

II. CENSUS DATA AS A SOURCE FOR THESES AND DISSERTATIONS IN THE FIELD OF SOCIOLOGY

PAUL C. GLICK

Previous censuses have provided materials for numerous theses and dissertations in the field of sociology. Some examples are the dissertations by Thomas Monahan, on age at first marriage; by Paul Jacobson, on a critique of data on marital status; by Robert Dinkel, on differential fertility; by Elmer Johnson, on educational attainment; by Karl Taeuber and Stanley Lieberman, on segregation; by Melvin Zelnik, on age distributions as bases for estimating births for past periods; by Charles Nam, on social stratification of successive generations of foreign stock; and by Mary Powers, on census tract profiles in metropolitan centers and their suburbs.

Abundant population data from the 1960 Census have been published in the Volume I reports for states, regions, and the United States, and in the Volume II and Volume III reports on 35 special subjects to provide source materials for innumerable additional theses and dissertations. The reports in Volume II deal with ethnic characteristics, migration, fertility, families (including family income), education, employment, occupation, inmates of institutions, income of the elderly population, and veterans. The reports in Volume III deal with population characteristics for state economic areas, Americans overseas, and metropolitan areas, and with population characteristics by size and type of place.¹

Unpublished data can be obtained at cost from the Bureau of the Census from the following sources for use in the preparation of theses and dissertations:

1. Tabulated but unpublished data from the 1960 Census on a wide range of population data are available for local areas (census tracts and "pseudo-tracts," such as townships, small cities, and balances of counties). Moreover, unpublished data for each state can be obtained on subjects for which data are covered only for the United States (or for the United States and regions) in most of the Volume II and Volume III reports. Statistics tabulated by the Bureau for S. J. Tesauro and Company, 14501 W. McNichols Road, Detroit, Michigan, show many cross-classifications of census data for the larger counties and cities; these statistics can be purchased from Mr. Tesauro.

2. The Bureau of the Census will make special tabulations from 1960 Census records at cost for individuals or organizations on request. For example, detailed characteristics of teen-agers in New York City by census tracts are currently being tabulated at the request and expense of the Research Center for Human Relations of the Graduate School of New York University, to be used in a study of factors associated with delinquency. In addition, several of the 1960 Census reports which had been planned but for which funds were lacking have been financed (or are in process of being financed) by outside sources; these data are being made available in the same format as reports financed by the Bureau of the Census.

3. Persons or organizations can purchase punch cards or electronic tapes from the Bureau of the Census containing the full range of population data and some housing items on the basis of records from a 1-in-1,000 or 1-in-10,000 sample from which all personal identification has been eliminated. Approximately 40 copies of the 1-in-1,000 tapes and 10 of the 1-in-10,000 tapes have already been sold.

4. Matching studies can be made by the Bureau of the Census wherein statistics from another source are matched with census data and statistical compilations are made at cost for the sponsor. Thus 1950 data on infants under three months of age have been

matched with data on births during the three months preceding the 1950 Census. Also 1960 data have been matched with data on deaths occurring soon after the census, with mental hospital admissions from the early summer of 1960 to the late spring of 1961, with divorce records for persons obtaining divorces in March of 1960, and with juvenile delinquents whose cases were processed at about the time of the 1960 Census. A similar study could be made wherein birth records for illegitimate children would be compared with the census, in which rates of illegitimacy by family characteristics could be developed.

5. Special studies, including the asking of new questions in conjunction with the Current Population Survey (CPS) or the Quarterly Household Survey (QHS), can be made by the Bureau of the Census for sponsors at cost, provided the substance is consistent with the public interest. Thus a large study now nearing completion was conducted by the Bureau in conjunction with the Current Population Survey for Otis Dudley Duncan and Peter Blau on occupational and educational changes in a generation. Other special studies may be made at cost by introducing new cross-classifications of CPS or QHS data that have already been collected.

Following is a series of illustrative topics for consideration in selecting subjects for theses and dissertations. The topics are organized under six headings: marriage and the family; ethnic characteristics; migration and commuting; social stratification; current social problems; and methodological problems.

MARRIAGE AND THE FAMILY

The Life Cycle of the Family

Previous attempts at defining the phases of the cycle could be sharpened. Alternative means of measuring progress through the cycle could be developed. Deviations from the typical patterns of the cycle could be analyzed, in terms of the range of variation among those in a given stage and in terms of color, residence, whether the marriage is stable or broken, etc. Ann Rice is currently preparing a dissertation at Florida State University on the life cycle of the childless family.

Mate Selection in Marriage

The extent and consequences of intermarriage of racial and ethnic groups could be studied. Differences between the ages, education, and occupational pursuits of spouses could be investigated with a view to ascertaining the optimum combinations of characteristics of mates for the preservation of stability in marriage.

Age at First Marriage

The age of the husband at first marriage could be considered as a fundamental gradient to be correlated with socio-economic status at the peak of the husband's productive life. Thus the relationship between age at marriage and the pattern of subsequent family building, family stability, and family economic success could be analyzed in depth. One of the many possible related considerations would be a study of the kinds of persons who marry while still attending college.

Spacing of Children

By retrospective analysis the student could ascertain the intervals between marriage and birth of each child, intervals between successive children, and the incidence of reported premarital conceptions. The findings could be related to changing economic and political conditions over recent decades, as well as to current socio-economic status and to ethnic characteristics of mothers. The measures derived from this study would be of central importance in the development of parameters (regression equations, probabilities, etc.) for use in developing a mathematical model of population growth.

Order of Birth

This topic could include an analysis of only children in the family and of first children, middle children, and last children. These orders of birth could be related to progress in school, employment of children living at home, and the types of employment and level of income derived from employment. Order of birth could also be studied as a factor in the eventual material success of siblings during their adult life, drawing on information collected in the special study for

Duncan and Blau on occupational and educational changes in a generation, which was made in March 1962.

Sex of Children

This subject could involve a search for evidence of preference for children of a given sex or for a certain combination of boys and girls in the family. Differences between the preferences of farm and non-farm families and of persons in differing socio-economic groups would be enlightening. The sex of the final child in the family might be found to bear a logical relationship to the sex of older children in the family. Families migrating to homes beyond the urban fringe might be found to contain a disproportionately large number of sons. The possible connection between occupational advancement and the presence of sons (to carry on the family name) might be pursued.

Stability of Marriage

An inquiry might be made into the effect of broken marriage on the eventual size of the family. Divorce might be studied as a release from childless marriage. The extent to which separation is the poor man's divorce could be restudied. Signs of weaknesses in superficially stable marriages might be sought. The interaction between the productive and reproductive functions performed by the husband and wife could be analyzed as a factor in marital stability.

Conformity-Deviance Patterns in Family Life

The implications of conformity to, or deviations from, traditional social values might be shown with respect to the following: age at marriage; characteristic spacing intervals between children; number of children in the family; employment of the wife at typical stages of the cycle for such employment; housing of a quality consistent with the family's socio-economic level; possession of those durables which are characteristic of the family's economic and educational status; living arrangements in regard to "doubling" or living in an apartment in the early years of marriage, etc. The purpose of this study would be to determine what kinds of couples conform to the model and what kinds exceed or fall below the model in regard to the above characteristics.

*Persons Who Marry, Persons with Broken Marriages
and Persons Who Never Marry*

Demographic characteristics could be shown for such persons in relation to their living arrangements (for instance, unmarried sons who still live with their mothers, or who are in penal or mental institutions); educational and employment status; work experience; occupation; industry; income; and housing characteristics. This study might be an attempt to show the implications of entering and remaining in (or returning to) marriage as an index of the ability of the person to meet the requirements of modern industrial society.

Familism of Different Social and Economic Groups

This topic relates to the tendency for multi-generation families to be found among various ethnic and ecological groups, at different income levels, and after successive lengths of marriage. Contrasts could be developed between extended family groups and nuclear family groups. Moreover, the housing accommodations of these two contrasting groups might be studied, in terms of residence in apartments versus separate houses, and in relation to size of housing unit.

Social Meaning of Work Done by Wives

Employed childless women and employed mothers (with differing numbers and ages of children) could be analyzed in relation to the ownership of durable goods (expensive or inexpensive house, one or more automobiles, air conditioner, washer, dryer, television, etc.), with control on presence in the household of an adult female who is not in the labor force (and presumably is available to care for the children, if any).

ETHNIC CHARACTERISTICS

The Dispersal of Ethnic Groups

This topic would deal with the movement of Negroes from the South to the North and West, with the movement of ethnic groups from the center of the metropolitan area to the periphery, etc. To

illustrate, the characteristics of Negroes in the North could be analyzed in terms of the length of time they have been in the North, thus distinguishing between the characteristics of those who were born in the North and those who have migrated to the North in more recent times. The data for this study—as well as for several other proposed studies—would require special tabulations.

Family Cohesion Among Racial and Other Ethnic Groups

This is a topic akin to the one on familism cited above, but differs in its emphasis on the relative stability of families among various ethnic groups. Thus the extent of instability of marriage can be shown for white, Negro, and other racial groups in relation to size of place and region or in relation to type of city (whether living in a state capital, a manufacturing center, a resort area, etc.). Life tables could be used to estimate the percentage of the lifetime spent in each marital status, for persons classified by race, nativity, and parentage.

Religion as Shown by Country of Origin

Although the Bureau of the Census included no question on religion in the 1960 Census, many inferences—probably sound—can be drawn about religious differentials for the foreign stock by inferring that nearly all persons in this country of Irish and Italian stock are Catholics and that the vast majority of persons of Russian stock in this country are Jews. A limitation of these data is their availability for only first and second generation stock.

MIGRATION AND COMMUTING

Regional Gains and Losses by Migration

This subject refers to the extent to which one area of the country gains more persons of a given educational level, of given occupational skills, and of a given earning (tax-paying) capacity than it loses through migration. Again, this study would require some new tabulations.

Effectiveness of Migration

This is the extent to which areas gain only or lose only, in the movement of population. One of the many hypotheses is that movement involves a financial cost for which movers usually expect to be compensated by increased income or intangible benefits. Differences in the effectiveness of migration could be studied by type of area, with special attention to migration from depressed areas, movement of Negroes from the South, and movement into areas with a heavy demand for labor.

The Family as a Unit of Migration

To date most analyses of migration have been made in terms of persons as units, yet about 90 per cent of the moves are made by entire families. Some interesting contrasts might be uncovered between the conclusions to be reached about the migration of persons, and the migration of families.

Events Related to Population Movement

Besides economic pressures, many other events or factors affect the length of residence at present location: marriage; adjusting to the needs of a growing family; moving into a newly built house or apartment; entering or leaving college, the Armed Forces, and institutions. One of the special reports of the 1960 Census on families contains some data on this subject.

Commuting Patterns in Urban and Rural Areas

This would make use of a new type of data collected in the 1960 Census which can be used to show, among many other things, the extent to which commuters are rural residents who work in nearby cities. Thus women living in the country but working in a metropolitan center can be classified by type of skill utilized, type of industry in which employed, and the presence of various types of household durables in the home.

Means of Going to Work

Another new type of data in the 1960 Census relating to "journey to work" provides information on demographic and economic fac-

tors contributing to the choice of means of transportation to work. This aspect of socio-economic life could be related to type of residence, the prevailing type of industrial activity in the area, etc.

SOCIAL STRATIFICATION

Social and Economic Status in Successive Generations

This is a topic intended to replicate as nearly as possible the work done by Nam in his thesis (based on the 1950 Census), in which comparisons are made of the amount of upward social mobility between first- and second-generation persons of specified ethnic origins.

Persistence and Status Consistency

This would be a test of the hypothesis that those who persist to completion in one aspect of behavior likewise tend to persist to completion in other types of behavior. Thus the more or less compulsive person who persists to complete his college education might be expected to persist in his married life. This idea of consistency in various respects deserves to be studied more intensively.

Occupational Changes in a Generation

This would be a reworking of the data mentioned above, which were collected in the Census Bureau's Current Population Survey for Duncan and Blau. The findings would provide a wide range of analysis, including correlations between occupational changes from one generation to the next and the level of fertility, the stability of marriage, the number of siblings, and the place where the person grew up (on a farm, in a town, in a suburb, or in a city of specified size). The basic data include information on occupation of the father-in-law as well as the father.

Educational Changes in a Generation

This topic is similar to the preceding one but features data collected in the same survey on changes in education from one generation to the next.

Sources of Family Income

A special report of the 1960 Census featured information on this subject which shows, among other things, differences among various strata in the population with respect to the proportion of family income contributed by the head, by the wife, and by other family members. It also features differences in income levels and social characteristics of families classified according to the chief source of income of the members (wages and salary, self-employment, and other sources).

Dependence on Agriculture and Other Industries

This is a study of family members and unrelated individuals according to the chief industry on which their livelihood depends. Data are available on characteristics of persons dependent on specified industries, based on the industry of the chief income recipient in the family and on the industry of the family head.

CURRENT SOCIAL PROBLEMS

Poverty

What is poverty? How much variation is there in the education, housing, and other characteristics of persons defined as "poor"? Contrasts between those classified as poor can be made on the basis of definitions relating to level of personal income, level of family income, level of per capita income, and level of income per ammain (equivalent adult—where, for instance, a child may be regarded as the equivalent of one-half adult).

The Changing Status of Negroes

This study might well include not only changes among Negroes over time in socio-economic level but also in family status and housing accommodations. A 1960 Census monograph by Daniel Price deals with such problems. Walter Farley is preparing a Ph.D. dissertation at the University of Chicago, which is designed to provide adjusted statistics on the age composition of Negroes since 1920, making allowance for biases in the basic data. Similar studies could be made, of course, for other racial groups.

Succession

By means of census tract data from successive decennial censuses, the student should be able to identify areas with changing concentrations of racial or ethnic composition. Comparisons can be made between the demographic characteristics of census tract residents before and after the transition to a new type of ethnic distribution.

The Aging Population

Nearly all reports of the 1960 Census permit the identification of persons in several elderly age groups, commonly regarded as relating to the aging population. These reports cover a wide gamut of statistics from housing characteristics and living arrangements to employment characteristics and income, including some novel statistics on income of persons by age in relation to their family income.

School Drop-outs

A series of tables in the special report of the 1960 Census on school enrollment present personal and family characteristics of persons of high school and college age who have not graduated from high school and who are not enrolled in school. Such tables could easily be supplemented by many additional tabulations to throw light on the roots of this social problem.

Parochial School Students

About 90 per cent of the persons attending private schools below the college level are enrolled in parochial schools—nearly all of which are operated by the Roman Catholic Church. Several tables in the 1960 Census reports show enrollment in private and public schools, in relation to personal and family characteristics. These tables show the selective nature of attendance in private schools, the relative size of families containing private school enrollees, etc.

Equal Pay for Equal Work

Numerous tables in the 1960 Census reports show income by sex for those employed in the various types of occupations, by color, age, and area. The hypothesis that Negro women and Negro men receive essentially equal pay for equal work, whereas white women and white men do not, can be investigated through these tables.

METHODOLOGICAL PROBLEMS

Re-examination of Population Concepts

As indicated above, certain results of the 1960 Census provide parallel information on persons classified by characteristics of the head of the family and by characteristics of the chief income recipient in the family. An analysis of these and related data might feature the extent to which these two persons are the same in specified social groups. Other concepts which might be examined are the family, the new "socio-economic status scores" and their companion "status consistency types," and various area concepts, including the possible development of a new concept for "suburbs."

Neighborhood Characteristics

The Bureau of the Census has under consideration the development of a special set of tapes parallel to the 1-in-1,000 sample of the 1960 Census which would associate each person with selected characteristics of the neighborhood (tract or pseudo-tract) in which he lived. This would permit the cross-classification of persons by their family and housing characteristics, cross-classified further by their neighborhood characteristics, and still further by size of place and region. This source of data would lend itself ideally to a sophisticated analysis of variance with respect to the whole range of population characteristics.

Homogeneity of Census Tracts and Pseudo-Tracts

A student could develop tract profiles which reveal demographic correlates of changes in the homogeneity of tracts and pseudo-tracts over time with respect to the dominant ethnic group or economic level.

Reliability of Census Data

Appendix tables in several of the 1960 Census reports include data on the number of persons for whom missing information was computed by "allocation" methods. The effect of these allocations on the distributions needs careful study. Moreover, the nature of differences between census data based on the complete count and on samples of various sizes needs to be analyzed.

Who Uses What Census Data

The Bureau of the Census has often considered, but has never successfully undertaken, an effective inventory of the users of census reports on population. One purpose of such an inventory would be to ascertain the most serious gaps which sociologists find in the published data and to determine which published statistics are seldom, if ever, used.

A Sociologist's Guide to Census Data

This, like some of the other topics in this section, might better be undertaken by the staff of the Bureau of the Census. Lacking such a guide, however, the student who undertook this project might find his efforts well rewarded. Moreover, if he did a good job, he undoubtedly would find many grateful users of his guide.

Needed Population Research

A valuable contribution could be made by updating the classical monograph by Whelpton on this subject. Likewise, selected parts of the more recent compendium by Hauser and Duncan, entitled "The Study of Population," might profitably be revised.

Development of a Population Model

This is probably too ambitious a project for a graduate student to undertake in its entirety. Some parts of this subject, however, might well be developed in the universities and utilized by the Bureau of the Census in developing its plans for the construction of such a model. This vehicle would presumably have its greatest utility in providing, through the use of computers, a wider range of population projections, involving more subtle and varied assumptions than those currently employed. Such a model might also be designed to be used for auxiliary purposes, such as the projection of the number of households and families, of the number of first marriages and remarriages, and of various other types of measures, for instance, in the field of education, employment, occupation, and income.

REFERENCE

¹ For further perspective on the 1960 Census reports, see Glick, Paul C., The 1960 Census as a Source for Social Research, *American Sociological Review*, 27, 581-585, August, 1962.

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