## A RETIREMENT HISTORY STUDY

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## Social Security Administration

The Social Security Administration will commence, in the spring of 1969, a ten year study of the American retirement process. Data will be collected repeatedly in biennial surveys from a sample of non-institutionalized respondents, between 58 and 63 years of age, who will number about 13,000 to start with. The result will be a unique body of data on actual changes in the living situations of people as they approach retirement, retire, and adjust to retirement.

The extended, diachronic character of the study results from the realization that a onetime, cross-sectional survey could not produce knowledge about processes. Comparisons among various age groups at the same point in time do not inform about the paths by which separate groups arrived at their current states. This is a point which deserves some emphasis, since the major part of our available knowledge of aging-in particular, of retirement and its effects -has resulted from just such one-time studies.

An important problem in deducing notions about human development from cross-sectional observations arises from failure to study and allow for cohort differences. Individuals, and groups of individuals, have characteristic auto correlated experiences which result from the happenstance of birth at particular points in economic and social history. Leonard Cain has illustrated this by a demographic comparison of the generation of Americans born between 1890 and 1899 with that of 1900 to 1909. The older cohort was more poorly educated, had higher fertility rates, worked longer hours for lower pay, probably suffered more unemployment, and was more likely to be foreign-born. The events of history, the social and economic upheavals through which the country is still passing, have meant different things to these two groups. The younger had no war to fight. It filled instead, more frequently, the well paid defense jobs of the second World War and has enjoyed the country's longest period of virtually uninterrupted prosperity.  $\underline{1}$  / Casual comparison of the two groups would undoubtedly produce faulty conclusions about the effects of growing older.

The flaws of cross-sectional studies could be especially troublesome in program evaluation, usually one purpose of Social Security Administration research. Suppose, for example, an enriched social insurance system made it possible for everyone to retire with no decrement in level of living, and to maintain that level the rest of his life. Suppose, at the same time an improvement over some years in everyone's level of living. People well past retirement would be living as they had at the time of retirement. But cross-sectional studies, comparing different age groups at the same point of time, would imply, deceptively, a retirement connected decline in living conditions. 2/

The expense and difficulty of conducting research through time, on the scale necessary for reliable results, 3/ account understandably for the scarcity of examples. Probably the best reported processual study of retirement is that conducted by Cornell researchers in 1952-1957. 4/ Its sample, originally over 4,000, permitted intricate analyses, but was not representative. No women were included. Only industrial and business occupations were sampled. The life-span study of the National Institutes of Health will inevitably cover the retirement process, but its sample is small (600) and limited (white collar and professional men in a limited geographic area). 5/ The Duke University study of aging 6/ started with a volunteer local sample of less than 300. Veterans' Administration is conducting a normative aging study of 1500 men which will include some sociological variables and may throw some light on the retirement process. 7/

Obviously, most of these studies are still ongoing. So the majority of available propositions concerning retirement derive from one-time, cross-sectional observations. The well-known disengagement theory, which postulates a universal tendency for society and the aging individual to withdraw from each other, was based upon a onetime comparison of different successive age groups. <u>8</u>/ Most published reports concerning sources and ingredients of "successful" retirement rely, similarly, upon either static or retrospective data. <u>9</u>/ Sc, too, the more interesting reports of age-associated behavioral change have come from cross-sectional work. 10/

The Social Security Administration's Retirement History Study will add a time dimension to the exploration of a number of existing propositions. In addition new information specific to Social Security program needs will be developed. Concentrated attention, early in the study, will be given to influences on retirement timing and to determinants of retirement patterns. Retirement plans and expectations will be assayed by items on the existence of such plans, their estimated timing, and attitudes toward retirement. In particular, the relation between preretirement income, expected post-retirement income, and retirement timing will be examined. The modifying influences of health, anticipated post-retirement needs and resources, employer policies, and significant work history will also be studied. As sample members retire, timedimensioned data will accrue in several areas where only impressionistic or cross-sectional information is now available. We will learn the actual extent to which mobility is affected by aging and retirement. Changes in consumption practices will be observed, as will changes in activity patterns. The moot question of retirement's effect on health can be studied in context. Later stages of the study, when it is expected that most of the sample will be retired, will include analysis of living patterns.

The accessibility of near relatives has been shown to be an important factor in the lives of older people. <u>11</u>/ Data will be collected on this area, particularly in its social and economic character. The extent of older people's work life and the factors in various combinations of work and retirement will be analyzed with special interest. Morale and its sources will be studied throughout the ten years of the project.

Primary influences on the design of the survey are implied in its title. As a "retirement" study, it must have a sample of people for whom retirement is meaningful--we shall be studying three 2 year cohorts (58-59, 60-61, and 62-63 year olds) of non-institutionalized men and non-married women. Married women, as individuals, will not be a respondent category. Some salient data on wives of men in the sample will be recorded. When sample males die, surviving wives will continue in the study. As a "history" study, this project will have a large enough original sample so that a validly analyzable number will remain at the end of 10 years. We are starting with about 13,000.

The sample design for the Retirement History Study evolved to satisfy the specifications for analytic needs and after appropriate consideration of the nature of possible sampling resources. At the survey planning stage the analytic specifications are quite general in terms of the wide variety of summaries and comparisons  $\underline{12}$ / that are likely to be of interest. The analytic comparisons likely are for 0, 1 variates and different magnitude variates. One objective is the ability to distinguish between a 10 percent change in one cohort and a 15 percent change in another cohort in a given two-year period, insofar as possible. Another is similar ability for the same cohort or different cohorts between pairs of periods. Others considered were to be able to distinguish between relative changes in means of magnitude variates for the same or different cohorts over time. The primary cohorts of interest are not only the two-year groups of all men and non-married women in the target population, but also the two-year groups of married men. The two-year spacing of observations in the surveys and of the cohorts may add a dimension of information additivity, if the parallel observations for different pairs of years of successive age cohorts turn out to be unaffected by the actual passage of events and time.

An initial review of likely sample designs suggested that a multi-stage probability sample would be optimal. Use of an existing statistical survey organization to collect the data seemed desirable and necessary. The exact nature of the multi-stage design was formulated after considering resource alternatives, attendant problems and costs, as well as the substantive needs.

SSA has lists of people in the target population. But these are incomplete. The degree of completeness is a function of the extent to which people in the target population have social security account numbers. This is true for virtually all men but there are material numbers of women who do not have their own numbers. Some consideration was given to the possibility of use of the SSA list of social security number holders as a basic frame for selection of the sample (supplemented by samples of those not in the frame). However, there are no current addresses available to the SSA except for those who are already social security beneficiaries on their own or someone else's wage record. Thus, for the vast bulk of individuals in the target age group that could be sampled from available lists, address information would have had to be compiled. As a minimum, for purposes of use for a given firststage sample selection, county of residence would be sufficient for each member of the target population--but within the selected sample of primary sampling units full address information would need to be available for a sub-sample. In net, use of this resource would have required full address information for all on the list. A number of experiments were carried out. They suggested that while a good deal of address information could be determined, which would make a substantial portion of the SSA list usable, a complex system of area sampling and weighting in addition would be required to make the SSA list usable, even in part. This multiple frame sampling approach might also have entailed some possible bias because of the need to identify within the area sample those persons who would and those who would not be available finally for sampling from the list frames. The joint effect of cost and potential problems suggested the desirability of considering area sampling as the sole resource. In either event, it was recognized that an area sample was needed, likely, to serve the substantive needs. The size and scope and design of the area sample would be the same under either circumstance.

The possible advantage of the multiple frame sample was seen to be the potential for overcoming, in part, the coverage bias existing for the target population in use of an area sample. The coverage bias that would be reduced would be for those elements in the list frame that are not included in an area sample field process. There is some evidence from a 1960 Census evaluation program matching study <u>13</u>/ that this is not a minor bias for persons approximating the target age population. Nevertheless, the decision was made to use solely an area sample when both the advantages and the disadvantages were examined.

Area sampling is utilized in many national and local area probability surveys. The Current Population Survey (CPS) of the Census Bureau makes use of area sampling.  $\underline{14}$ / As part of the ongoing survey process, the CPS records, among other characteristics, the age, sex, and marital status of all persons who are resident at the sample addresses that are included in the monthly surveys. Preliminary discussions with the Bureau of the Census suggested that this resource, for households no longer included in the ongoing CPS surveys, was one which potentially would be available if the Bureau of the Census were to collect the information for the Retirement History Study.

The final decision on the essence of the sample design for the Retirement History Study is the use of the sample persons in the specified entire target population of the Census Bureau's 449 PSU CPS design. The use of this resource influences the level of the first-stage sample for the Retirement History Study. It was determined that about two and one-half "no longer used (expired)" samples would be required. Operational considerations over the life of the survey suggest the appropriateness of use of the 449 PSU design. The survey mechanism, to be unbiased in the first and subsequent rounds, needs to include not only persons within the sample PSUs but also requires we follow the sample persons to their current addresses at the time of the specific round. The 449 PSU sample design encompasses about 72 percent of the total U.S. population of all ages (according to the 1960 Census). The likelihood, therefore, is that as sample persons in this survey move about, most would move either within their sample PSU or to some location still within the PSU structure of the sample design. Since this target population might be expected to have over 2 percent migrants in an average two-year period, likely less than 1/2 percent of each earlier wave would need to be interviewed outside of the sample PSUs.

The use of the 449 PSU design is desirable also for relatively rapid survey collection without undue training and travel costs. The average workload per interviewer appears to be about what can be accomplished with the amount of available interview time during each planned survey period.

The sample of individuals in the target population will be selected from among the sample in 21 rotation groups of the CPS. The last month in the CPS survey for persons in these 21 rotation groups will be as much as 23 months and as close as 2 months from their first interview in the Retirement History Study. In devising the dimensions of the needed sampling, account had to be taken of several similar factors as will exist in the continued use of the sample. Some of the sample persons will have died since their last month in the CPS sample and some will have moved from the addresses at which they were interviewed in the CPS. Both of these factors over the 10-year interview period of the survey have been taken into account in the determination of the initial sample sizes. Attrition in sample size has

been assumed to arise because of death and the possible failure in finding current addresses for some of the movers. The sampling rate assumes that the 1959-61 life table survivorship factors would continue for each age-sex group. It was assumed that these would apply independently of marital status and that the likely joint survivorship of husbands and wives would be the product of the probability of the survivorship of each. Further, it was assumed (hopefully conservatively) that not more than about 5 percent of the surviving sample persons included in a given survey would be noninterviewed in each of the succeeding surveys. This might occur for a variety of reasons. These would be not only cases arising from failure to trace a sample person to a current address but also cases of refusal, not at home on continued calls, or the like. As noted previously, an additional factor affecting the design is the decision to interview husbands and wives as a single unit when both are in the target population. Further affecting the design is the need to follow either if the spouse dies. Thus, the design is affected by the joint age distributions of married couples and the assumptions of survivorship. For purposes of final decision, the joint age distribution of married couples was determined from a CPS subsample. Within each of the two-year age-sex groups, the final sampling plan takes into account each of the differential effects of these factors by age, sex, and marital status.

The substantive results of the study likely will have effects on long-range program planning. In addition, we anticipate that a number of interesting methodological results will flow from this program to add to the stock of knowledge about surveys over time.

## FOOTNOTES

<u>1</u>/ Cain, Leonard D., Jr. "Age Status and Generational Phenomena: The New Old People in Contemporary America," <u>The Gerontologist</u>, 7 (1967), 83-92.

2/ K. Warner Schaie and Charles R. Strother have reported a study which documents the different results of cross-sectional and diachronic studies of the same respondents: "The Effect of Time and Cohort Differences on the Interpretation of Age Changes in Cognitive Behavior," paper presented at annual meetings of the American Psychological Association, September 1964.

3/ Reports of a 10-year survey in Great Britain (J.W.B. Douglas and J.M. Blomfield, "The Reliability of Longitudinal Surveys," <u>The Milbank</u> <u>Memorial Fund Quarterly</u>, 34 (1956): 227-251,) emphasize the danger of progressive sample distortion when the sample is not Nationally representative. 4/ Volume 14, No. 2, 1958 of <u>The Journal</u> of <u>Social Issues</u> is devoted to this study.

5/ Stone, J.L., and A.H. Norris, "Activities and Attitudes of Participants in the Baltimore Longitudinal Study," <u>Journal of Gerontology</u>, 21 (1966) 575-580.

<u>6</u>/ Described in various places. See, for example, George Maddox and Carl Eisdorfer, "Some Correlates of Activity and Morale Among the Elderly," <u>Social Forces</u>, 40 (1966) 254-260.

<u>7</u>/ Bell, Benjamin, Charles L. Rose, and Albert Damon, "The Veterans Administration Longitudinal Study of Healthy Aging," <u>The</u> <u>Gerontologist</u>, 6 (1966) 179-184.

<u>8</u>/ Cumming, Elaine, and W.E. Henry, Growing Old, New York: Basic Books, 1961.

9/ See, for example, Charles E. King and William H. Howell, "Role Characteristics of Flexible and Inflexible Retired Persons," <u>Sociology and Social Research</u>, 49 (1965) 153-165, and Aaron Lipman, "Role Conceptions of Couples in Retirement," in Tibbitts and Donahue, eds., <u>Aging Around the World</u>, New York: Columbia University Press, 1962, pp. 475-485.

<u>10</u>/ E.g., Lois R. Dean, "Aging and the Decline of Affect," <u>Journal of Gerontology</u>, 17 (1962) 440-446; S. De Grazia, "The Uses of Time," in R.W. Kleemeier, ed., <u>Aging and Leisure</u> <u>A Research Perspective into the Meaningful Use</u> <u>of Time</u>, New York: Oxford University Press, 1961, pp. 113-153; and Anthony Lenzer, "Mobility Patterns Among the Aged, 1955-1960," <u>The</u> Gerontologist, 5 (1965) 12-15. <u>11</u>/ Leopold Rosenmayr, Eva Kockeis, and Albert Kaufmann, "Intergenerational Relations and Living Arrangements in the Course of the Life Cycle, unpublished paper read at the 1963 meetings of the International Congress of Gerontology, Copenhagen.

Peter Townsend, "The Effects of Family Structure on the Likelihood of Admission to an Institution in Old Age: The Application of a General Theory," in Ethel Shanas and Gordon Streib (eds.), <u>Social Structure and the</u> <u>Family: Generational Relations</u>, New York: Prentice-Hall, 1965, pp. 163-187.

Elaine M. Brady and Burton, Gummer, "Aged Applicants and Non-Applicants to a Voluntary Home: An Exploratory Comparison," The <u>Gerontologist</u>, 7 (1967) 234-243.

<u>12</u>/ Sedransk, J., "Designing Some Multi-Factor Analytical Studies," <u>Journal of the</u> <u>American Statistical Association</u>, 60 (1965) 1121-1139.

13/ Marks, Eli S. and Waksberg, Joseph, "Evaluation of Coverage in the 1960 Census of Population through Case-by-Case Checking," <u>American Statistical Association, Proceedings of</u> the Social Statistics Section, 1966, p. 67.

14/ U.S. Bureau of the Census, "The Current Population Survey--A Report on Methodology," Technical Paper No. 7, Washington, D.C. 1963.

15/ When, originally, it had been considered that the target population would include wives, the use of double sampling within the survey of sample persons received active consideration.