

A LONGITUDINAL STUDY OF LABOR FORCE BEHAVIOR

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Most human interaction depends on some form of mutual understanding in order to operate effectively. Such understanding requires, at best, a history of relevant interaction involving the same people and similar physical conditions. The effective relationships between husband and wife, parents and children, friends, employer and employee all depend upon knowledge of the prior interactions. Similarly manpower policy, to be most effective, must be based on an understanding of the origins and development of worker characteristics which affect labor force behavior. In 1966, to help develop this understanding, the Department of Labor in conjunction with the Bureau of the Census and Ohio State University launched what we believe is the first large scale longitudinal study of labor force behavior.

Prior to the early 1960's, most large scale studies of labor force behavior relied on surveys in which information was sought on the employment status of individuals at one point in time. Changes in the employment situation of the entire work force were studied to determine the relative well being of men and women workers. Such studies had limited use in studying the cumulative effects of a variety of economic, social and psychological factors on given individuals or on groups of individuals who could be identified as having unique problems or characteristics. The Negro, the person with a criminal record, the undereducated, the partially disabled, all have more or less permanent conditions which limit and block paths to a good livelihood.

With this new longitudinal approach we hope to find out much more about these conditions and their effects on employability. Hopefully, also, policies and programs to improve employability can be built on the implications of such a study.

Dr. Herbert Parnes of Ohio State University is responsible for the development of the study and the analysis of the results. The Bureau of the Census has selected the sample and is conducting the necessary interviews.

Two approaches to the measurement of longitudinal data are being used. Changes are measured retrospectively for many variables by asking questions in a single interview about past events and circumstances. Education of parents, first job, best job, date of marriage are examples of such questions. Other changes are recorded by noting differences in annual re-interviews with the same people. Not only can we record authentic changes in this way but because the interviews are only a year apart, and actual records of change are being compared, we can also ask reasons why such changes took place.

Some of the changes measured in this way relate to changing jobs, entering or leaving the labor force, and leaving or re-entering a program of education.

Because of the length of the interviews, because the interviews were to be held with a specific person (not with any household member reporting for that person), because of the mass of tabulations that will have to be completed and finally because the same individuals had to be located each year for a period of 5 years, the costs of the survey were estimated to be very high. In order to reach a compromise between available resources and the need to study the most significant problems, study populations were chosen to represent four separate age-sex groups--men 45 to 59 years of age, women 30-44 years of age, men 14-24 years and a group of women of this same age. Each group consisted of approximately 5,000 respondents, selected in a manner to overrepresent nonwhite population by a 3 to 1 ratio.

At this point it seems necessary to briefly describe a longitudinal study and indicate why the Department of Labor became interested in supporting this particular study. Dr. Parnes who is responsible for the development of the study, has defined a longitudinal study as follows: "A longitudinal population study has two essential characteristics. First, it involves measurement or description of one or more characteristics of the same group of individuals at two or more points in time. Second, it involves analysis of relationships among the characteristics of these individuals at different times or of changes in one or more of their characteristics over time."

As noted earlier, information of a longitudinal nature can be collected by asking retrospective questions in one interview or by a series of periodic interviews which take place at different times. It is also worth noting that collection of data covering a long span of years does not necessarily enable a longitudinal study. It is only if comparisons are made between the characteristics of respondents at different points in time that the study becomes longitudinal.

The present longitudinal study of labor force activity was designed primarily to include 5 or 6 annual interviews covering a period of about 5 years. There are three major advantages of a series of interviews as compared for example with a longitudinal study based solely on retrospective questions. First, certain variables are impossible to measure retrospectively. Attitudes toward a job or toward retirement are usually measured indirectly through a specific series of questions. In such circumstances, the

respondent cannot be asked to recall what his answers might have been one year earlier. Furthermore, if measurement of change in attitudes is important, the interviews are best made separately so that changes will not be conditioned by the respondents inability or unwillingness to recall a contradictory attitude.

A second advantage of a series of interviews is that the respondent's ability to recall certain events is often diluted by time. Short spells of unemployment, minor sources of income, and different short term jobs are more likely to be forgotten or partially forgotten when the interview covers a long period than when the interview covers only 1 year. The third major advantage of a series of interviews is that comparisons can be made of the ability to recall facts about employment by comparing actual annual interview results with special questions covering the same five year period.

A rather minor advantage of a series of interviews should also be noted. Some respondents will die during the survey period and to the extent that they have significantly different characteristics from the living respondents, it is necessary to interview them each year in order to collect some facts before they die. Only those who survived the entire 5 years could be interviewed in a one time survey.

Although the survey focusses on four age-sex groups in the population--men 14 to 24, and 45 to 59, women 14 to 24 and 30 to 44, the major variables are similar for all these groups. These variables have been described by Dr. Parnes as static and dynamic. Obviously for static variables, only a one-time survey is needed and the information was sought only in the initial interview. Because only the dynamic variables will be measured each year, the length of the second and subsequent interviews will be shorter. Some static variables are color, date of birth, place of birth and first job. Dynamic variables include current employment status, current marital status, current state of health, and attitudes toward work, retirement as well as general outlook.

Because the major purpose in funding the research is to help develop new manpower policies and evaluate the effects of existing programs, the following listing of major variables to be explained emphasizes employment characteristics.

1. Labor force participation will be measured both for a current week of reference and for weeks worked during the year.
2. Unemployment will be measured as of a current week of reference as well as the number of weeks lost annually because of unemployment.

3. Mobility will be reflected in the survey in at least 3 jobs (1) first job after leaving school, (2) longest job and (3) current job. Information will be sought about each of these jobs on occupational and industrial classification, class of worker, length of service, and reason for leaving. In addition to measures of actual job change, attempts will be made to measure willingness to change jobs based on hypothetical job offers.

A great many variables will be examined to seek reasons for changes in the labor force, unemployment and mobility characteristics but obviously they cannot be comprehensive. These variables are broadly grouped into the following related categories:

1. Formative influences including such items as age, nationality, father's occupation, father's education, residence and family composition at age 15.
2. Skills including present and several previous occupations, formal education and vocational training.
3. Health including a measure of relative health as judged by the respondent and a description of healthy problems that limit the kind or amount of work they can do.
4. Labor market information including how the respondents looked for work, and how well they advance in their work careers.
5. Marital and family characteristics including number and ages of dependents, the employment, education and health status of other family members.
6. Financial characteristics including current wage, annual income of respondent, unearned income, total family income, and other assets.
7. Attitudes including whether they would work if their earnings were not needed to live on, what they think is the most important thing about a job, satisfaction with current job, and willingness to change jobs.
8. Environmental variables including size of local labor force, local unemployment level, and industrial diversification of the local labor market.

Other variables will be explored for special problem groups such as propensity to retire for men 45 to 59, academic interests and knowledge of the world of work for youths, and marital and family composition and early work

experience of women 30 to 44 years of age.

Some Specific Objectives of the Study

Limitations of resources required that certain groups of employment problems be given priority in the study. A selection was made on the basis of the age-sex composition of the work force. As noted earlier, the four groups were men 14 to 24, men 45 to 59, women 14 to 24 and 30 to 44 years of age. Each of these groups has a particular set of problems which affect their employment characteristics.

Men 45-59 Years of Age

This study population was selected because of the incidence of sustained unemployment and involuntary retirement with advancing age among men in this age group. In addition these men are rapidly approaching the institutional age of retirement and information is needed on the relation between attitudes toward retirement and economic, social and psychological circumstances. A third reason for selecting this age group is that the incidence of early retirement is increasing more rapidly for nonwhite men than for white men. ^{1/} Needless to say, the Department of Labor is very hopeful that the research will uncover a series of policy implications that could affect manpower programs.

Some significant policy questions are listed here:

1. How should training and retraining programs for older men be modified to take into account their education, job experience and physical and other limitations?
2. How effectively can job redesign programs cope with problems of involuntary early retirement?
3. What are the best channels to reach and guide the older job seekers when they lose a job?
4. Is it better to balance local manpower supply and demand situations by encouraging the retraining of men for jobs in their own community when their jobs run out or should men be trained in new skills in order to assist them to migrate and quickly adjust to a new job in other areas?
5. What kinds of institutional barriers can be readily overcome by manpower programs and how can they best be overcome?
6. What kinds of programs can be developed to help prepare older men for retirement and how can these programs be best implemented?

7. What kinds of post retirement employment programs can be developed suited to the economic and social needs of older men and also adapted to their past skills and present capabilities?

Young men and women 14-24 years old

Both of these groups--a separate sample of men and women was selected--were included because of great concern with the high unemployment rates of young people and their obvious inability to make a smooth transition from school to work. Increasing emphasis on the need for more education for workers and job seekers has brought with it recognition that school dropouts are becoming more disadvantaged in the job market. In our city slums, many young men do not even enter the labor force until long after they leave school. Job changing is at a phenomenally high rate among young men and women indicating possibly that they may have had inadequate preparation for the world of work, that their aspirations were unrealistic, that job counseling and placement were woefully inadequate or that employers policies toward young workers may need to be revamped for today's world. Some implications for policies and programs that may be developed from this study are phrased in terms of the following questions:

1. What programs can be developed to reduce undesirable aspects of job mobility of young workers?
2. How can the job finding machinery be improved to help young men and women both unemployed and employed find jobs suited to their needs and abilities?
3. What modifications are needed in educational, vocational and training programs to help young men fit more smoothly into the work force?
4. What programs are needed to help those already on a job to make the most of their opportunities or to properly assess their long range opportunities on a job? How can those with limited opportunities be helped to find better work without their having to quit their present job?
5. How can urban slum youths and others with serious employment problems be encouraged to seek and helped to find good jobs? What are the best means of guiding and counseling these persons?

Women 30 to 44 years old

Women in this age group represent three different types of employment problems. The first is that significant numbers are the sole support of their families; for many others it is only by supplementing their husband's earnings that they are able to help their

family rise above poverty income levels.

The second type of employment problem is one that relates to severe occupational shortages in such occupations as teachers, nurses and a few professional occupations. Many women with critically needed skills are unable to enter the work force because of a lack of knowledge of specific job opportunities, because of a need for updating of somewhat rusty work skills, or because of inadequate child care facilities available to them.

The third and most general type of problem probably affects more women than the other two more serious problems. How do women with reduced housekeeping and child care work loads find a useful and satisfying outlet for their energies and a challenge to their intelligence. Obviously it will be difficult to develop policies and programs directed to problems as broad as the above. Many of the possible program implications have already been noted in the discussions of younger men and women. Here we are looking for means of accomplishing some of the following specific objectives:

1. What kinds of adjustments in working conditions can be developed for implementation by either public or private programs that will enable women to do paid work without sacrificing family and home obligations?
2. What kinds of training programs can be most useful to women with prior education and work experience to facilitate their reentry into the work force?
3. What kinds of training and placement services can be provided to unskilled women workers to help them to earn a wage which is significantly greater than the offsetting costs of working.

Some unresolved methodological matters

Initially the planning for this study involved a series of 5 or 6 interviews covering a period of 5 years for each interviewed group. Current budget limitations have brought about some modifications in these plans. Present plans are to use a brief mailed schedule in at least one survey for the two older groups in the sample. Other changes may be made but it is expected that only minor modifications will be made until after a great deal of information is obtained and analyzed from the early surveys.

There are a number of technical and procedural problems which will soon have to be resolved regarding the future of the survey. In addition, there are a number of opportunities to add new dimensions to the study which must be considered. Some of the unresolved problems are listed below:

1. What aspects of the study should be continued beyond the initial five year period and what changes in focus will be needed after five years?
2. Should some panels or perhaps all panels be continued beyond the original 5 year period?
3. Should new groups of persons be selected for longitudinal analysis?
4. Should the longitudinal studies be restricted to special problem groups to the exclusion of generally representative population groups?
5. Should the panels be supplemented each year and if so how should the supplementation be made?

One major, but as yet unrealized opportunity lies in the use of school records for the respondents as well as information on the school curricula for the purpose of evaluating intrinsic ability as well as the quality of education received.

Answers to these issues will undoubtedly depend on the usefulness of the results of the initial surveys, how well the surveys provide better answers to manpower problems and, of course future budgets. In addition, new employment related problems may emerge which will be most effectively studied from a longitudinal point of view.

I have described briefly the plans and objectives for this study but as yet have made no mention of progress or results. Older men have been surveyed three times and women 30 to 44 years old twice with one survey of each of these groups by mail. Young men have been surveyed twice and young women once. Analysis of the results of the first surveys of both groups of men will be available this year and subsequent reports on this study should be appearing regularly in the future as more work is completed.

We in the Department of Labor are particularly anxious to see the results of the longitudinal aspects of the study which should begin to become available some time during the next year.

1/ In order to obtain more valid information on the employment characteristics of nonwhite persons who represent only about one-tenth of the sample, a 3 to 1 oversample of nonwhites was built into the survey.