ICPSR Bulletin

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A Resource for Data, Training, and Computing Assistance in the Social Sciences



be available for continuing scientific study by others.

Just where the idea of sharing data came from is difficult to say. An idea is not readily copyrighted. It is easier to trace its institutionalization than its origin. In 1954, the Survey Research Center of the Institute for Social Research at The University of Michigan, with support from the Social Science Research Council. held a summer seminar in which 10 political scientists had the opportunity to share and make use of data on voting behavior of the national electorate collected in connection with the 1952 election. Once the appetite for secondary analysis had been stimulated and especially when subsequent biennial election surveys had been fielded, the demand for systematic preservation and convenient distribution of the "Michigan data" increased. Researchers in a number of other specialties were also beginning to collect quantitative or quantifiable data that needed archiving and dissemination. How the necessary resources could be found became a practical concern.

The plan for a "consortium" of universities as the custodian and distributor of quantitative data thus

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ICPSR—
What It Is and Why
Heinz Eulau

The Inter-university Consortium for Political and Social Research (ICPSR) is the institutional realization of an idea now taken for granted, yet an idea which, in retrospect, was original and, once translated into action, became critical in the development of the social sciences in the United States and abroad.

The idea is simple enough: that quantitative data of interest to social scientists, even though collected by only a few investigators, should and can be shared by many. Although census-type, aggregate statistical information had been widely used prior to the Consortium's founding, notably in economics and demography, the basic data, on which the statistical tables are built, were rarely available to the scholarly community at large.

If the idea of sharing pristine data could be made to work, it was likely to have two significant consequences for social-scientific development. First, it would greatly reduce the cost of social research. especially for those scholars who depend on data from relatively large random probability sample surveys of a population. Most individual investigators do not have the resources to conduct numerically adequate studies. Making such data accessible to the social science community was to expand the pool of investigators and usage of otherwise fallow data.

Second, wide distribution of basic data would improve the quality of research. Once original investigators had deposited the data in an "archive," replication and secondary analysis would be possible. Interpretations could be challenged by confronting the data directly so that criticism no longer depended on logic alone or mere opinion. Moreover, as the original data are often not fully exploited by those who collect them, they would now

emerged in the late 1950s. Warren E. Miller, then an imaginative study director at the SRC, and today director of the Center for Political Studies and president of the American Political Science Association. was the indefatigable architect, organizer, and first executive officer of the Consortium that came into existence in 1962. At the time, it was not expected that the new organization, founded as a partnership between the center and the Consortium's institutional members, would ever include more than perhaps 12 to 15 of the country's major research universities. Not the least difficult obstacle to overcome was the rejuctance of skeptical department chairpersons or deans who were asked to allocate scarce funds to the strange partnership. But enough had the vision to endorse the new enterprise.

The Consortium's archival holdings gradually expanded to include data of interest to scholars other than political scientists, especially after a historian joined the staff in 1965 and began the collection of quantitative historical data that has come to constitute a significant component of the archive. Subsequent acquisition of data relevant to work in economics, international relations, sociology, and social psychology but also to applied fields such as gerontology or criminal justice inevitably led to the 1974 change of the organization's name to Interuniversity Consortium for Political and Social Research. By then some 200 member institutions, in the United States and around the world. were affiliated in the Consortium.

The Consortium had been conceived in the mechanical age of the counter-sorter, before the wide introduction of the electronic digital computer which did not really reach most university campuses until the middle '60s. Its arrival confirmed the foresight of the organization's founders. For now its archival resources would be used not only in advanced research but also in teaching at the undergraduate level.

An important contribution of the Consortium, almost from the beginning, was the summer program of

training in quantitative methods and analysis that came to have an enormous influence on research development and undergraduate instruction, especially in political science and history. It is not unrealistic to suggest that ICPSR could grow and flourish because it trained. through the years, several thousand young social scientists who became users of the archive. Much early support also came from the outside, notably the National Science Foundation, which quickly recognized the scientifically innovative potential of the organization.

One sometimes hears that the social sciences, economics perhaps excepted, do not contribute their proper share to social policy and the improvement of the human condition, as do the physical and biological sciences. The ICPSR has been instrumental in narrowing the gap between social research and its public uses. Increasingly in recent years the Consortium archive has become the depository of important datasets generated in various fields of public policy by governmental agencies and private research groups, thus making these types of data available to the academic community; and both public and private research organizations are drawing on the Consortium's academically generated data. This development may not be without pitfalls, but the good sense of the Consortium's senior staff, the wisdom of its elected and policysetting council, and the watchfulness of its several hundred official representatives at member colleges and universities are in place for guarding the ICPSR's scientific integrity.

One purpose of this newsletter is to reach out both to researchers and teachers who may not be familiar with the organization, and to those whose understanding and appreciation of the ICPSR's mission and usefulness is essential to its wellbeing-college and university deans and presidents, foundation executives, heads of non-academic research groups, government officials, and policy makers. The most important aspect of the ICPSR is that as a collaborative partnership it is able to do in the arena of social research and its diffusion what no single university or research organization can do alone-provide a service that is efficient, economical, and effective. It is these three "e's" that I want to call to the attention of those outside of the active research community whose goodwill and



support an unusual institution such as ICPSR deserves. The ICPSR has served and continues to serve well its member colleges and universities, thousands of individual researchers and students, and many other constituencies as well.

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A Cooperative for the Social Sciences

Governance and Direction

Unlike most data bases or social science facilities, the ICPSR represents a cooperative effort on the part of well over 240 educational and research institutions around the world. Schools do not just buy access to the vast data resources or pay for specific services, they participate in the governance and direction of the organization.

The basic units of participation in the ICPSR are the educational institutions which constitute the membership of the organization. Each member pays an annual fee which entitles any student or faculty member at the school to obtain any data in the archive at no additional cost to themselves, to participate in the training program, and to avail themselves of any other service offered by the organization.

Each member institution designates one of its faculty or staff to be the "ICPSR Official Representative." The official representative serves as the contact person on the campus for the ICPSR staff. Requests for data and other services from individuals at each member institution are routed through the representative while information, announcements, and documentation for distribution on the member campus are sent from the staff to the representative.

The ICPSR representatives also provide insights on how the ICPSR staff can improve services, ideas about what data should be added to the holdings, and suggestions for changes in policy. Every two years the representatives of the member colleges and universities gather together to discuss developments within the organization and the social sciences, to establish general policies, and to elect members of a governing council. The meeting gives the representatives an opportunity to meet with the staff as well as to interact with each other to share common problems, discover new procedures, and learn from each other's experiences. Besides the business portion of the biennial meeting, the representatives attend panel sessions and workshops on substantive topics of professional interest. These panels often cover research projects which have yet to enter the general literature or the programs of associational meetings.

The governing council is composed of 10 leading scholars from the areas of social science served by the Consortium. Many members of the council have served as officers of professional associations in the social sciences and in other capacities which give them an overall view of the needs within social science today. The council meets at least three times a year with the ICPSR staff to review activities and to participate in the governance of the organization.

In order to gain advice from as wide a spectrum of scholars as possible. council members form advisory committees in various discipline and programmatic areas. The committees suggest bodies of data for acquisition, advise on the priorities of data processing, and help solve problems facing the organization. Committees have dealt with such topics as international relations. sociology, history, comparative politics, American politics, elites, undergraduate teaching, the training program, and computer software development.

The combination of the staff located at the Institute for Social Research at The University of Michigan, the official representative network, and the council of eminent scholars with its advisory committees makes the ICPSR a truly cooperative effort within the international social science community.

Members of the ICPSR Council, 1979-81

Paul Allen Beck Florida State University Aage Clausen (Chair) Ohio State University Norval D. Glenn University of Texas, Austin Robert T. Holt University of Minnesota Ruth S. Jones University of Missouri, St. Louis Lawrence LeDuc University of Windsor Murray Murphey University of Pennsylvania Judith Rowe Princeton University John D. Sprague Washington University

Dina A. Zinnes

University of Illinois,

Urbana-Champaign

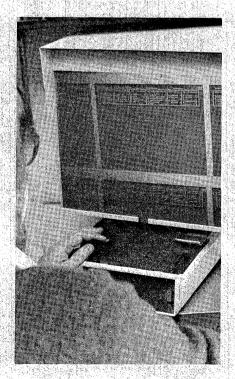
Empirical Data

A major activity of the ICPSR central staff in Ann Arbor is the maintenance of the world's largest computer-readable numeric data base in the social sciences. This data base consists of more than 5 000 data-files relevant to the disciplines of political science, history, sociology, economics, social psychology, public health, public policy. education, and international studies. The data are pertinent to a wide variety of areas of inquiry including demography, urban studies, conflict and war, economic behavior and attitudes, legislative bodies, mass political attitudes and behavior, social indicators, minorities and ethnic relations, religion, socialization, age and the life cycle, and criminal justice.

The ICPSR data archive program performs three particular tasks for the membership—acquiring, processing, and disseminating data of use to students and researchers around the world

Acquisition

The ICPSR staff, with guidance from the data advisory committees and the official representatives, monitors social science research activity in the United States and abroad in order to identify data which are of use to the membership. Many researchers who collect original data, as a matter of course, offer to share



their data with the rest of the social science community through ICPSR. These scholars are aware of the need for cumulative research and replication in science, rather than bear the burden of responding to requests for data themselves, they utilize the ICPSR services for that purpose.

Analysts who have developed a data collection of general interest to the members, but who may not know the role ICPSR plays in making data available to the scholarly community, may be asked by the staff or advisory committee to deposit the data within the archive.

Often the advisory committees or particular members feel that a certain body of information or statistics should be made computer-readable. In response the staff will arrange for such material to be obtained and computerized. Moreover, a number of files in the archive have been routinely updated as additional information is made available. For example, the staff obtains countylevel election returns for national and state offices from each state every year and enters this information into a computer file which contains data going back to 1789.

For computer files produced by commercial firms or government agencies, the ICPSR often acts as a buyers cooperative to acquire large, complex, and costly data on behalf of the membership as a whole. Large portions of the 1970 United States census were obtained in this manner; more recently international financial data were acquired from the International Monetary Fund by such a procedure. Additionally, plans are being developed for gaining access to significant portions of the 1980 census data in computerreadable form for dissemination to member colleges and universities.

Every year the ICPSR adds hundreds of files to its data base in order to provide members with as much currently topical and theoretically relevant material as needed for teaching and research.

Processing

Not only does the ICPSR acquire data of interest to social scientists, it also checks, formats, and corrects many of these data files. Researchers do not always have an opportunity to completely check all aspects of their data or prepare readily usable documentation. The ICPSR, however, does undertake to check

and fully document the data files resident in the archive. The staff often reformats the data into a more easily used form, checks for minor errors and when necessary consults with the original investigator concerning discrepancies, and prepares complete documentation (often computer-readable) for the data file. These steps are taken in order to transform the data into a general purpose format that can be used by persons not intimately familiar with the original study and that can be readily used in a variety of computer

environments. A complete annotated list of the data files available from the ICPSR is published annually in the ICPSR Guide to Resources.

Distribution

Once data have been checked and formatted they are available for use by individuals at member institutions. The task of getting the data into the hands of those who need them is a straightforward operation because the ICPSR staff maintains a file of information on each member's local computing facilities

and because every member school has a person designated as an ICPSR official representative. The local campus ICPSR representative serves as a liaison between the central staff and that institution. Requests for data on each campus are routed through the local representative who is also sent periodic informational mailings and printed documentation. Data are sent to members on magnetic tape written to each member's specifications, usually within two weeks of the request.

Examples of Data in the ICPSR Archive

American National Election Surveys, 1948-

Political Attitude Surveys: Australia (1967, 1969), Canada (1965, 1972, 1974), Netherlands (1967, 1969, 1971, 1972, 1973), France (1958, 1967, 1968), West Germany (1961-1976), Israel (1963, 1969), Japan (1967), Norway (1957, 1965), Britain (1963-1970), Sweden (1960), Switzerland (1967, 1972), Argentina (1963, 1965), Brazil (1960)

Biographical Characteristics of Members of U.S. Congress, 1789-

Carnegie Commission National Surveys of Higher Education

Comparative Political Parties Data, 1950-1962

County and City Data Book, 1952, 1956, 1962, 1967, 1972, 1977

Cross-National Economic, Social, and Demographic Data

U.S. Current Population Annual Demographic Files, 1968-1976

Demographic, Social, and Education Data for France, 1801-1925

Detroit Area Studies, 1953-1971

Euro-Barometers (Surveys in the European Community), 1970-1976

Historical Census Data for the United States, 1790-1970

International Financial Statistics, 1948-1978

Justifying Violence: Attitudes of American Men, 1969

National Crime Surveys, 1971-1977

Panel Study of Income Dynamics, 1968-1977

Quality of Employment Surveys, 1972-1977

Racial Attitudes in Fifteen American Cities, 1968

Retirement History Longitudinal Survey, 1969-1973

Roll Call Voting Records of the Continental Congress and Congresses of Confederation, 1777-1789 and for the Congresses of the Confederate States of America, 1862-1865

Data for Time on the Cross Study

Myth and Reality of Aging, 1974

Surveys of Consumer Attitude and Behavior, 1953-1976

Surveys of Consumer Finances, 1947-1971

Uniform Crime Reports, 1966-1976

United States Congressional Roll Call Voting Records, 1789-

World Handbook of Political and Social Indicators, 1950-1975

World Military and Social Expenditures, 1974-1978

Direction of World Trade, 1948-1978

General Social Surveys, 1972-1978

Macroeconomic Time Series for the U.S., U.K., Germany, France

United States Election Returns by County for National & State Offices, 1788-

World Event/Interaction Survey Project Data for over 100,000 International

Events
National Longitudinal Surveys of Labor Market Experience, 1966-1977

Time Use in Economic and Social Accounts, 1975-76

Young Men in High School and Beyond, 1966-1974

Quality of American Life

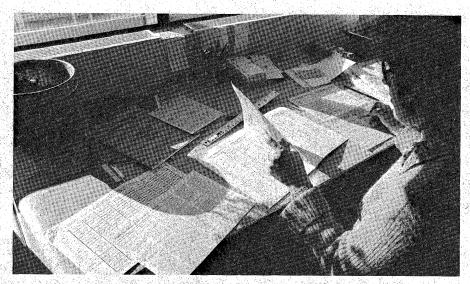
Methodological Training

Another activity of the ICPSR is the Training Program in Quantitative Methods of Social Research which serves Consortium member colleges and universities by offering a comprehensive, integrated program of studies in research design, statistics, data analysis, and social methodology. Emphasis is focused on those courses and subjects that are not usually an integral part of the curricula of member institutions—not because the courses are of limited importance. but because most colleges and universities are unable to allocate resources to support the specialized offerings that form the core of the training program's curriculum. Furthermore, the training program's instructional environment differs from that of all but a few universities' social science curricula in that quantitative methods of analysis are conveyed as part of a broader context of substantive social science research; and virtually all instruction is coordinated with and reinforced by active, participatory data analytic experiences.

Instruction is organized in lecture, seminar, and workshop formats in four-week sessions with additional two-week lecture/workshops that provide participants an opportunity to examine the impact of various methodologies on specific substantive issues. Moreover, there are special topics sessions in which research scholars who have made important contributions to the development of social methodology present a series of lectures that focus on their most recent research interests. In addition to methods courses, there are workshops on technical topics such as data base management, minicomputer applications, teaching package development, and data librarianship.

Examples of Courses from Recent Training Programs

Centre-Periphery Structures in Europe
Multi-level Analysis
Quantitative Historical Analysis
Dynamic Analysis
Quantitative Analysis of Criminal
Justice Problems
Experimental Studies in Politics
Causal Models



Empirical Research Issues in Aging Data Analysis and Public Policy Exploratory Data Analysis Formal Theories of Political Analysis

Politics and Macroeconomics Data Graphics

Multivariate Nominal Data Analysis Dynamic Models of Political Economy

Measuring Media Use and Media Impact

Time Budgets

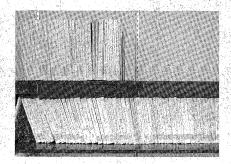
Database Management for Complex Social and Historical Data Optimizing Research and Criminal Justice Problems

Introduction to Linear Models

Management & Library Control of
Data

Introduction to Research Design and Elementary Statistics Mathematics for Social Scientists Computer Simulation of Organizational and Individual Behavior

Comparative Occupational Mobility Multi-dimensional Scaling Applied Multivariate Analysis Discrete Multivariate Analysis Archiving Criminal Justice Data Time Series Analysis Undergraduate Teaching Workshop



Computing Assistance

Faculty research, student theses, curricular revision, and the growth of local data archives and data processing facilities are increasingly supported by ICPSR resources. These activities are aided in many settings by ICPSR efforts to ease some of the technical barriers to maximum social science utilization of modern computer technology.

The ICPSR provides its members with various kinds of assistance in the effective use of local computing facilities. Members may seek assistance when faced with such problems as computer hardware selection, effective use of new storage technology, and utilization of rapidly emerging data communication and computer network technology. The staff also seeks to keep the membership informed of developments in social science computer software and will assist users in selection of appropriate data management and analysis packages. Programming by the ICPSR staff to meet individual member needs is not undertaken. Instead the emphasis is on assisting the member to utilize effectively the resources available on the home campus.

An important service is the provision of an integrated package of computer programs (OSIRIS) to an increasing number of the members. This system of software greatly aids members' ability to utilize ICPSR data resources on their local computing hardware as well as facilitating the transfer of the ICPSR training program experience. It also provides a software base to assist local archives on their own campuses.

Joining ICPSR

Would your institution benefit from participation in the ICPSR? Can teachers and students on your campus make use of the vast array of computer-readable numeric data files available through the ICPSR? Might they find participation in the training program important for improving their skills in statistics and data analysis? Are there individuals at your school who would like to join thousands of other social scientists around the world in a cooperative network?

If your answer is "yes," consider membership in the Consortium. Membership is a worthwhile investment not only for schools with active programs in the social sciences but also for institutions with empirically grounded departments in areas such as business administration, public health, social work, education, public policy, and international studies. Participation is also of value for colleges and universities where programs in the empirical social sciences are not yet well developed.

Membership, however, should be a considered decision, one seen as part of an effort that draws schools together to create a common resource from which all can benefit. Cooperative participation should be viewed as an action to improve scholarship in the social science generally as well as to serve the needs of each member specifically.

There is a variety of membership options available. The cost of membership is on a sliding scale related to size and type of program and location of the member. The membership fee covers the cost of services to members while a portion is devoted to acquiring and processing new data. Over the years the ICPSR staff have been highly successful in obtaining funding from foundations and federal agencies for the purpose of archiving various bodies of data whose cost would tax the membership budget. Such grants have enabled the Consortium to acquire important data in such fields as American political history, international relations, criminal justice, gerontology, and comparative politics. The average expenditure of external funds to membership fees has been about 3 to 1. The membership structure, the cooperative nature, and the international net-

I would like information	
☐ Membership ☐	Training Programs Data Holdings
l am also interested in:	
☐ Depositing my da	
☐ The name of my	"official representative" (if applicable)
Name	Title
Institution	
Institution	

work of scholars linked by ICPSR are often key points that influence granting agencies to provide funds to augment the activities of the organization.

If you would like further information on membership or on any of the activities of the organization, please return the form above or call Executive Director Jerome M. Clubb at 313-764-2570.

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