In this report of the year's activities of the Institute for Social Research and its components—the Survey Research Center, the Research Center for Group Dynamics, and the Center for Research on the Utilization of Scientific Knowledge—two developments merit particular attention. Both represent changes in the structure of the Institute and both have extensive and valuable implications for the social sciences generally.

New center

In recognition of a need for understanding the nature of the gap between the discovery of new knowledge and the utilization of it, the Center for Research on the Utilization of Scientific Knowledge was launched July 1, 1964, under the direction of Dr. Floyd C. Mann. Its activities during the year have been concentrated in two program areas, both concerned with studying the process of utilization and the kinds of training that will best prepare practitioners to receive and use new knowledge. The Socialization and Education Program, directed by Dr. Ronald Lippitt, is focused on the teaching of social science at all levels in the schools—elementary through college—and on the dissemination and diffusion of research findings and materials to educational and community groups and agencies dealing with children and youth. The Complex Organizations Program, directed by Dr. Mann, is aimed at linking basic research to organizations' ongoing action and change programs so that they sustain each other to their joint benefit. Manned by a staff of
some 40 research and supporting personnel, the Center's first year has been an active and promising one with 29 active projects. A description of these activities appears later in this report.

Data processing facilities

During the year the Institute initiated a new phase in its development of computer applications in the social and behavioral sciences. Mr. Ralph Bisco was appointed Head of Data Processing and has undertaken the task of restoring, to the extent possible, the immediate interaction between the Institute's research staff and the data processing facilities. The objective is to increase the flexibility of computer usage and to reduce the excessive time delays which discourage non-routine use of computer capabilities. Steps are being taken toward: (1) early acquisition of a modern small computer suitable for easy access by staff members on a shared-time basis, (2) preparation of advanced programs designed to permit the use of the computer by researchers with limited technical background, and (3) training of staff in the direct use of this improved facility. While cost economies will result from these changes, the main goal is to encourage more flexible and imaginative uses of new data processing methods in the solution of analytic problems.

The new process developed by Mr. John Sonquist and Dr. James Morgan and described in a later section of this report (page 11) is illustrative of the more innovative and creative work in the uses of data processing which this reorganization is intended to facilitate.

Teaching, Training, and Research Collaboration

Although the research programs represent the prime concern of staff members, a significant proportion of their time is devoted to sharing
with others the Institute's research and methodologies. This is accomplished through formal teaching, on-the-job training, counseling, consultation, and research collaboration.

Teaching activities

Thirty members of the Institute staff taught courses and seminars under the instructional programs of the University's various departments, schools and colleges; five staff members also participated in the teaching program of the Extension Service. In addition, 23 Institute staff members served on a total of 94 doctoral committees and chaired 24 of these. Seventy-one graduate students received on-the-job training, counseling and research experience, as well as income, through their employment on Institute projects. Forty-four of these were doctoral candidates working on project-associated theses, of whom three received their Ph.D. degrees during the year. The Institute also employed 38 undergraduates in clerical positions.

Summer Institute in Research Techniques

The 17th Annual Summer Institute in Survey Research Techniques was held from June 22 to August 15, 1964. Taught by senior staff members of the Survey Research Center, seven methodological courses were offered in an eight-week sequence designed to meet the needs of a heterogeneous student body of graduate students, faculty members, and people in business, industry and government agencies from all over the world. One hundred thirteen students were enrolled. Sixty-two percent of those attending elected the courses for graduate credit; the remaining 38 percent, including nine visiting scholars, were established professional persons who wished to inform themselves of new research techniques. The student
population included 33 scholars from 20 foreign countries who will apply their training in their native countries.

Other training programs during the year included the sampling program for statisticians of underdeveloped countries, mentioned on page 25, and the training program in political behavioral research, mentioned on page 16. Plans were also completed for the internship program in interdisciplinary research described on page 21, which will be inaugurated in 1965-66.

Research collaboration

During the past year the Institute has continued its active collaboration on research projects with faculty members and units of the University, including the Law School, the Medical School, the Institute of Public Administration, the Institute of Labor and Industrial Relations, the Center for Research on Conflict Resolution, the Center for the Study of Higher Education, the Mental Health Research Institute, the School of Public Health, the School of Social Work, the Bureau of Fisheries, the University Library, and the Office of the Vice President for Academic Affairs. As in previous years, the facilities and services of the Institute, as well as the counsel of its staff, were made available to the Detroit Area Study, and Dr. Angus Campbell served as chairman of its Executive Committee.

Similar collaborative relations were enjoyed with organizations elsewhere, including among others Eastern Michigan University, Brookings Institution, Harvard University, Carnegie Corporation of New York, Tuskegee Institute, Office of Manpower Training of the Department of Labor, and the 44 universities participating in the Inter-university Consortium for Political Research.
International training and research activities

The training of foreign scholars and collaboration in cross-national, comparative research have become increasingly important activities of the Institute.

In addition to the foreign participants in the previously mentioned training programs, five foreign scholars-in-residence received training during the year through involvement in ongoing research. An additional 200 foreign visitors spent a day or more at the Institute, meeting with members of the staff and learning about the research being done here.

Institute staff members have also been engaged in training abroad during the year. Dr. Donald C. Pelz has been at the Indian Institute of Public Administration since the fall of 1964 on an 18-month assignment to train Indian scholars and to help create a survey research facility. Dr. Charles A. Lininger and Dr. Donald P. Warwick are completing the first of two years in Lima, Peru, where they are assisting the Peruvian Planning Institute in the development of a survey research facility. Both of these projects are being carried out under contractual arrangements between the Institute and Agency for International Development.

The ultimate objective of the Institute's interest in its international activities is not only training, but also the development of specific research projects in foreign situations which are sufficiently similar to Institute projects to make productive international comparisons possible. Several of the Institute's members served abroad for extended periods during the past year as consultants to research programs in other countries. These included:

Charles Cannell, Yugoslavia
Robert Fox, India
John R.P. French, Jr., Norway
Leslie Kish, Central Europe and England
Donald E. Stokes, England
Arnold Tannenbaum, England
Similar foreign assignments will be undertaken during the coming year by:

Angus Campbell, France
George Katona, Germany
Stanley E. Seashore, England
Robert Zajonc, Holland

Close association with foreign colleagues has led to increasing success in developing studies which attack the same problem, use the same methods and common definitions, and come to comparable results:

# The Economic Behavior Program is planning a program of comparative research on the role of the consumer sector in the United States, Western Europe and the developing nations.

# The Organizational Behavior Program is presently concerned with studies in England, Norway, and Yugoslavia, seeking to compare the characteristics of organizational life in these countries to the findings of our research in this country.

# The Political Behavior Program is working with political scientists at Oxford University in a study of the British electorate. In addition, an international conference of students of voting and elections is being planned and will be held in Ann Arbor in 1966.

# The Mental Health in Industry Program is developing a study which will extend to Scandinavia and Western Germany its inquiries into achievement motivation and the development of occupational self-identity.

# The Survey Research Center is participating as the American representative in a ten-nation study (including the Soviet Union and other East European countries) concerned with the sociological implications of the use of time.

As a result of its international reputation and its long-standing personal connections with many foreign scholars, the Institute is in a strong position to extend its association with these developments and
to participate in a meaningful program of comparative studies. The Institute does not now have funds which can be allocated for this use. It is hoped, however, that financial support can be obtained which will permit the enlargement of cross-national research in those areas in which comparative studies are particularly productive.

**Staff honors and professional activities**

Several of the senior staff of the Institute received individual honors and engaged in professional activities that reflect favorably on the Institute and the University.

- Angus Campbell - member of Committee on SST-Sonic Boom of National Academy of Sciences
- Dorwin Cartwright - elected chairman of the board of the Foundation for Research on Human Behavior
- John R. P. French, Jr., and Stanislav Kasl - received honorable mention in the James McKeen Cattell Award competition at the 1964 annual meeting of the American Psychological Association for their research proposal on "Self-esteem, occupational status and illness behavior"
- George Katona - president-elect of the Division of Consumer Psychology of the American Psychological Association
- Leslie Kish - selected for membership in the Sociological Research Association, an honorary assembly within the American Sociological Association
- Warren Miller - elected to the Council of the American Political Science Association
- Stanley E. Seashore - elected to the Council of Representatives of the American Psychological Association
Research Programs

One hundred forty-nine research projects were active during 1964-65. Of these, 52 were initiated during the year and 27 were completed. Following are brief descriptions of the year's activities in the various program areas of the Institute's research centers.

Survey Research Center

Economic Behavior Program. Several extensive new projects have occupied much of the time of the staff during the fiscal year 1964-65.

Studies on the impact on consumer spending and saving of the 1964 cut in federal income taxes have been initiated by the President's Council of Economic Advisers and are carried out in collaboration with The Brookings Institution. The project is financed by Brookings, the Ford Foundation, and the National Science Foundation and is directed by Drs. George Katona and Eva Mueller. A panel of consumers have been interviewed four times in order to obtain information on the timing of the consumers' response and on differences in response on the part of different income groups. The unique event of the tax cut is used to study a basic problem, namely, consumers' response to an increase in income. Analysis of data and preparation of publications will take place in 1965-66.
A new project supported by the Carnegie Corporation and directed by Dr. James Morgan is designed to study these several types of behavior important both to the individual's economic position and to the country's rate of economic growth: productive use of time, planning ahead and extended time horizon, and receptivity to change in consumption, work, and technology. Since the study is intended to provide benchmark data for possible studies (suitably altered to fit other economies and cultures) in other countries, an international design conference was held in 1964 in Ann Arbor. This project is an international extension of the study of determinants of family income, published in *Income and Welfare in the United States* (McGraw-Hill, 1962).

The large build-up in the early 1960's of consumer savings account balances led to a new study of motivations to save and of the role of the savings account in family financial management. The purpose of the study is to determine under what conditions savings balances are subjectively available for spending and what constraints limit their use. The project has been financed by the Federal Reserve Board and will be continued by the Board in 1965-66. It is under the direction of Dr. Eva Mueller. The first findings of this study were reported at the December 1964 meetings of the American Economic Association.

Among the ongoing projects, the 20th annual Survey of Consumer Finances is of particular importance. Data on the distribution of incomes, assets, debts, and major consumer transactions have been obtained from a fairly large sample early in 1965. At quarterly intervals surveys on changes in consumer attitudes and expectations
have been carried out. Press releases and publications on these two surveys continued to receive attention and consideration in the assessment of economic trends.

The analysis of the sample of high-income families interviewed in spring 1964 is far advanced and a book manuscript should be ready by the end of the year 1965. It will probably be published by The Brookings Institution, one of the sponsors together with the National Science Foundation. A paper summarizing some main results was presented by Drs. J. N. Morgan, Robin Barlow, and H. E. Brazer at the meetings of the American Economic Association in Chicago last December. Findings show that tax disincentives to work are less important than more positive motives, and that the impact of tax considerations on investment decisions is relatively weak and uneven. This is significant at a time when tax reforms are being considered by state and federal governments.

Under the direction of Dr. John B. Lansing, work continued during the year on three projects related to the movement of people. A study of geographic mobility of labor has been in the analysis stage with a comprehensive report planned for next year. People's choice of place of residence within metropolitan areas and their local transportation are the subject of two reports completed during the year; further data collection is planned. An additional round of data collection took place in the continuing series of studies of long distance travel. A monograph was released during the year in the field of studies of travel, *Mode Choice in Intercity Travel: A Multivariate Statistical Analysis*, by Drs. John B. Lansing and Dwight M. Blood. This volume presents both a reorganization of
earlier thinking on the subject and results of an extensive statistical investigation.

A three-year project on the impact of private pensions and favorable retirement prospects on saving was completed during the year. It appears that, on the average, coverage by private pensions stimulates rather than retards individual saving. A publication by George Katona is forthcoming.

The study of the economic impact of Michigan automobile accidents on individuals, a cooperative project with Professor Alfred Conard of the Law School, was completed with the publication by the University of Michigan Press of *Automobile Accident Costs and Payments*. The book contains theoretical discussions, estimates of national aggregates, chapters on compensation systems in several countries of Europe, in addition to its central core which is based on interviews with auto accident victims, as well as lawyers and defendants in court cases.

One of the most complex studies ever conducted by the Survey Research Center, the survey involved splicing samples from police records with those from court records, mail questionnaires with personal interviews for serious cases, checking of victims' estimates with hospital records, and supplementary information from both plaintiffs' and defendants' lawyers.

Work was completed on a new IBM process for the analysis of survey data. The large number of degrees of freedom, and the rich matrix of interrelated explanatory factors--most of them categorical classifications rather than scales--required a process to search for patterns, rather than to test some narrowly conceived deductive hypothesis. With increased flexibility of computers we have come full circle and can now
get a computer to do tirelessly and systematically what a good researcher did twenty years ago if he had the time and energy. The program is being used extensively at the Institute and by a number of doctoral candidates. It has the unique position of being one of the few computer programs documented sufficiently so that people should be able to use it without personal coaching. A monograph entitled The Detection of Interaction Effects by John Sonquist and Dr. James Morgan provides a description of the program, examples of its output, and details of the necessary procedures.

A reinterview panel imbedded in the 1960, 1961 and 1962 Surveys of Consumer Finances led to complex analyses which have been published in a monograph edited by Drs. Richard Kosobud and James Morgan and entitled Consumer Behavior Over Two and Three Years. Perhaps the most novel finding of the study was the extent of income fluctuations of individual families over a relatively short period.

Two reports were released by the Institute which present results of an approach to the dynamics of urban development through study of consumers' choices of place of residence and means of transportation within cities: Residential Location and Urban Mobility, by Drs. John B. Lansing and Eva Mueller with Nancy Barth, and Residential Location and Urban Mobility: A Multivariate Analysis, by Dr. Lansing and Nancy Barth.

In November 1964 the McGraw-Hill Book Company in New York published a book entitled The Mass Consumption Society by Dr. George Katona. This is a theoretical discussion based on findings obtained over several years.
Organizational Behavior Program. Two new lines of research activity were initiated during the year. Five books representing major contributions of the Program were completed or brought near completion. Four continuing lines of research were further advanced.

One of the new activities pertains to the creation of a usable archive for comparative organizational studies. Plans were formed and activated for converting the data from 50 past organization studies into a standardized and machine-retrievable form in order to permit effective use of this unique data resource for comparative analyses. Conversations were begun with interested representatives from Yale and the University of Chicago toward the development of data conventions that may permit sharing of comparative data.

A second new activity is the formation of a research alliance between the Organizational Behavior Program and the Center for the Study of Higher Education. Dr. Jerald Bachman has provided consultation to the Center on research matters and has collaborated in a study of relationships between faculties and administrations within a number of liberal arts colleges. It is expected that there will be further studies joining the interests of the Center and of the Organizational Behavior Program.

A year of productive writing by key staff members has occurred. Dr. Arnold Tannenbaum has in press a book manuscript titled *The Social Psychology of the Work Organization*. Drs. Daniel Katz and Robert L. Kahn have in press a theoretical work growing from past Program studies titled *Social Psychology of Organizations*. Dr. Rensis Likert completed during the year the major portion of a new volume, yet untitled, that will be a substantial extension of ideas first set forth in his 1961
book, *New Patterns of Management*. Drs. Donald C. Pelz and Frank Andrews have in hand a complete manuscript of a volume summarizing their five-year investigation of the attitudes and social conditions facilitating creativity on the part of scientists in academic, governmental and industrial laboratories. Dr. Basil Georgopoulos is near the completion of a major book reporting his nationwide study of 50 community general hospitals; this book is concerned with the social structure of these hospitals in relation to objective indicators of the quality of medical care provided to the patients.

In addition to these innovations and writing activities, the following lines of research were advanced during the year:

# Dr. Martin Patchen has continued his investigation of the effects of participation upon employee involvement and work performance in the Tennessee Valley Authority. Two theoretical publications have been completed from this work.

# Dr. David Bowers has advanced his work on the association between different patterns of leadership and patterns of organizational performance; papers representing this work appeared in print and were read at an international scientific congress.

# Dr. Philip Marcus completed the field work phase of a study of the institutionalization of personal relations in formal organizations; this work in a Michigan firm will be carried through analysis and publication during the coming year.

# Dr. Stanley E. Seashore continued his empirical study of the relationships among the factors comprising organizational performance; a paper representing this work has been accepted by the *Michigan Business Review*.
Political Behavior Program. The research activity of the Political Behavior Program during the past year was concentrated on five major studies.

# Analysis was completed on a study of stability and change in political values, attitudes and behaviors, under the direction of Dr. Philip Converse and based on the 1956-58-60 national panel study. A report of the findings will be prepared during the coming year.

# Work was continued by Drs. Warren Miller and Donald Stokes on the study of representation in the American Congress and publication of the findings had been scheduled for the next year.

# Under the direction of Dr. Kent Jennings, data for a study of political socialization were collected from a national sample of high school students, their parents, and their social studies teachers. Analysis and writing of the study report will be done during the next two years.

# The Program's series of national election studies was continued in 1964 under the direction of Dr. Aage Clausen, with data collected nationally in pre-election interviews and post-election reinterviews. Program personnel are preparing a series of papers and manuscripts based on the findings; in addition, the data will be distributed to participants in the Inter-university Consortium for Political Research.

# A study of the British national elections carried out under the direction of Dr. Donald Stokes in collaboration with Nuffield College, Oxford University, England, was completed. The design of this study was extended beyond the original data collection,
which was completed in the spring of 1963, to include data pertaining to Members of Parliament, their constituencies, and elements of the British political party organizational structures.

Supplementary organizational activity within the Program consisted of further development of the Inter-university Consortium for Political Research, membership in which increased from 37 to 44 participating universities.

With the support of the National Science Foundation, the major collection of historical election statistics neared completion under the direction of Dr. Howard Allen.

Efforts of the Consortium staff, in combination with colleagues from other archival installations, resulted in the provisional creation of a National Council of Social Science Data Archives.

The role of the Consortium as a supplier of data for basic research and graduate instruction continued to expand; the equivalent of more than 1.5 million punch cards were distributed to Consortium participants, in addition to tabular and computational output of more than 40,000 tables of data.

Advanced research training continued to expand with support from the National Science Foundation. The third summer training program, to be held in 1965, will be attended by some 135 advanced graduate students and faculty members. Plans have also been made for a further extension of the program to provide specialized training for social scientists interested in historical research.

Communication and Influence Program. Under Dr. Stephen Withey's direction work continued on an experimental basis on people's reactions to continued threat. Much of the thinking arising out
of this work and a series of field studies over the last decade has been reported in a chapter in *The Nature of Human Conflict*, published by Prentice-Hall, and another in *The Threat of Impending Disaster*, published by Massachusetts Institute of Technology Press, and in a dissertation by James Swinehart titled, *Sequential Responses to Sustained Threat*.

In addition, the Communication and Influence Program has continued its review of models of organization that bear on the contents and contexts for communication. This work has broad ramifications since "organization" is the distinctive feature of so many phenomena that range across the whole field of science.

For the last five months of the year, Dr. Withey served as staff director to a national Exploratory Committee on Assessing the Progress of Education, established by the Carnegie Corporation of New York. Looking beyond simple tests of academic subjects, this group considered continuing assessment of the educational achievements of the United States population. As a novel and far-reaching proposal for American education, the groundwork was a very sensitive concern to educators. After several conferences with national groups and school personnel from over thirty states, a decision was made to go ahead with such a national program on a developmental basis. In addition to the published minutes of the conferences, a review report titled *Goals in Education* was prepared.

**Study of Young Boys.** With a focus of helping institutions that work with boys in small groups, a national study of 8-, 9- and 10-year-old boys was completed. This study of boys' changing activities, interests and organizational involvements included interviews with mothers and
fathers on parental attitudes, aspirations and activities with sons of this age group. The study resulted in two books, *A National Study of Boys: Eight to Ten Years Old* and *Cub Scouts and Cub Scouting*, co-authored by Dr. Stephen Withey and Robert L. Smith and published by the Survey Research Center.

This project completes a series of national studies of boys and girls ranging in ages from approximately 8 to 17 years that have been carried out over the last ten years. In addition to the individual reports of these studies, a book on the middle-teen years, authored by Drs. Elizabeth Douvan and John Adelson, is being published by Wiley in 1965.

**The Intercenter Program in Mental Health in Industry.** This Program has continued during the year its research on the transmission of rheumatoid arthritis in families and on the work load of University professors. These two projects are now drawing to a close and some of the results are already apparent. In the study of arthritis, it appears that marriages in which one partner has rheumatoid arthritis have some unusual characteristics and that these characteristics depend on whether it is the husband or the wife that is affected. When the rheumatoid is a woman, there appears to be an excess of anger and overt aggression in the family with a presumably consequent excess of peptic ulcers and nervous breakdowns among the husbands. The study of University professors has revealed an extraordinarily high correlation between the level of uric acid in the blood serum and the achievement oriented behavior of the individuals. The correlation approximates 0.6 which must be close to the test-retest correlation of the behavioral measure.
The main direction of the Program has turned increasingly to issues surrounding employment and unemployment. The projects on the culturally deprived school dropout and on manpower trainee attitudes which were begun last year are progressing well. The manpower trainee study is discussed in the Student Development Program section of this report. In addition, a project to study the health effects of employment termination has been initiated. Here the emphasis will be on physiological variables, a few specific health variables and several mental health variables. A grant has been received to initiate studies aimed at understanding the development of occupational self-identity in adolescent boys by studying the socialization processes that take place in three different environments, namely, school, work, and unemployment. This project will be balanced by an additional project, now in the planning stage, aimed at an evaluation of health and mental health effects of voluntary, as compared with compulsory, retirement.

A continuing thread running through the program is the interest in illness behavior that began several years ago with a project on status and health. Since that time Drs. Stanislav Kasl and Sidney Cobb have been pursuing the subject. This has resulted in publication of a paper by Drs. Kasl and Cobb in the Journal of Chronic Diseases entitled "Some Psychological Factors Associated with Illness Behavior and Selected Illnesses." In addition, a further substantive paper and a review of the literature are in press. These papers represent an effort to bring meaning to our work beyond the original substance of the projects from which the data were drawn.
Dr. Robert L. Kahn and Dr. Cobb have collaborated on a project at the Mental Health Research Institute on phenylketonuria. Dr. Cobb has consulted with Dr. Melvin L. Selzer of the Department of Psychiatry concerning the relation of alcoholism to highway accidents. Dr. Cobb's research has been materially aided by the staff at the Rackham Arthritis Unit of the University Medical Center.

During the past year several projects have been brought to completion with the final publication of research findings. The results of studies of role conflict and ambiguity have been published as a book entitled Organizational Stress: Studies in Role Conflict and Ambiguity by R. L. Kahn, D. M. Wolfe, R. P. Quinn, and J. D. Snoek. Some findings from the same studies are summarized in another recent book entitled Power and Conflict edited by R. L. Kahn and Elise Boulding. Preliminary work on problems of prejudice and discrimination, which are seen as related to mental health and to the expression of resentment and hostility, is presented in Discrimination Without Prejudice by R. L. Kahn, G. Gurin, and R. P. Quinn.

The findings from another large study that was a part of the initial principal research efforts in the industrial mental health program are being published in two additional volumes. The study, directed by Dr. Floyd Mann, of the effects of shift work on the employee and his family has been brought to a close with a volume entitled Shift Work: Its Social, Psychological, and Physical Consequences by P. E. Mott, F. C. Mann, Q. McLoughlin, and D. Warwick. Additional writings about these findings and their implications are appearing in chapters on "Hours of Work and Moonlighting" by Mott and "Shift Work and the Shorter Work Week" by Mann in a volume Hours of...
To provide post-doctoral training in research concerning the influence of social factors on health, plans were developed for an internship program in interdisciplinary research to be initiated in 1965-66. Emphasis will be on an intensive cross-discipline reading program and on actual research participation in such areas as etiology of disease, illness behavior, organization of health facilities, and professional education and training. It is intended that participants will spend from one to three years in the program.

**Student Development Program.** This Program encompasses the study of the interaction of personality and social structure with the focus on the individual's interpersonal experiences within the educational socio-cultural system and the import of these experiences for the individual's reaction to the system's norms and pressures.

At present, Dr. Gerald Gurin is involved in several studies within this general approach. One, in cooperation with Dr. Theodore Newcomb, is an intensive longitudinal study of student development at The University of Michigan, focusing on the determinants and the effects of subcultural and peer group experiences over the four-year college career. A second study, in cooperation with Dr. John R. P. French, Jr., of the Institute's Research Center for Group Dynamics staff, is being done in connection with the vocational re-education program of the Office of Manpower Training of the Department of Labor. As in the study of The University of Michigan undergraduates, the reactions of the manpower trainees are viewed within a personal identity framework;
this retraining experience is seen as a problem of handling and integrating a potentially drastic change in the occupational sub-identity of the worker.

A third study, being done with the aid of Dr. Daniel Katz and Dr. Patricia Gurin, is investigating student subcultures and identity changes in a number of Negro colleges. In addition to the general identity emphasis, this study is also concentrating on some of the more traditional motivational concepts, examining the impact of the changing civil rights situation on the motivation of Negro students.

Some of these motivational issues are also being explored in a study that Dr. Edgar G. Epps is initiating beginning in July of this year. This study will focus on some of the motivational factors affecting performance and achievement of Negro high school students in the North and South. This study will combine survey and experimental methods, relating motivational and background characteristics of the students (derived from interviews with students and their parents) to these students' reactions to different experimental stress situations.

Under a grant from the Cooperative Research Program of the U.S. Office of Education, Drs. Angus Campbell and William Eckerman conducted a study of the attitudes held by the general public toward the social and personal values of higher education and toward the expenditure of funds to support an expanding program of college training. The study and its findings are reported by Drs. Campbell and Eckerman in an Institute monograph entitled Public Concepts of the Values and Costs of Higher Education.
Child Development Program. Under the direction of Dr. Joseph Veroff, a research project is underway to study the effect of desegregation procedures on the achievement motivation of youngsters from kindergarten through 5th grade. Other studies also in process deal with: (1) the effect of achievement motivation on generalization of success and failure experiences and on the receptivity to different types of performance feedback; (2) sex differences in the effect of different types of feedback on goal-setting; (3) sex differences on the control of hostility under different pressures to be socially sensitive; (4) developmental differences in risk-taking behaviors.

Dr. Veroff is also co-author of two books which are in preparation: Motivation with Dr. J. David Birch and Motives & Roles with Dr. Sheila Feld. Several articles based on the Program's research are also being prepared.

Field Section. In fulfilling its data collection responsibilities to the Institute's research programs, the Field Section and its staff of interviewers, located throughout the United States, conducted approximately 17,000 personal interviews during the year. This figure exceeds by some 3,000 the next largest year in the history of the Institute. Nearly all of these interviews were part of national samples which include 74 sampling areas in 37 states.

As a result of Institute needs, the Field Section was not able to service other organizations this year to the extent it has previously. It did, however, conduct a pilot study of the academic profession for Harvard University and also provided data collection service for several units of the University, including the Detroit Area Study and the Mental Health Research Institute. In addition,
at the request of the University administration, a mail inquiry was conducted to obtain faculty members' opinions about a faculty club.

As in previous years, staff members provided guidance, counsel, and technical assistance both to University faculty and students and to organizations and individuals outside the University. Dr. Charles Cannell acted as consultant to the U. S. Public Health Service on field methods of research conducted in the United States, England, and Yugoslavia. Dr. William Eckerman participated in the National Research Seminar in Vocational Education which was held at Michigan State University.

The Field Section also continued its program of methodological research on data collection. The overall objective of this research is to obtain data which will provide insights into sources of bias in data collection interviews, thus forming a basis for improvement in the methodology. Three projects were undertaken in this area. Two were financed by the U. S. Public Health Service, which publishes the results of this program of research in a series of research monographs, usually through professional journals. Another project was conducted through the Detroit Area Study with partial financial support provided by the Bureau of Census and a Rackham Faculty Research Grant and dealt with the accuracy with which people can place events in time and the factors which help them to do this.

Sampling Section. In addition to providing sampling services for the Survey Research Center during the year, the Sampling Section designed and executed household samples for the Detroit Area Study,
the Institute for Community and Education Research, Eastern Michigan University, and The Combined Jewish Philanthropies of Greater Boston.

A research project on analytical statistics for complex samples, supported by the National Science Foundation, was completed, and another grant was received from that organization for a study of designs for analytical samples, comparison and change studies. A grant from the National Institutes of Health for a study of probability sampling methods was extended for a period of six months.

Dr. Leslie Kish, on off-campus duty assignment during the year, spent several months at the London School of Economics and also visited and lectured at universities and other research and scientific organizations throughout Central Europe. Several articles by Dr. Kish were published during the year and his book, Survey Sampling, is scheduled for publication in June of this year.

With support from the Edgar Stern Family Fund, the Training Program for Statisticians from Underdeveloped Countries continues to develop under Dr. Kish's direction. Countries represented in the training program this year are Argentina and India. Arrangements for next year include five trainees from Argentina, Venezuela, Ecuador, Mexico, and Korea.

Research Center for Group Dynamics

Mathematics in Social Science Program. Research on mathematical problems in group dynamics has focused on the task of providing a mathematical basis for treating structural properties of social groups and of interpersonal relations. A major event of the year was the publication by John Wiley and Sons of a book, Structural
Models: An Introduction to the Theory of Directed Graphs, under the authorship of Frank Harary, Robert Z. Norman, and Dorwin Cartwright.

Program on Group Goals. The seventh and eighth experiments in a series of studies on group aspiration setting were completed and submitted for publication. These investigations conclude the first phase of the work in this program and have been summarized in a final report for the U. S. Office of Education, which provided funds for the experiments. A field study of the conditions determining the goals of United Fund Campaigns and the changes in these goals is underway. A survey of group memberships and their meanings for members is nearing completion. The data for this survey were obtained in a large chemical firm in Michigan. The second phase of experimental work on group goal setting, financed by the U. S. Air Force, will begin this summer.

Program on Status:Systems. Experiments were conducted during the year under the direction of Dr. Eugene Burnstein on several kinds of phenomena associated with the learning, perception, and reorganization of group structure. These experiments have made it possible to identify some systematic biases which influence how individuals perceive and behave in a social structure. One series of experiments demonstrated that, almost without exception, groups take remedial action at once when a member occupies a position of power which is incommensurate with his ability. The rapidity with which this action is taken, however, is inversely related to the size of the incongruence in the member's status. Other experiments conducted on these kinds of phenomena demonstrated that individuals will learn
balanced, positive, and reciprocated relationships more quickly than those which are unbalanced, negative, and unreciprocated and that, given the opportunity, they will change the latter into the former.

**Cognition, Perception and Group Performance Program.** The effectiveness of oral statements, gestures and written messages in an organization largely depends upon the meanings persons give to the terms they use when interacting. The awareness of this fact has led to a series of experiments on the conditions determining how and why persons learn to give particular sense to specific cues. Experiments conducted during the year under the direction of Dr. Robert Zajonc have shown that the intensity of purpose a person has in his work leads to considerable loss in his ability to perceive accurately the terms others use in his presence.

Other laboratory experiments conducted by Dr. Zajonc during the year were concerned with the questions: How accurately can persons recognize the nature of the social structure of their group and how does their ability to understand that structure affect the performance of the group? In addition, Dr. Zajonc has continued his investigations on group performance when members are given various forms of feedback on their productivity.

**Children, Youth, and Family Life Program.** Data on undetected delinquent behavior are being organized and readied for publication. *Undetected Delinquency* by Dr. Martin Gold will describe the method through which youngsters can report their delinquent acts, and assesses the truth about such reports of behavior. This book will also illustrate the usefulness of the method through an analysis.
relating delinquency to social status, sex, and race. Another monograph is being prepared which will describe the composition of delinquent groups, analyze cases of delinquent "loners," relate delinquency to variables in the home and school, and link delinquency to youngsters' occupational aspirations and expectations.

Terminal data were collected during the year for the Institute's study of the delinquency-prevention efforts. The repeated survey of adolescent boys and their mothers and of selected community leaders (in Chicago) is designed to show what changes if any have occurred in delinquency behavior rates, school attendance and employment, community organization and in adults' sense of responsibility toward youth. Papers have also been written on such phenomena as the dynamics of influence in group work among slum boys, on the sudden self-defeating behavior of boys who seem almost to have broken out of the pattern of slum life, and on the characteristics of boys who are served in delinquency prevention programs. The project staff are currently analyzing and organizing the data for the final report from this five-year study.

Pilot work has begun on a study of the effects of failure to achieve in school on the unconscious self-esteem of adolescent boys. This project aims to develop measures of unconscious self-esteem and to use these measures in studies of delinquency and depression among school failures.

Center for Research on the Utilization of Scientific Knowledge

Socialization and Education Program. A series of six audio-visual communication and training "packages" are being completed to disseminate the findings of six years of action-research relating to
juvenile delinquency in Flint. Seminars on these materials have been held with the U. S. Office of Education, the National Institute of Mental Health, and the President's Committee on Delinquency and Youth. These materials will be used to study the effectiveness of various dissemination procedures. A series of five monographs on the basic findings is being completed.

A monograph is also being completed on the differences of goals and orientations among program policy planners in education, religion, social control, leisure time, politics, employment, and family life. This material will provide the basic documentary data to be used in Research Utilization Conferences with community leaders.

In collaboration with the National Council of the Camp Fire Girls, Program staff are exploring ways of helping professionals and volunteers discover and use knowledge of the culture of poverty and the development of lower class girls to develop a creative program for them.

A statewide field study on the innovation and diffusion of creative teaching practices is being conducted in collaboration with the Michigan Department of Classroom Teachers. School systems and regional teams are experimenting with techniques of locating and documenting creative teaching practices, and testing procedures of spreading these practices within and between school systems.

From a pilot tryout with an innovative teacher has grown a full-scale demonstration of a procedure for training older children to act as educational aides in lower grades. The present demonstration, in a lower-class school, is training 6th graders to serve as academic helpers in the 1st, 2nd, and 3rd grades. The documentation of this project will be used as the basis for a larger demonstration in the
Detroit schools next fall. In order to develop the most effective demonstration of cross-age socialization it is necessary to understand more fully the unexplained phenomenon of identification with and modelling of olders by younger. This is the focus of a basic diagnostic study. Prior research has shown that the distribution of emotional acceptance and influence status among peers in the classroom is an important determinant of the level of learning and achievement; ways of utilizing this knowledge are being tested with a population of teachers to bring about positive changes in the interpersonal structure.

Collaborative efforts have been undertaken with the Social Science Education Consortium of the Committee on Institutional Cooperation to organize the key concepts and methods of psychology, social psychology, and micro-sociology in such a way that experiments can be conducted with integrated social science education in the junior and senior high school.

An analysis is being completed of the way in which the child's role at home and his relations to his parents affects his adjustment at school. These materials will be converted into communication units for use in the training of parents.

A final report is being prepared of an intensive study of the social and motivational factors related to pre-marital pregnancy and school drop-out of teenage girls. The next stage of the program will be a study of ways of getting results of the study utilized by girls, parents, school personnel, ministers, and other community-helping professionals.
In all of these projects there is a triple focus on the discovery or retrieval of knowledge, on experimenting with procedures for getting this knowledge used to improve social practice, and on development of basic theory about the powers of resistance to and acceptance of scientific knowledge.

**Complex Organizations Program.** There are a number of new studies getting underway in this program. The aim is to collaborate with managements in business, industry, and government in studies of organizational change and self-improvement. Most of the following studies are designed to continue for several years.

The Board of Directors of a newly organized subsidiary of a major oil company has declared its intention of thinking through, developing, and implementing a management philosophy consistent with the findings from organizational research. Staff members of the Center are working collaboratively with company personnel to:

1. develop through seminars a familiarity with pertinent findings;
2. assert through interviews, surveys, and meeting observation the identification of organizational and intra-system problems that could be attacked using the knowledge and methods of behavioral sciences;
3. develop further the problem-solving processes and skills within the organization; and
4. assist in the design and implementation of change activities, to monitor, study, and evaluate the procedures by which utilization processes are employed.

During the last few years one of the Center's principal staff members, Robert Norman, developed and experimented with a data utilization process called "coach-counseling" for improving the interpersonal and intergroup functioning of an industrial plant.
Three surveys were taken of attitudes and perceptions of supervisory and nonsupervisory employees. The information from these was used as the basis for problem-solving meetings by first-line supervisory work groups within the plant. An account of the processes involved and the changes achieved is being prepared, including longitudinal and comparative data analyses to investigate the measured effectiveness of these activities.

The Office of Administration in the headquarters of NASA is working collaboratively with the Center to explore ways of increasing the use of new knowledge from the behavioral sciences relevant to organizational effectiveness. The objectives of the study are to:

(1) provide NASA management with information about important behavioral science research findings relevant to complex organizations; (2) identify, describe, and assess the important problems relating to the practice of supervision and management throughout the Office of Administration; (3) design and implement alternative utilization procedures based on known and new knowledge to improve the functioning of the Office of Administration; (4) evaluate the comparative effectiveness of the alternative utilization methods and techniques used; (5) identify unique supervision and management problems and needs which may be worthy of future research undertakings.

A related study deals with the factors associated with the effectiveness of the units within the Department of Labor which report to the Assistant Secretary for Administration and the processes whereby the effectiveness of these units may be increased by the utilization of the findings from such research.
A third study in the Federal Government is concerned with professional scientists' responses to data on effectiveness of scientific work groups. In a series of meetings key supervisory and managerial personnel are being presented with data on the correlates of unit effectiveness in their agency. The implications of these findings are being explored jointly in open discussions to develop better understanding of the impact of such information on the members of the organization in which the study was done.

The objective of a citizen communication-participation program for Metropolitan Detroit is to design an experimental program of communication between citizen and leaders of the Detroit area. Current work includes gathering knowledge about community organization and processes, the theory and technology of public information diffusion, and the problems of eliciting citizen motivation and involvement. Similar communication programs in other sites are also being examined to identify problems and issues. Potential models will be derived from this experience and used along with other information to design a tentative program for Detroit.

An Advisory Committee to the new Center has been established to help link the research-application work in the new unit to the professional schools and the social science departments of the University. The members of this group are as follows:

Edward S. Bordin, Department of Psychology
Dorwin Cartwright, Institute for Social Research, Group Dynamics
Lee E. Danielson, School of Business Administration
Stanford Ericksen, Center for Research on Learning and Teaching
Ned Flandres, School of Education
Robert S. Friedman, School of Public Administration
William A. Gamson, Department of Sociology
Dr. John Gosling, School of Medicine
This committee met once during the fall and twice during the spring months to review developments in the new Center, to look carefully at some of the new work being done on the development of audio-visual communication and training packages, and to give suggestions and advice on developing collaborative relationships with the schools and departments they represent.

Much of the time of the Center's senior staff members this first year has been devoted to the development of organizational and administrative structure, the recruitment and training of staff, and the launching of specific projects to ensure the funding of the new Center. The key need of the new Center continues to be financial support for long-range program planning and development and recruitment of senior staff.

**Organization and Administration of the Institute**

**New building**

Construction of the Institute's new building near the central campus has proceeded without interruption, and occupancy is scheduled for early fall. Since February of the present year, the major part of the staff and facilities have been housed in a former factory at Fourth Street and Williams. The move to this location arose from the decision to raze the Old West Hospital building, which had been the principal home of the Institute since 1950. The temporary relocation of the Institute proved to be excessively costly and seriously disruptive to ongoing research.
work; nevertheless, the staff looks forward to their next move into a modern building designed to house the entire staff and its associated research facilities.

**Director's office**

To assist in coordinating the increasingly complex administrative work of the Institute, the position of Assistant Director was created. Dr. Stanley E. Seashore, formerly program director in the Survey Research Center, was appointed to this post. In addition, the responsibilities of the existing position of Assistant to the Director were re-defined to emphasize the dissemination of information about the Institute and its research and the coordination of relationships with the various organizations and people who are interested in ISR research activities: Mr. Govert W. van den Bosch was appointed to this position.

**Budget**

As in all but one of its nineteen years, the Institute again experienced an increase in volume of research work and, correspondingly, an increase in budget. Revenue for the fiscal year came to approximately $3,000,000, of which all but four percent was spent in fulfillment of research contracts and grants and the provision of services to various teaching and research agencies. Over 90 percent of the Institute's revenue came from external sources, and only three percent (excluding University-wide facilities and services) came from the General Funds budget for direct support of the Institute's work.

While the Institute is financially viable, it is increasingly evident that its present financial arrangements will not permit full realization of the Institute's potential. The modest overhead income
and general support funds allow very little freedom for undertaking activities beyond those specified by the terms of external contracts and grants. This restriction has increasingly undesirable consequences for the work of the Institute:

Senior staff members must see to it that each of their projects is immediately succeeded by a new one which will carry their salary. They do not have adequate opportunity, consequently, to integrate their work with that of others, to rework and extend first hypotheses, or to plan fully for the next steps in their research programs.

Although the Institute has all the necessary technologies for social research, it can maintain them only on a minimum basis. The Institute has no library; its field, sampling, and content analysis sections have no funds for methodological innovations or experimentation; its group research laboratory lacks the basic electronic equipments; its computing and tabulating facilities are obsolete and must be replaced by equipment which is increasingly expensive.

Communication and collaboration with social scientists and with the interested public must be limited. Use of project funds for time spent with visitors cannot be justified; research cannot be given wide distribution since research grants and contracts typically provide only for the major report; preparation of special analyses for special audiences or the publication of articles prepared for special journals must be bypassed as a new study replaces the old one.

These problems are becoming increasingly serious as time passes, and during the coming year the attention and efforts of the Institute's administrators will be focused on attempting to find solutions for them.
Institute Executive Committee, 1964-65

The following outstanding faculty members of the University served on the Executive Committee during the past year, and the Institute gratefully acknowledges the guidance, assistance, and counsel which they have provided:

Harvey E. Brazer, Professor of Economics
Ronald Freedman, Professor of Sociology
Ferrel Heady, Director, Institute of Public Administration
William N. Hubbard, Jr., Dean, Medical School
Rensis Likert, Director, Institute for Social Research
Paul W. McCracken, Professor of Business Conditions
Wilbert J. McKeachie, Chairman, Psychology Department
Michael Radock, Vice-President for University Relations
Allan F. Smith, Dean, Law School
Stephen H. Spurr, Dean, Horace H. Rackham School of Graduate Studies
Myron E. Wegman, Dean, School of Public Health

Publications

In keeping with the Institute's primary objective of contributing to knowledge and understanding of human social behavior, staff members during the year completed 12 books and monographs, 18 chapters in books edited by others, and numerous technical or theoretical articles in scientific journals, in addition to a large number of technical reports and papers prepared for research sponsors and for limited distribution to scientific colleagues. Five dissertations based on Institute data were submitted and accepted in partial fulfillment of requirements for the Ph.D. degree.

A selected list of publications by staff members of the Institute is appended to this report.
A Representative Listing of Publications of the
Institute for Social Research
1964-65

Bachman, J. G. Motivation in a task situation as a function of ability


Campbell, A., & Eckerman, W. C. *Public concepts of the values and costs

Cannell, C. F. The reliability of survey data. In J. Nell, Margery Shaw,
and W. Schull (Eds.), *Genetics and the epidemiology of chronic disease.*

Cannell, C. F., & Fowler, F. J., Jr. A note on interviewer effect in self-

Chesler, M., & Schmuck, R. Student reactions to the Cuban crisis and public

Conard, A. F., Morgan, J. N., Pratt, R., Jr., Voltz, C. E., & Bombaugh, R. L.
Automobile accident costs and payments: studies in the economics of

Converse, P. E. A network of data archives for the behavioral sciences.

Converse, P. E. The nature of belief systems in mass publics. In D. Apter


Seashore, S. E. Field experiments with formal organizations. Human Organization, 1964, 23(2), 164-170.


