-classified with appropriate characteristics, duration data can serve a second function noted by Bogue, estimation of "the extent of migration adjustment and the type adjustment in the community of destination." The data thus far tabulated from the 1958 Survey do not permit an illustration of this approach. One illustration is provided by the Massachusetts Census analyst, who, however, assumed rather than demonstrated such a positive relation between duration of residence and adjustment to community institutions. Klineberg's study of the relationship between intelligence measurements of Negro children and duration of residence in New York City is a well known example of this approach. (8)

Duration data are useful for analyzing a variety of problems in addition to the adjustment of migrants. Goldstein's concern with the stability and continuity of the population of Norristown is an example. Duration-of-residence data permit an emphasis on both the mobile and the stable portions of the population. From the preliminary tabulations of the May, 1958, Survey, patterns of mobility and stability can be delineated for regions and sizes of communities by age, sex, and color.⁴

⁴ The preliminary tabulations may differ slightly from the final tabulations.

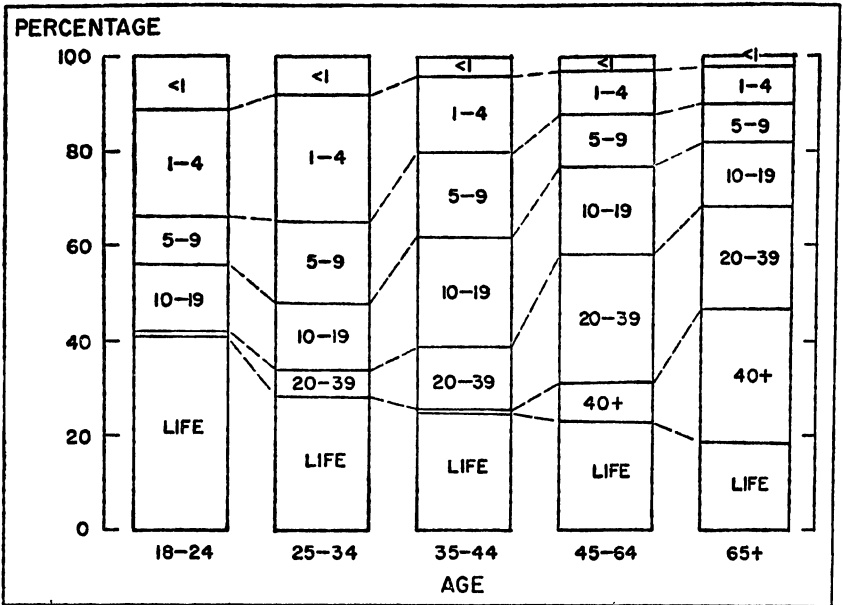


Fig. 1. Duration of residence in current place. Percentage with specified years or longer, by age, United States, 1958.

These preliminary data supplement the comparisons possible on the basis of annual migration rates, and permit additional inferences about migration patterns. Figures 1 through 6 and Table 3 portray the variation in durations of residence by these basic characteristics. These data illustrate the nature of duration-of-residence data and some of the ways of looking at them. Only a few features of these data can be noted here.

One of every four adults in the United States is reported as having lived his entire life in a single place. Any residential mobility for this one-fourth of the population has been local moving rather than intercommunity migration. Nearly one-half of the adult population has lived more than 20 years in the current place, and nearly two-thirds has durations of 10 years or more. Cumulating the proportions the other way emphasizes the extent of mobility rather than stability. One-fifth of adults has resided in the current place for fewer than 5 years, and one-third moved into their current place sometime during the last 10 years.

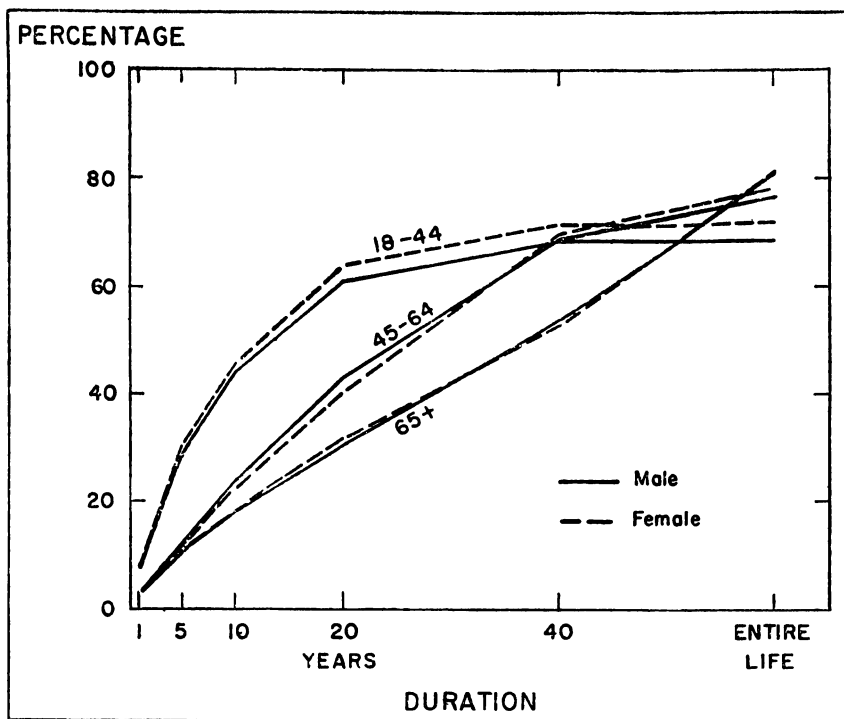


Fig. 2. Duration of residence in current place. Percentage with specified years or longer, by age and sex, United States, 1958.

In grouping durations, the "entire life" category does not fit precisely at one end of a continuum of years of residence since last move. A "life" duration for someone aged 18 is considerably shorter than a "40 years or more, but less than entire life" duration for someone aged 50. This problem is overcome in cross-classifying duration with age. In interpreting Figures 1, 2, and 3, it must be kept in mind that the "entire life" and "40 or more years" durations have different meanings for ages 18-44 than for the older ages.

The shorter durations for young adults do not reflect only their lesser opportunity for long durations because of their younger ages, but also the high mobility during early adulthood. At ages 18-24, two-fifths are still resident in their place of birth. This proportion drops sharply for ages 25-34, and declines gradually with further increases in age. The years of

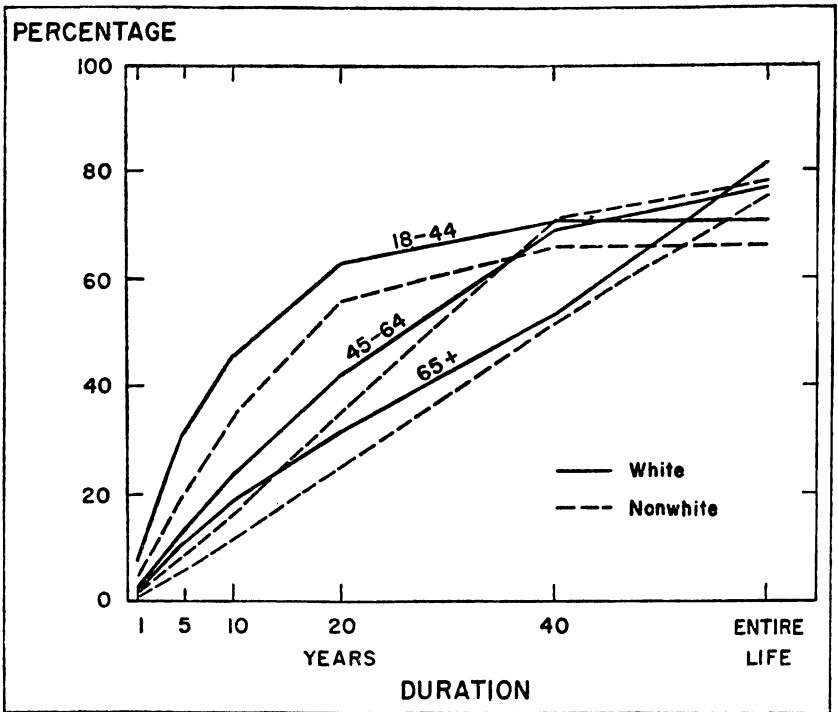


Fig. 3. Duration of residence in current place. Percentage with specified years or longer, by age and color, United States, 1958.

leaving home and establishing new families frequently involve changing the place of residence as well as the specific dwelling.

Durations of 20 or more years, but not embracing the entire life, increase sharply with age. Among persons 25-34, a duration of 20 or more years implies a move into the current place after birth but before age 14. Only 6 per cent of persons aged 25-34 fall into this group. Similarly, only 13 per cent of those aged 35-44 moved into their current places after birth but at least by age 24. These data suggest that relatively few persons change their residence between birth and late adolescence, whereas by the mid-twenties two-thirds have left their birth-places.

Durations for the older age groups suggest that these persons settled down in their late twenties or early thirties, and were unlikely to change their place of residence thereafter. Local

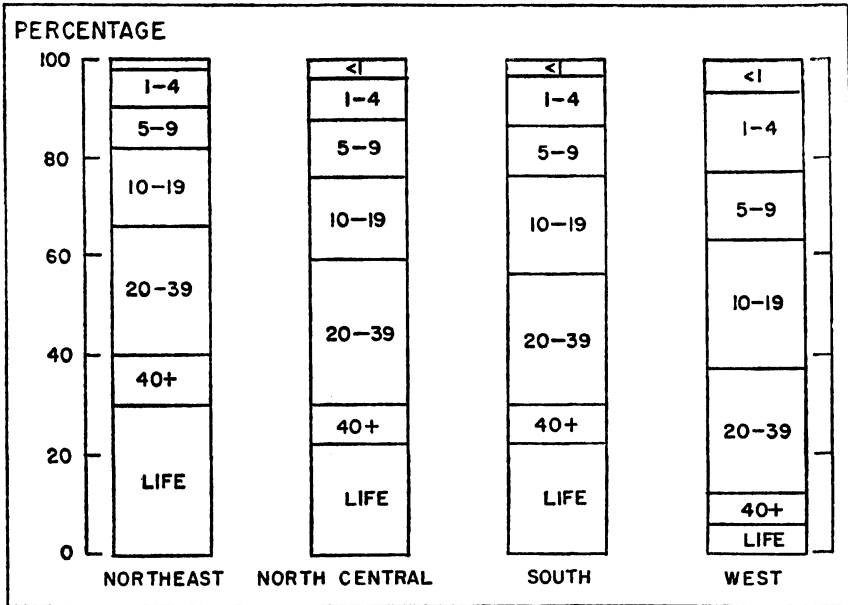


Fig. 4. Duration of residence in current place. Percentage with specified years or longer, by region, whites aged 45 to 64, 1958.

moving may have continued, and it is probable that many of the shorter durations for these persons reflect a recent move to the suburbs rather than a long-distance migration.

The differentials by sex, illustrated in Figure 2, are not large. Women aged 18-24 years not only have higher 1 year mobility rates, but higher rates for the previous 1-5 years. At these ages, men are much more likely to have spent 10 or more years, including entire life, in their current place. At ages 25-34, however, men have higher percentages with both short (less than 5 years) and long (life) durations. Among older persons, men have slightly higher proportions than women among the long durations categories, reflecting perhaps a greater likelihood of the wife moving to the husband's place of residence than of the husband moving to the wife's place. Classification by marital status would permit testing of the plausible inference that the duration patterns reflect age differentials at marriage and residence patterns after marriage.

The higher mobility of whites is reflected in Figure 3, which

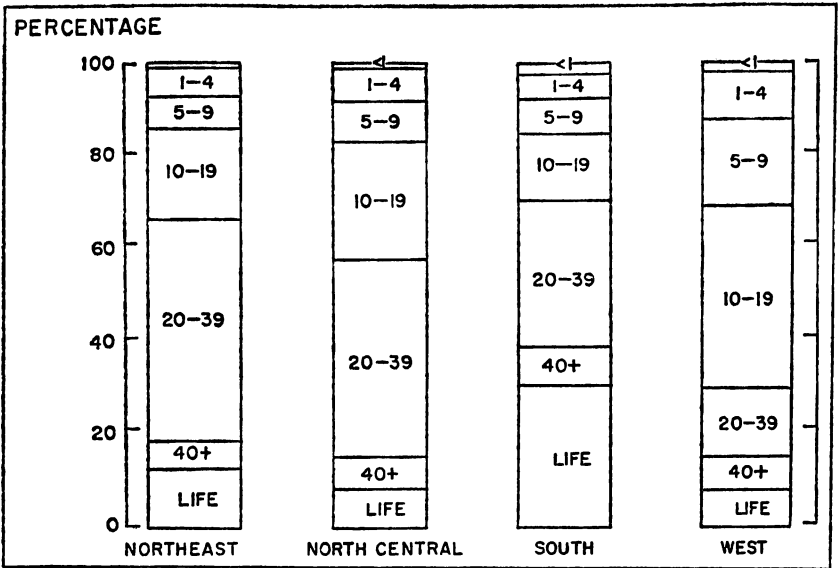


Fig. 5. Duration of residence in current place. Percentage with specified years or longer, by region, nonwhites aged 45 to 64, 1958.

shows generally longer durations for nonwhites. The duration data permit more interesting comparisons by color when classified by region, as in Figures 4 and 5. In the South, nonwhites aged 45-64 show much more residential stability than do whites. In the Northeast and North Central Regions, the duration data clearly reflect the heavy in-migrations of Negroes in the last 40 years. As compared to the whites in the regions, few of the nonwhites have lived their entire lives in a single place. Nonwhites are heavily concentrated in the 10-40 year durations. Perhaps the last change of place for many nonwhites is the move from the South to a Northern metropolis; once there, further migration is unlikely. These differentials between whites and nonwhites are apparent also in Figure 6, comparing durations for persons currently living in metropolitan places with durations for those in nonmetropolitan places.

In Table 3, places of current residence are further subdivided into size classes. For both whites and nonwhites, the highest proportion of life durations is found among farm residents. For whites, life durations in the largest cities are nearly as common

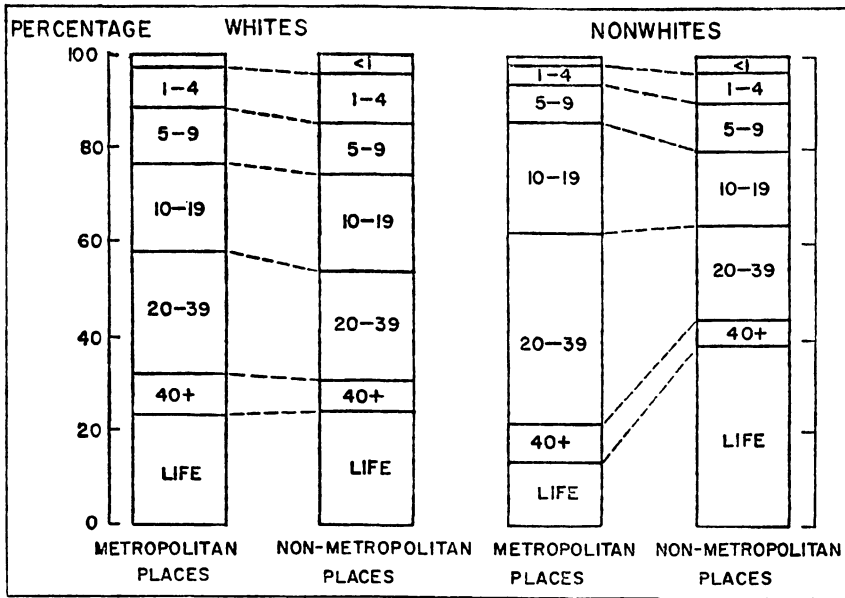


Fig. 6. Duration of residence in current place. Percentage with specified years or longer, by color and type of place, males aged 45 to 64, United States, 1958.

as in farm areas, and durations of more than 20 years are more common. Relatively few nonwhites, however, have lived their entire lives in any nonfarm places. In the larger metropolitan places, nonwhites much more frequently than whites have durations of 20 years or more, but less than life, reflecting both the timing of periods of urban in-migrations and the lesser total residential mobility of nonwhites.

Duration-of-residence data can contribute to our knowledge of migration differentials by age, sex, and other characteristics. They can be used to further document and analyze historical migrations, such as those of nonwhites to Northern metropolises. They permit analysis of population stability and mobility by regions and by types and sizes of places of current residence. The most distinctive feature of duration data, however, is the glimpse they give into migration as part of the life history of persons. An individual's changes of residence are not independent of previous changes of residence; neither are the migrations of a given year independent of the changing residential patterns

| | ALL DURATIONS | DURATION IN YEARS | | | |
|--------------------------------|------------------|-------------------|------|------|----------------|
| | | Less than 5 | 5-19 | 20+ | Entire Life |
| <i>Metropolitan Places</i> | | | | | |
| 500,000+ | | | | | |
| White | 100 | 5.2 | 17.5 | 39.8 | 37.5 |
| Nonwhite | 100 | 4.0 | 30.6 | 54.0 | 11.4 |
| <i>50,000-500,000</i> | | | | | |
| White | 100 | 8.6 | 28.4 | 41.1 | 21.9 |
| Nonwhite | 100 | 6.7 | 30.6 | 48.6 | 14.1 |
| <i>2,500-50,000</i> | | | | | |
| White | 100 | 18.4 | 45.7 | 26.2 | 9.7 |
| Nonwhite | 100 | 10.7 | 38.7 | 44.3 | 6.3 |
| <i>Rural Nonfarm</i> | | | | | |
| White | 100 | 18.5 | 39.8 | 24.8 | 16.9 |
| Nonwhite | 100 | 9.0 | 37.5 | 27.9 | 25.6 |
| <i>Non-Metropolitan Places</i> | | | | | |
| <i>2,500-50,000</i> | | | | | |
| White | 100 | 15.9 | 34.1 | 34.6 | 15.4 |
| Nonwhite | 100 | 9.9 | 36.6 | 35.6 | 17.9 |
| <i>Rural Nonfarm</i> | | | | | |
| White | 100 | 18.1 | 34.8 | 27.2 | 19.9 |
| Nonwhite | 100 | 12.8 | 32.8 | 21.0 | 33.4 |
| <i>Rural Farm</i> | | | | | |
| White | 100 | 8.3 | 23.2 | 27.7 | 40.8 |
| Nonwhite | 100 | 6.6 | 13.9 | 18.9 | 60.6 |

Table 3. Duration-of-residence in current place. Percentage distribution by color and type and size of current place, males aged 45-64, United States, 1958.

of the nation. A single question on duration in current residence can provide but a small proportion of the data needed to proceed very far with the longitudinal analysis of migration. A second question, on place of previous residence, is necessary to permit duration analysis of specific migration streams. More questions are necessary to provide more complete longitudinal data. Analysis of the basic duration data continually suggests the need for such additional information. Duration-of-residence analysis is but a preliminary step in the systematic study

of migration within the context of the life cycle of the individual and the population redistributions of the nation.

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