

America By Number



Celebrating fifty years of social science research in the public interest.

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America By Number NORC Report 1991

DEDICATION

This volume is dedicated to the memory of two individuals, Harry Hubert Field (1897-1946) and Paul B. Sheatsley (1916-1989). Had the National Opinion Research Center not had the benefits of their vision and devotion we would not now be beginning our second half-century.

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And NORC thanks its employees and trustees, past and present.



INTRODUCTION

he National Opinion Research Center was founded upon the idea that it would be different-profoundly different-from the commercial survey research organizations that had been before. Founder Harry Hubert Field saw the science of survey research as a revolutionary force and he wished to apply that force in a systematic fashion to the vital issues of the day. Field was an experienced commercial pollster. He had worked in the Gallup organization and had organized the Gallup operation in Great Britain. But the driving force behind the collection of survey and poll data for newspapers was the sale of newspapers. Field wished to collect survey data based on the current issues of debate in government. Survey data was to provide an objective standard-a measure of the will of the people-to compare with the assertions of persons claiming to represent that will. Conveyed to the elected representatives, these data would then influence how those representatives would vote on a particular issue.

NORC Then

NORC was incorporated on October 27, 1941, two days before Field's forty-third birthday. Its first employees were Field, Associate Director F. Douglas Williams, and Statistician William Salstrom. NORC was supported by a grant from the Field Foundation, the philanthropic institution endowed by department store heir and newspaper owner Marshall Field III, and by the University of Denver. Yorkshireman Harry Field and Chicagoan Marshall Field were not related. Harry Field had for some time nursed the idea of a survey research center, inspired by questions he thought deserved more attention and by Elmo Roper's suggestion that a governmentmanaged survey organization be established. When Field learned that Marshall Field was organizing a charitable foundation, he approached that foundation with his idea. Harry Field (1941b) told *Time* magazine: "When Mr. Field read the brief for the Research Center he said that he would like to meet me at lunch as he wanted to consider the matter further. At this first luncheon, it was decided that if Mr. Marshall Field should eventually decide to back the project, that it should be connected with an institution of higher learning. I was asked to prepare a report covering several such institutions and to recommend one of them."

The second sponsor of NORC, the University of Denver, entered the picture in the person of Caleb F. Gates, Jr., Chancellor of the University. Harry Field met Gates when the latter was an administrator at Princeton University. In a 1941 memorandum Field writes that Gates was enthusiastically in favor of the idea. But Gates told Field, "You will have to raise the money. I can't ask the people in Denver to support your project. I will, however, give you every possible kind of cooperation if you ever realize this dream, and I will welcome you at the University



PAUL B. SHEATSLEY C. 1960.



MARSHALL FIELD III, LEAVING THE WHITE HOUSE AFTER VISITING PRESIDENT ROOSEVELT IN 1941.

of Denver." When NORC opened its doors in 1941 Field told the *Denver Post*, "Up to this time, most of the academic and commercial research in the field of public opinion measurement has been concentrated in the east. Denver was selected because it is the industrial and business capital of this great western territory." Gates was the first President of the NORC Board of Trustees. The other founding Trustees were J. Quigg Newton of the University; Douglas P. Falconer and Louis S. Weiss of the Field Foundation; and three distinguished social scientists, Gordon W. Allport of Harvard, Hadley Cantril of Princeton, and Samuel A. Stouffer of the University of Chicago.

The University of Denver was (and is today) the home of the Social Science Foundation, an international relations research institution of worldwide reputation. The Social Science Foundation was then headed by Ben Mark Cherrington. Cherrington was later involved in the organization of the United Nations, particularly the United Nations Educational, Scientific, and Cultural Organization (UNESCO). When Gates entered the military in 1943 Cherrington became both Chancellor of D.U. and the President of the NORC Board of Trustees.

In 1946 Harry Field was killed in an aviation accident. After Field's death there was concern among NORC's sponsors and friends about its future, both because NORC owed so much to Field's vision and because a substantial portion of its revenue had been derived from war-related research. William Gaskill, an associate editor in the Gallup organization, contacted the Field Foundation at George Gallup's request to offer suggestions about the direction NORC might take. Later Gallup, Elmo Roper, and Archibald Crossley discussed their views on NORC's future, which included the suggestion that the center be reorganized as a school for training public opinion researchers (Bugli, 1946).

A number of NORC Trustees, and new Director Clyde W. Hart, felt that NORC might benefit from affiliation with a larger university with greater financial resources. Several institutions were considered. The best offer—both financial and academic—came from the University of Chicago. Trustee Gordon Allport summarized the strength of the University's academic activities as providing "The kind of rich setting desirable as a matrix for NORC activities." Trustee S. Arthur Henry stated the case for remaining in Denver. Henry stressed D.U.'s pioneering support for NORC and the good working relationships that had

resulted. He warned that such relationships might not be so easily recreated (NORC, 1947b). This latter point, in fact, proved to be true. Jean M. Converse writes in *Survey Research in the United States* (1987, emphasis Converse's) that relationships were slow to develop and "Chicago and its social science faculty may in fact have been **too** eminent for NORC's purposes in the short run." Herbert Hyman (1991) notes that one resource that served NORC well was the pool of talented University of Chicago graduate students, a number of whom came to NORC for training in survey research and later joined the staff.

When NORC moved to Chicago some of its Denver activities were continued by the Opinion Research Center there, an NORC affiliate headed by Don Cahalan. ORC, writes Hyman, "made an important contribution to the program of methodological research that NORC began in 1947." Financially strapped, ORC closed in 1949.

The Aims of NORC

NORC issued an *Announcement of Purposes* in 1942. The announcement presented five aims:

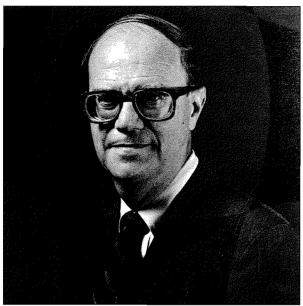
- To establish the first non-profit, non-commercial organization to measure public opinion in the United States. Through a national staff of trained investigators, representative cross-sections or samples of the entire population will be personally interviewed on questions of current importance.
- To make available to legislators, government departments, academicians, and non-profit organizations a staff of experts in the science of public opinion measurement, and a highly trained nation-wide corps of interviewers.
- To analyze and review the results of surveys made by other polling organizations.

- To create at the University of Denver a research Center to discover, test and perfect new methods, techniques and devices for ascertaining the status of public opinion.
- To provide at the University a graduate department devoted to the study of the new science of surveying public opinion.

Most of these aims are realized in the NORC of today, but in ways somewhat different from those Field imagined. During its early years NORC's fulfillment of these aims was both assisted and hindered by the outbreak of the Second World War. The establishment of a non-profit research center and the training of a national field staff were accomplished quickly. And, when the doors were opened and the staff was trained, survey research services were then available to government agencies, legislators, and university researchers. But the primary users of such services during the war years were government departments linked to the war effort.



ELOISE BINGAMAN AND DORIS PAGE (SEATED) OF THE NORC DENVER OFFICE IN 1944.



CURRENT DIRECTOR NORMAN M. BRADBURN IN 1990.

The third purpose, to analyze and review the results of other polling organizations, became a service available to clients, rather than the independent activity implied by the Announcement. The idea of reviewing and analyzing other organizations grew out of Field's belief that polls needed to be evaluated by an independent auditor. He thought that NORC should be that auditor. While NORC seldom evaluates opinion polling (although NORC has evaluated data collection by other houses as part of government assessments of data quality), Field and NORC were instrumental in the founding of the American Association for Public Opinion Research. A part of AAPOR's mission is just such a function. The vehicle AAPOR uses to oversee ethical practice is its standards committee. A number of NORC researchers have chaired this committee.

The fourth purpose, the discovery and testing of new survey methods and techniques, was present from the very beginning. New methods were sometimes tested with NORC's own resources, sometimes as an adjunct to government contracts, and when clients commissioned NORC to address questions formerly outside the scope of the discipline. Both in Denver and in Chicago, NORC has maintained a vigorous program of survey methods research that explores both sampling and nonsampling issues, and seeks new applications for the empirical social sciences.

As for the fifth point, a graduate department devoted to the study of survey research was never established. However, NORC did play a role in the University of Denver's training program for public service. NORC is an important participant in the training of academic researchers through the University of Chicago and through post-doctoral and internship programs. Between 1977 and 1982 NORC was the site of a National Institute of Mental Health postdoctoral training program. Between 1963 and 1977 NORC administered an NIMH predoctoral training program. In 1989, NORC established a summer internship program for college undergraduates and recent graduates. NORC-trained researchers practice their craft around the world.

As the discipline of survey research has evolved, and as the needs of the government and academic research community have changed, NORC has also changed to meet those needs. Today, except for the long-running General Social Survey, NORC does relatively little of the opinion measurement that Field saw as essential to democracy. NORC's role in advising the government is not explicitly directed at legislators as Field had imagined it would be, although NORC data are used in developing legislation. It is primarily the executive branch that supports NORC data collection to inform policy decisions and assess the functioning of government programs. In such areas as education, labor, and health NORC has contributed to the national debate.

NORC Now

Today NORC is one of the nation's largest private, non-commercial social science research organizations. The backbone of NORC is its Survey Research Group, where survey design, data collection, and data analysis projects are undertaken. NORC has maintained a national field staff since its inception. That field staff is recruited and trained by NORC. In 1942 NORC had a field staff of 160 interviewers. Today NORC has over 1,000 interviewers. In addition, NORC has a new, fully computerized, telephone interviewing facility.

NORC's constituent parts include four programmatic research centers where research projects are initiated and data analyses are carried out. They are the Economics Research Center, the Methodology Research Center, the Chapin Hall Center for Children, and the Ogburn-Stouffer Center for the Study of Population and Social Organization. Chapin Hall and the Ogburn-Stouffer Center also have independent relationships with the University of Chicago. Associated with these centers are nearly 100 academic researchers from universities around the world.

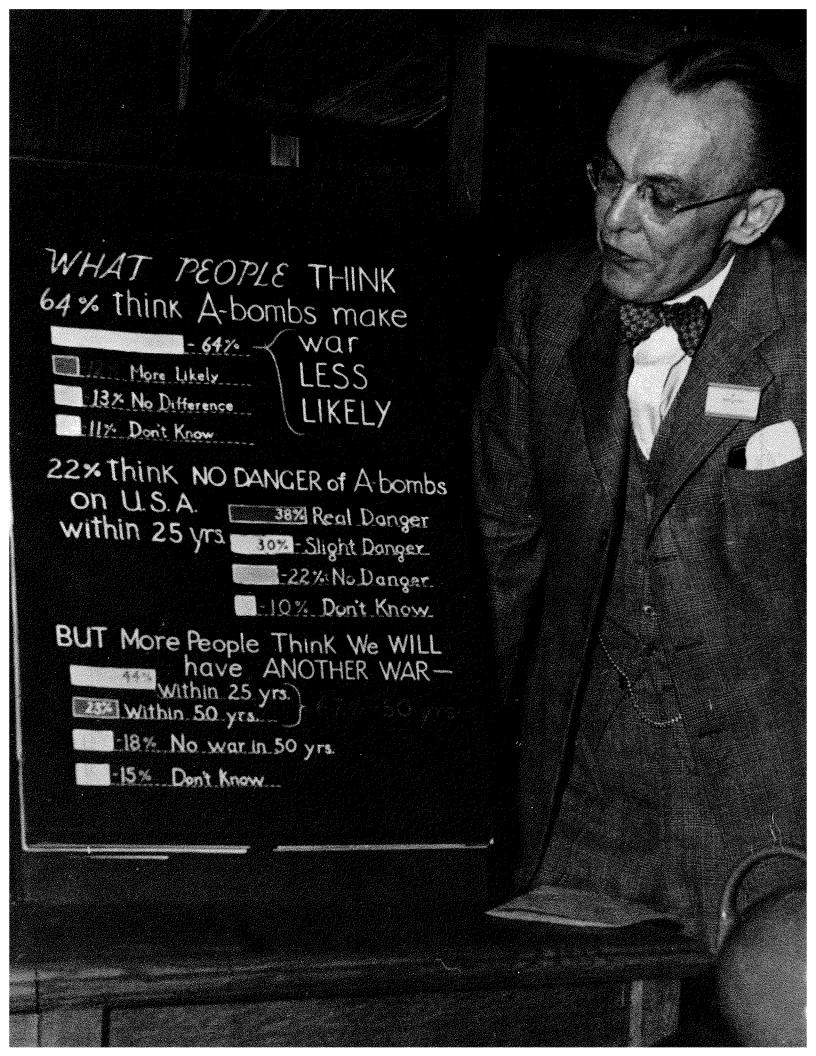
This report attempts to capture the challenges of conducting research in the public interest by addressing both the topics of NORC research and the organization's continuing efforts to refine survey research methods. The history of NORC-with its unusual purposes and distinctive procedures and its intense involvement in both local and national research-could be written a number of different ways. Paul B. Sheatsley wrote a chronological summary of NORC's activities in 1982. Converse focused on NORC research achievements in a chapter of her volume on survey research before 1960. A history of NORC could be a history of personalities. After all, persons formerly associated with NORC include a Nobel prize winner (Franco

Modigliani), a major poet (Allen Ginsberg), a recording star (Chaka Kahn), and a distinguished journalist (Carl Rowan). Perhaps for another book.

However when such a history is written the word "survey" will appear on almost every page. In 1975, James A. Davis, then Director of NORC, addressed a conference entitled Perspectives on Attitude Assessment: Surveys and Their Alternatives. In his address Davis noted "To ask the director of the National Opinion Research Center to speak on 'survey alternatives' is a bit like asking the pope to speak on 'New Breakthroughs in Lutheran Theology'. . . . " What follows is a brief, hardly comprehensive history of a survey research organization.



STAFF MEMBERS GORDON M. CONNELLY AND ANNE S. ZANES IN SAN FRANCISCO IN 1946.



THE PUBLIC INTEREST

arry Field's vision of NORC, an unbiased organization dedicated to scientific measurement of the national situation, is exhibited throughout the organization's activities. This section details the substantive research questions that NORC research addresses. These include attitudes and trends, intergroup relations, health and medical care, labor, education, and international research. This diverse agenda is covered in the *Announcement of Purposes* by the phrase "subjects or issues close to the common experience of the masses of people or . . . based on subjects of wide public interest" (NORC, 1942a).

Attitudes and Trends

The largest part of NORC's early, war-related work involved the study of attitudes. When the war was finished, issues related to the new world situation were studied. Today America's attitudes are captured by the General Social Survey.

War and Peace

NORC's first national survey, conducted a scant month after its incorporation, entered the field on November 24, 1941. It asked a series of questions on attitudes toward defense policy and about support for Britain, Russia, and the Allied efforts in World War II. The study data were published in NORC report number 1, One Week Before War Was Declared (NORC, 1942c). Because Field had insisted that every interviewer employed by the firm be professionally trained, NORC was prepared to offer first-quality work on its very first national effort. Of course, NORC had not had time to train these interviewers. Field borrowed interviewers from Elmo Roper, who was the only commercial survey operator then requiring interviewer training, until NORC could accomplish its goal of recruiting and training its own interviewing staff (Sheatsley, 1982).

NORC was similar to many other U.S. enterprises in that its stated and projected purposes were redirected by the war. Shortly after the war broke out, NORC became the data collection and survey design contractor for the polling division of the Office of Facts and Figures, later called the Office of War Information. In 1942, NORC opened an office in New York City, just down the hall from the OWI. That office was first headed by John F. Maloney. By the end of 1942 Maloney had entered the military and had been replaced by Paul B. Sheatsley. The New York office managed a number of national studies devoted to the war effort sponsored by OWI and other government bureaus and agencies.

Such surveys were designed to evaluate the attitudes of both the general population and of certain population groups to various aspects of the war. These assessments of civilian attitudes and morale helped the government understand the perceptions of and attitudes toward its various military, home front, and foreign policy initiatives. They were important to the effort because, as George Marshall said: "no policyforeign or domestic-can succeed without public support" (Foster, 1983). African-Americans were interviewed about their perceptions of the war and about how intergroup relations might be different after it was over; businessmen discussed their vision of the post-war world and Nazism and the German people; grocers were surveyed about the Office of Price Administration programs; the effectiveness of war information programs was assessed and opinions regarding those programs solicited; and attitudes toward war progress were sought. NORC fielded 160 separate surveys on such topics between 1942 and 1944. The size of the samples for these projects varied, ranging from a minimum of 500

to a maximum of 5,000. Each study was based on a national cross-sectional quota sample (Allswang & Bova, 1964).

Correspondence files reveal that life under the OWI contract was hectic. A steady stream of messages between Field and Eastern Representative Sheatsley, and correspondence between Field, and Julian L. Woodward and Elmo C. (Budd) Wilson of OWI, reveal the daily challenges and excitement of turning the government's research questions into workable surveys. The perpetual Congressional threat to OWI survey funding was a worry for both OWI and NORC, and particularly, one assumes, to Sheatsley whose entire salary was supported by OWI work. Funding is the subject of several anxious telegrams and commiserating or congratulatory letters between Field, Sheatsley, and Wilson. The government's reluctance to pay with dispatch and its tendency to disallow expenses capriciously (as NORC saw it) were also annoying. In early 1942, NORC borrowed \$10,000 from Marshall Field. Field lent the money without charging interest to help NORC continue conducting government surveys while the government agonized over payment (Field, 1942a). In 1944, Harry Field (1944a) wrote to Sheatsley and Salstrom that the government tended to "think everyone has a bottomless purse. And because MF [Marshall Field] is wealthy I suppose they think we can dip in whenever we feel like it."

Anne Schuetz Zanes, NORC Field Supervisor 1941-1947, recalls how the Denver Office, under Harry Field, balanced the needs of the employees with the demands of the client:

... our secret Washington client wanted a telegraphic survey done that night. We wrote out some tentative questions, and, as supper time approached, Harry suggested that we go down to Larimer Street for dinner.... We took a typewriter and carbon paper and between courses we would dash out on the street to pre-test the questions, revise them, and go out again before dessert.

Another problem was created by the very issue NORC was exploring, rationing. NORC interviewers used up their gasoline allotments and wore out their tires gathering data. Zanes asked OWI to pressure the interviewers' local rationing boards for exemptions. Increased fuel allotments and permission to purchase recapped tires allowed interviewers to keep working.

Wartime efforts left NORC with a well-trained, reliable field interviewing force and survey management staff. NORC was able to move swiftly into peacetime activities on a large scale. Peacetime surveys were further enhanced by the departure from government service of the skilled research professionals who had formerly helped design and purchase survey research projects from NORC and other organizations. NORC's second Director, Clyde W. Hart, was only one of a number of former government researchers who found a congenial home to pursue their research interests at NORC. To try and name them all would doubtless slight some, but of the eleven NORC researchers and Trustees who have won the AAPOR Exceptionally Distinguished Achievement Award (Paul F. Lazarsfeld, Samuel A. Stouffer, Herbert H. Hyman, Clyde W. Hart, Harry H. Field, Hadley Cantril, Shirley A. Star, Paul B. Sheatsley, Norman M. Bradburn, Seymour Sudman, and James A. Davis) three-Hart, Hyman, and Star-came to NORC shortly after their government service. In addition, the federal government continued to require surveys, even as universities, foundations, and charities-whose interests NORC had been established to serve-called on NORC for renewed efforts directed at their areas of concern.

Amalgam Surveys

Between 1963 and 1978 NORC conducted twenty omnibus surveys called Amalgams. The Amalgams were designed as an inexpensive way for a researcher to get nationally representative data on a particular issue or series of issues. Among other things these were a vehicle for asking racial attitude questions, and such research is discussed in more detail below. The clients for the particular Amalgam effort split the cost of collecting the demographic data necessary for analysis.

The General Social Survey

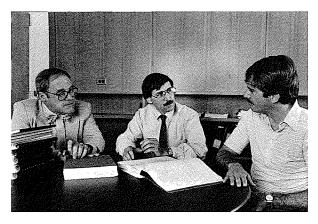
How Americans assess their society and themselves, and who those Americans are, are among the issues addressed by one of NORC's best known and longest-running data collection efforts, the General Social Survey (GSS). The GSS is the data collection tool of the National Data Program for the Social Sciences. Sponsored principally by the National Science Foundation (the first GSS was also supported by the Russell Sage Foundation), the GSS has been conducted annually (save for two years) since 1972. Richard Morin, writing in the *Washington Post* in 1991, termed the GSS "perhaps the single most important annual survey measuring social trends."

The GSS is a ninety-minute interview with a representative sample of the U.S. adult household population. The survey collects information on such issues as race relations, religion, sexual behavior, job satisfaction, goals and desires, and attitudes toward children and childrearing. Supplemental modules are added to the GSS to address areas of special interest and also to conduct research into survey methods.

The GSS was developed by James A. Davis, who was then Director of NORC. Davis is the GSS Coprincipal Investigator, sharing that responsibility with GSS Director Tom W. Smith. The

initial questionnaire was constructed, in part, by retrieving from NORC files questions that had been used on national surveys conducted by NORC and by other organizations during the preceding four decades. In this way a number of important research themes were bound together and carried into the present. Attitudes toward foreign countries-including the Soviet Union-had been an important issue on the war and post-war surveys. The inclusion of these questions on the GSS made possible the better understanding of how the fluctuations in the U.S.-Russian relationship-from ally to cold war adversary to the current state of watchful cordiality-have influenced public opinion. Intergroup relations is another research topic for which new data allowing the study of the trends documented by sixty years of national surveys are supplied by the GSS.

Such research is particularly useful to historians, sociologists, political scientists, and journalists seeking to reconcile perceived public opinion with the reality of national attitudes. In 1985, Smith analyzed trends in attitudes expressed in eleven research areas—including attitudes toward abortion, civil liberties, crime, social welfare, and taxes—to see if a widely held belief that



GENERAL SOCIAL SURVEY PRINCIPAL INVESTIGATORS JAMES A. DAVIS (LEFT) AND TOM W. SMITH (RIGHT) WITH SENIOR SURVEY DIRECTOR RICHARD M. RUBIN IN 1985.

the United States was becoming more conservative was supported by empirical data. In fact, Smith (1985) was able to demonstrate that on most of the social issues investigated, the trend in the liberal direction apparent since World War II had merely slowed or halted. The trend in attitudes for only two of the eleven issues, taxes and crime, showed a shift in the conservative direction. It is precisely this kind of application of survey data, the replacement of speculation with evidence, that Harry Field had been eager to address.

In 1988 Smith, along with University of Rochester political scientists Richard G. Niemi and John Mueller, published *Trends in Public Opinion*. The volume addresses trends in attitudes in fifteen research areas, including politics, sexual morality, religion, and psycho-social well-being. It brings together, in the most comprehensive fashion to date, data from surveys on these issues gathered by commercial, media, and academic survey organizations.

Research on Intergroup Relations

NORC's abiding interest in relations between racial and ethnic groups is illustrated by the large number of surveys that address these topics. Clyde Hart wrote in 1951:

Inter-group relations has been one of the Center's main fields of interest since its establishment in 1941. Approximately twenty studies bearing on Negro-White relations, Japanese-American relations, and on anti-Semitism have been completed during this period. . Although their main purpose has been to collect well-substantiated factual information about minority group relations and the attitudes and experiences determining these relations, they have invariably had, as an incidental purpose, the discovery of more effective ways

of modifying these relationships in order to bring them into fuller accord with democratic principles.

For a substantial portion of its early life, NORC was almost alone in its interest in surveys on race relations. Converse (1987) writes:

Judging from the evidence in the 1951 Cantril/Strunk volume *Public Opinion:* 1935-1946, which included poll data from five American organizations, virtually no research other than NORC studies was conducted into attitudes toward blacks.

NORC's first study of race relations was conducted between April 15 and May 11, 1942. A sample of 1,000 African-Americans were surveyed in New York City and, for comparison, 500 whites, of similar economic status, were also interviewed. The purpose of the study was to discover how the war had influenced the lives of African-American citizens, to assess their perceptions of the level of discrimination to which they were subjected, and whether they felt war might alter that discrimination. The study also involved a methodological experiment. The African-American sample was divided in half. One half was interviewed by black interviewers and the other by white interviewers. The race of the interviewer did seem to influence response. African-American respondents seemed to minimize their achievements and complaints before white interviewers. Similar results were found in a 1942 Memphis study and the effect was discussed by Herbert Hyman and his colleagues in the 1954 volume Interviewing in Social Research (1954) and by Hyman in his memoirs. A particularly notable effect was that, when speaking with white interviewers, blacks in Memphis were much more reluctant than black New Yorkers to discuss their unhappiness over discrimination practiced by employers, labor unions, or the

military. This influence of a southern locale is echoed in the 1964 findings of Gary T. Marx discussed later in this section.

In June and July of 1942, NORC conducted a national survey of whites to assess their attitudes toward blacks. This survey revealed that a substantial number of white Americans thought that African-Americans were not as patriotic as whites. NORC research, and studies by other houses, found that whites thought African-Americans were more likely to be communists than whites. Such findings have been a continuing theme in NORC race relations research throughout several decades. NORC's 1990 General Social Survey found that 51 percent of white Americans thought African-Americans less patriotic than whites (U.S. OWI, 1942; Smith and Dempsey, 1983; Smith, 1990a).

The most dramatic of the early OWI studies on race relations was a 1943 study of a race riot in Detroit. In his memoirs, Hyman attributes the spark for this riot to numerous rumors, including one in the African-American community that claimed that whites had thrown a black baby off the Belle Isle Bridge, and the identical story in the white community with the races of the murderer and the child reversed. Although OWI never formed a definite conclusion on the incident that began the riot, a Detroit newspaper attributed the spark to an interracial fist fight (U.S. OWI, 1943). Twenty-five blacks and nine whites were killed. The majority of blacks, but none of the whites, were killed by the police.

OWI was eager to explore the cause of the riot and NORC interviewers were dispatched to Detroit within three days. Hyman notes that this wasn't a survey, with sampling or standardized questions, but was an effort to capture as much information as possible in hopes of avoiding future eruptions. The testimony of the interviewed is gripping. One incident from an interview with a young African-American woman:

She was sent home from work early Monday because of the rioting and was on the streetcar, when it reached Vernor Highway, there was one Negro man and this girl, all others were white. They saw a white mob in the path of the car and the white passengers asked the motorman not to stop, but he did stop and the white rioters asked 'You got any niggers in there?' They saw the Negro man and came in after him, dragged him off and beat him up while the people on the bus watched. They apparently did not take the girl because she was not as black as the man. The rioters were principally after black or dark Negroes. (Detroit Race Riot Interviewer Notes, June 23, 1943)

A number of white respondents suggested that such riots could be prevented in the future if rigorous segregation were to be instituted in order to restrict African-Americans to their neighborhoods.

The views of white Detroiters not withstanding, NORC researchers have reported regularly on the decline in white opposition to racial integration. In 1956 and 1964, Hyman and Sheatsley wrote on this topic in Scientific American. In 1971, Sheatsley and Andrew M. Greeley addressed this topic, and in 1978 D. Garth Taylor, Sheatsley, and Greeley wrote the fourth article in this series. Hyman and Sheatsley analyzed the attitudes of white Americans by age group and region of residence. When Greeley addressed these topics the articles began to include analyses of the attitudes of various white ethnic and religious groups, a topic of particular interest to NORC and one to which Greeley has devoted a substantial portion of his research career. The



CURRENT ASSOCIATE DIRECTOR FOR SURVEY RESEARCH RICHARD A. KULKA IN 1990.

most recent assessment in this series was a 1984 piece by Smith and Sheatsley, published in *Public Opinion*. NORC was one of four survey organizations participating in a 1968 national study of race relations for the National Advisory Commission on Civil Disorders, which was chaired by Otto Kerner and known informally as the Kerner Commission.

Since 1972 racial tolerance has been measured by the NORC General Social Survey. A number of researchers, including GSS Director Smith, have continued the investigations in this area. Recently, a new series of GSS questions addressing racial stereotypes was added to the survey. The battery of questions, written by a committee chaired by sociologist Lawrence Bobo of the University of California at Los Angeles, demonstrated that high levels of racial stereotyping continue to characterize intergroup relations. The majority of whites believe, for example, that African-Americans are more likely than whites to prefer to live off welfare, and are more

violence-prone, less intelligent, and less patriotic than whites. Commenting on these data in the *Cleveland Plain Dealer*, civil rights activist Julian Bond said, "It's just amazing to me. Or maybe it's not amazing. If these statistics are true the majority of white Americans are racists and that's frightening."

NORC has also studied the opportunities for minorities in the educational and job markets, and issues related to schools and housing. Two surveys are emblematic of such research concerns, a 1964 study of African-American attitudes toward their personal circumstances and a 1966 survey of African-Americans in northern cities conducted for the U.S. Commission on Civil Rights.

In the wake of riots in major urban areas in 1964 a planned University of California study on attitudes toward Jews, with data collection by NORC, was expanded to include the attitudes of African-Americans toward their personal circumstances, all whites, the community, and the civil rights movement. The survey had several different samples. One was a representative sample of African-Americans living outside the south. In addition, samples were selected in four urban areas—Atlanta, Birmingham, Chicago, and New York. Gary T. Marx, who analyzed these data in his 1969 volume *Protest and Prejudice*, writes of the selection of these cities:

These four were chosen because they are among the most important urban centers of Negro population, and differ in region, history, and present Negro-white relations. It was hoped that differences in the climate of Negro opinion among these four urban centers, and between them and the general metropolitan sample, might yield insights.

According to Marx, the insights revealed by the diverse sample included the finding that the

majority of African-Americans did not harbor anti-white hostility, and "those lowest in exposure to the values of the traditional South were the least anti-white."

The Commission on Civil Rights survey of African-Americans in northern urban areas was conducted in 1966. In twenty-five northern metropolitan areas a sample of 1,651 African-Americans were interviewed for two hours in person on a wide range of discrimination and segregation issues. For comparison, 1,326 whites were also surveyed. The effort documented denial of employment and housing and recorded the distrust, anger, and frustration spawned by discrimination, prompting investigator Robert L. Crain (1972) and his co-author Carol Sachs Weisman to write:

We don't think we are being harsh or extreme when we say that the North has failed. The dream represented by the North has become a nightmare. Many writers have, in trying to explain this, argued that we must give black migrants from the south time to adjust to northern urban life, to develop nonagricultural skills, to send their children to urban schools, and to learn how to live in, and take advantage of, the city. Unfortunately, the data from our survey suggest that life in the North is so disruptive that migrants from the South are actually better off than those who were born in the North.

Overall, NORC research on race relations has served to illuminate bigotry. Wendell Wilkie's 1943 warning is useful to recall in light of recent data:

The attitude of the white citizens of this country toward the Negroes has undeniably had some of the unlovely charac-

teristics of an alien imperialism—a smug racial superiority . . .

Integration

NORC began efforts to study the effects of integration in 1949 when Shirley A. Star, a Senior Study Director, led an effort that investigated the reactions of white residents of two Chicago neighborhoods to African-Americans moving into those neighborhoods. From the late 1960s to the present day the number of such surveys has expanded and NORC research projects have focused on desegregation in housing and in schools. Student attitudes toward integration were assessed in 1963 and community attitudes toward school desegregation were assessed in 1964, 1965, 1967, and 1974-75.

In 1967, NORC conducted a national study of integrated neighborhoods. The study was designed to obtain a comprehensive portrait of their economic and social conditions and secure an understanding of respondents' attitudes toward and perceptions of those neighborhoods. The study, directed by Norman M. Bradburn, Seymour Sudman, and Galen Gockel, began in 1965 with a pilot study conducted in Washington, Atlanta, and San Jose. The pilot study was supported by a Ford Foundation faculty research grant from the University of Chicago Graduate School of Business. It led to the 1967 study supported by the National Institute of Mental Health. Complex sampling procedures eventually yielded 200 neighborhoods for study and an additional 100 neighborhoods-fifty all white and fifty all black-as controls. The survey instrument explored in detail both attitudes and participation in social or community groups. During the late 1970s, NORC researcher and University of Chicago professor Richard Taub directed an ambitious survey on racial integration in Chicago. Called the Chicago Neighborhood Survey, this effort consisted of a random-digit dialing telephone survey conducted among residents of eight Chicago neighborhoods, each undergoing economic and social change and some in the process of racial integration. Attitudes toward integration were a key component of this study, but respondent views of community attributes were also gathered. Respondent perception of neighborhood resources, of the neighborhood as an investment, of area crime, and expectations for the neighborhood's future, were among the factors used to provide a more complete picture of community attitudes (Taub, Taylor, & Dunham, 1984).

In the middle 1980s NORC conducted the innovative and complex Urban Poverty and Family Life Survey for William Julius Wilson, a University of Chicago sociologist and widely recognized national expert on the study of urban poverty. The UPFLS, conducted in several Chicago neighborhoods, explored issues of community participation, housing, work, and family life among a sample of both poor and extremely poor persons. Wilson is one of a number of sociologists associated with NORC who have written widely on urban structure and segregation. Another is Douglas S. Massey of the Ogburn-Stouffer Center for the Study of Population and Social Organization. In 1988, Massey testified before the U.S. House of Representatives Committee on Banking, Finance, and Urban Affairs, Subcommittee on Housing and Community Development, saying:

Our research suggests that blacks still face strong barriers to full acceptance in American society. In urban areas containing large black populations, high levels of residential segregation persist, and suburban residence remains out of reach to most black citizens. Even when suburban residence is achieved, the level of black residential segregation remains high. These patterns cannot easily be attributed to socioeconomic factors, to black desires for segregation, or to a lack of knowledge of residential opportunities among blacks. The most likely explanation appears to be the persistence of white prejudice against blacks as potential neighbors, which leads to active and passive discrimination in housing markets. The high levels of residential segregation imposed on blacks because of their race has a variety of deleterious consequences, forcing aspiring middle class families to live in poor neighborhoods with few resources and limited opportunities compared to white families.

Anti-Semitism

Concurrent with, and often intertwined with, research on black-white relations were studies of attitudes toward Jews. NORC's first survey question on anti-Semitism, from 1942, asked whether Jewish people have too much, too little, or an appropriate amount of influence in business. Fifty-one percent of respondents said too much (NORC, 1942b). In 1944, NORC surveyed American attitudes toward the establishment of a Jewish state in the Levant.

NORC conducted a study of anti-Semitism in Baltimore in 1947. Data from this study were employed by Tom W. Smith to analyze the context of the racist and anti-Semitic statements appearing in the recently published private diary of journalist H. L. Menken. Of the survey data Smith (1990b) wrote:

The profile of ethnic prejudice in Menken's Baltimore does disclose widespread racism and intergroup prejudice, but it also reveals a complex pattern of relative likes and dislikes and contradictory support for both segregation and equality.

Smith noted that Menken had a number of Jewish friends, encouraged black writers, and opposed segregation of municipal facilities, illustrating in his personal life the same contradictory attitudes that NORC found among his contemporaries. Later, in 1958, NORC conducted a study of anti-Semitism in Highland Park, Illinois (Allswang and Bova, 1964) and during the 1960s NORC worked with the Survey Research Center at the University of California investigating anti-Semitism as part of its Research Program on Patterns of American Prejudice. Data from the California program were used to develop a picture of anti-Semitism in the United States, and to understand the form such prejudice took among persons of different demographic groups (Quinley and Glock, 1979; Selznick and Steinberg, 1969; Marx, 1969). Questions on anti-Semitism continue to be part of the NORC General Social Survey. GSS Director Smith recently analyzed the GSS data and other surveys on anti-Semitism for the American Jewish Committee. Smith (1991) concluded that American anti-Semitism was experiencing a long-term decline, but warned that anti-Semitism is not:

. . . a spent force. Jews are recognized as an ethnic and religious out-group and are judged and treated in a distinctive manner accordingly. While at present the negative repercussions of Jewish identity are limited, hostility to Jews because of their material success, ties to Israel, or some other reason could manifest itself in the future.

Prejudice against estatis

NORC research on attitudes toward Asians dates from World War II, when national and local samples were queried on their attitudes toward the Japanese. Three national surveys conducted between February, 1942, and June, 1943, found that the percentage of Americans believing the Japanese to be incurably warlike jumped from

48 to 62 percent. This view remained high throughout the war, but dropped substantially by May of 1946 (NORC, 1943; NORC, 1946b & e). Post-war NORC data did reveal that, in 1946, substantial numbers of Americans thought that during the war years Japanese living in this country (including American citizens of Japanese ancestry) were guilty of sabotage, and a majority of Americans thought these individuals guilty of spying for Japan. (This despite statements from the Office of War Information, the Federal Bureau of Investigation, and others asserting that no Japanese person or American of Japanese extraction living in the United States had been convicted of either offense during the war.) The Minneapolis Star-Journal (1946) commented on the contrast between the American public's perception of nisei loyalty, as revealed by the NORC survey, and the facts presented by the FBI, in an editorial that read in part: "Although it is humiliating to read their tabulations, NORC pollsters have performed a public service in spreading the truth about Nisei loyalty "



CUPPENT PERSONNEL DIRECTOR STEPHEN C GOLDST. IN 1992

Results of NORC surveys of attitudes toward the Japanese were published in Japan by Soryu-sha in 1950. NORC donated the royalties from the publication to Japanese educational and charitable causes (Hart, 1950).

Two NORC-trained researchers, Toshio Yatsushiro and Iwao Ishino, conducted surveys of internees in the Poston, Arizona, relocation center in May and June of 1943. These surveys investigated the views of the interned Japanese and Japanese-Americans on their future. The Poston project consisted of four surveys-two in English and two in Japanese-among both the nisei and issei (second and first generation Japanese-Americans). These were part of the Sociological Research Project of the Colorado River War Relocation Center (as Poston was officially known) headed by Alexander H. Leighton, then of the U.S. Navy. Yatsushiro and Ishino also conducted a small survey of Denver residents of Japanese ancestry (Connelly, 1943). Field, who agreed to train Yatsushiro and Ishino as a courtesy to the project, was eager to conduct other surveys of the Japanese in the camps. He suggested to the Office of War Information that the camp inmates be surveyed on their reactions to the themes used in U.S. propaganda broadcasts to Japan, a project that was never conducted (Field, 1943a). Independently, Paul Lazarsfeld (1942) proposed a similar study using European refugees to John Houseman, then of the Voice of America, to test the themes of broadcasts to occupied Europe. Attitudes toward Asians are also investigated by the GSS. Most recently, data from the 1990 ethnic images series revealed widespread prejudice against Asians.

Hispanics in the United States

The importance of ensuring that Hispanic-Americans are appropriately represented in the data gathered for all NORC surveys has led to a number of company-wide efforts in the areas of

interviewer recruitment and questionnaire design. NORC has also conducted an assessment of its translation techniques that led to improved renderings of instruments written in English into the Spanish dialects spoken by most Hispanics in the U.S.

The ability to obtain high-quality, reliable data from Hispanic samples (and there are large Hispanic samples in such surveys as the National Longitudinal Surveys of Labor Market Experience/Youth Cohort) has been accompanied by an expanded research program addressing issues of discrimination, led by Douglas Massey. Massey's work on Hispanic immigration is described in the section of this report devoted to religion and ethnicity. Massey's studies on urban segregation, noted above, have included the experiences of Hispanic-Americans as well as those of African-Americans. A 1989 Sociology and Social Research article by Massey and his colleague Nancy A. Denton explored the segregated housing situation of Cubans, Mexicans, and Puerto Ricans living in urban areas. The analysis encompassed both segregation from other members of Hispanic groups, and also from non-Hispanic Americans.

Another NORC researcher, Marta Tienda of the University of Chicago, has written extensively on discrimination and poverty among Hispanics. Like Massey, Tienda's NORC research home is the Ogburn-Stouffer Center. In addition, prejudice against Hispanics is explored by questions on the GSS.

Religion and Ethnicity

Research on religion and ethnicity is a mainstay of NORC. Often ethnic research at NORC takes on the perspective of studying the variety of behaviors and attitudes in a particular ethnic or religious group rather than studying one group's attitudes toward other groups. Early surveys of

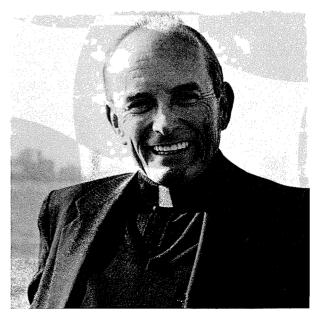
African-Americans might fall into this classification, except that these were more firmly grounded in the race relations tradition, seeking to help in untangling the complex skein of distrust and prejudice that has marked blackwhite relations.

Research on religion and ethnicity does not date from the early years of the organization's history, although early studies of religious attitudes were discussed in the 1940s and war-related efforts did assess attitudes toward citizens of Axis countries. Research into religion and ethnicity began in earnest in 1961 with the completion of "The Influence of Religion on Career Plans and Occupational Values of June 1961 College Graduates," a University of Chicago Ph.D. dissertation by NORC researcher Andrew M. Greeley.

Since then Greeley, an NORC Research Associate, has written a number of books on religion and ethnicity in the United States. He has devoted over thirty years to dispelling myths associated with immigrants and to chronicling immigrant realities. A Roman Catholic priest, professor of sociology at the University of Arizona, and a 1991-92 visiting professor at the University of Chicago, Greeley has devoted special attention to the study of Catholics, both in the U.S. and overseas, and also to the study of ethnic groups. These have included important and sometimes ground-breaking studies of the experiences and attitudes of the Irish and Hispanics. Data on white ethnics from seven NORC studies conducted between 1963 and 1972 served as the basis of Greeley's 1974 volume Ethnicity in the United States: A Preliminary Reconnaissance. This book explored the variation in social attitudes, religious belief, and political attitudes among eight white ethnic groups. Greeley's collaborators included longtime NORC researchers Norman H. Nie and William C. McCready.

A number of these studies of white ethnics were conducted through the NORC Center for the Study of American Pluralism, headed by Greeley and later renamed the Cultural Pluralism Research Center. Related work is now done by the Ogburn-Stouffer Center. Recent initiatives in the study of Hispanic immigration include Massey's surveys of Mexican immigrants to the U.S. and studies he has conducted in the provinces of Mexico that supply the most immigrants to the U.S.

Beyond these research programs on white ethnics and on Hispanics, a substantial number of other studies have focused on religious activities in the U.S. and overseas. Greeley has devoted a number of years to understanding the differing religious experiences of Catholics and Protestants, using as a research tool specially designed questions that are part of the NORC General Social Survey. GSS Director Smith (1988) has written on religious denominational affiliation, using questions from the GSS that seek information on the denomination respondents were



RESEARCH ASSOCIATE ANDREW M. GREELEY.

raised in and what church they now attend, along with similar information for spouses.

NORC has also studied particular religious groups and organizations. Such studies have included a 1966 survey of members of the Unitarian church, a study of the attitudes of Chicago Catholics toward racial integration, a study of Franciscans, of active and recently resigned Catholic priests, and a 1979 national study of young Catholics. The social effects of Catholic education were studied in 1963 and 1974, and Greeley and James S. Coleman are among a number of researchers using NORC data to conduct ongoing assessments of the effectiveness of Catholic high schools.

Health and Medical Care

Research on health and medical care at NORC embraces both broadly and narrowly focused studies. NORC has assessed the health care needs of specific populations, such as sufferers from particular diseases, and has collected data to provide a comprehensive portrait of the U.S. health care system. In 1989, NORC created a Department of Health Surveys within its Survey Research Group to manage the varied health-related research efforts undertaken at NORC. It is headed by Richard M. Rubin.

Health Care Needs

Disease-linked research. A substantial portion of NORC's early research on health care was disease-specific. In 1945, NORC conducted two important studies focusing on cancer. One was a survey of a national sample of physicians, in which respondents discussed the role of medical schools and other physician-education efforts related to cancer. The second was a survey of a national sample of adults, which investigated knowledge of cancer and cancer care techniques. The early cancer studies were the precursors of two 1980s investigations, one assess-

ing the effectiveness of the Community Clinical Oncology program for the Fred Hutchinson Cancer Research Center and the other investigating the treatment of cancer among older women sponsored by Memorial Sloan-Kettering.

Studies of environmental hazards and work-place toxins were conducted during the 1960s and a large-scale study of the effects of Vietnamera exposure to the defoliant Agent Orange on members of the U.S. armed services, was conducted throughout the 1980s under subcontract to Science Applications International Corporation. A follow-up survey of these veterans is being conducted by NORC and SAIC in 1992.

Substance abuse. NORC's 1946 study of drinking behavior and alcoholism, conducted with Rutgers University, was the first of over a dozen alcohol and drug-linked efforts. Of these, one particularly innovative study is a longitudinal study of women's drinking conducted for researchers at the University of North Dakota School of Medicine, begun in 1981. This was the first national study of drinking patterns of women and is especially valuable because it contains sufficient numbers of women who drink heavily to draw reliable conclusions about longterm heavy alcohol consumption. Coprincipal Investigator Sharon Wilsnack (1991), in comparing this study to other longitudinal studies of drinking, writes:

A majority of longitudinal studies in a recent comprehensive survey totally excluded female respondents. . . . Those longitudinal studies that do sample women frequently have insufficient numbers of heavy and problem drinking women for multivariate analysis, due to the lower rates of heavy drinking and drinking-related problems among women than among men.

Another substance abuse study was a threephase 1974-82 effort that interviewed a sample of former drug abuse treatment clients on subsequent drug use. This evaluation of the Drug Abuse Reporting Program was conducted in two stages. Principal investigator for the 1970s data collections was Saul Sells of the Texas Christian University. Dwayne Simpson of Texas A&M was the principal investigator for the 1982 follow-up. NORC achieved response rates ranging from 79 to 87 percent seeking information on illegal behavior from this study's highly mobile, lowincome sample. Because these data included information on illegal or socially undesirable behavior, information linking respondent names with the data was held outside the U.S.

Beginning in 1972 NORC interviewed 900 recently returned Vietnam veterans on drug use before, during, and after their military service overseas. The study, led by Washington University's Lee N. Robins, investigated the kinds of drugs used, the circumstances of drug use, and the use of Veterans Administration addiction treatment services. Respondents were also asked to provide urine samples. Three years later the men were re-interviewed (Robins, 1974).

Mental Health. The first national research effort on mental health was Shirley Star's 1950 national study of American attitudes toward mental health and the mentally ill. This study consisted of ninety-minute personal interviews with 3,500 respondents. It revealed that the general conception of mental illness was a condition of extreme psychosis, accompanied by violent behavior (Halbert, 1969). Careful exploration of respondent definitions of mental illness led Star (1955) to conclude that:

At first sight, then, it appears that a majority of the American public does distinguish,

roughly, between "insanity," on one hand, and "nervous conditions," on the other. . . . The fact is, however, that though people can be pinned down to this more inclusive definition of mental illness by explicit questioning, they seldom stand by it. That is, whenever people are encouraged to talk about mental illness, without being pressed for their definitions of the term, they tend to slip into a usage which corresponds to their original spontaneous identification of it with psychosis.

In 1962-63, Norman M. Bradburn directed two pilot studies in four Illinois towns aimed at discovering how environmental stress effected the happiness of respondents. The pilot tests were fielded in communities selected to exhibit different levels of economic prosperity. These pilot studies led to a larger effort to assess feelings of well-being that was conducted in 1963-64. For this panel study respondents were interviewed twice and members of selected subgroups were interviewed four times. One of the most widely used products to emerge from this research was the Affect-Balance or Bradburn Scale, a measure developed by Bradburn as an indicator of happiness (Bradburn with Noll, 1969).

Such research produced both satisfaction and unhappiness among members of the press as well. Robert C. Toth, writing in the *New York Times* in 1963, called the 1962-63 study "pioneering," and cited a key finding—that happiness depends on positive satisfactions rather than the absence of negative experiences—suggesting that the study would be of practical use to psychiatrists. Joseph Wood Krutch, writing in the *Saturday Review*, dismissed the study as utterly subjective. Wood wrote "There is no way of correlating external situations or even behavior



CURRENT ASSOCIATE DIRECTOR AND SPECIAL ASSISTANT TO THE DIRECTOR PEARL R. ZINNER IN 1990.

patterns with the inner state that constitutes 'happiness'."

In 1973-74 NORC New York Office Director Pearl R. Zinner oversaw the execution of one of the most complicated follow-up data collections in NORC history. In the early 1950s, psychiatrist Thomas A. C. Rennie of Cornell University began the Midtown (Manhattan) Study, a survey that sought to capture how residents of midtown Manhattan are "dispersed along the entire spectrum of mental health variations . . . " (Srole et al., 1975, emphasis Srole's). Twenty years later, NORC conducted the follow-up to this study, reinterviewing the respondents from the 1953 study-both those who had remained in New York and those who had left. Many interviews were conducted in Europe and Asia as well as across the United States. Besides the length of time between interview and follow-up, the study had two other interesting characteristics. First, the survey instrument was quite long. It had 385 main questions with hundreds more branching questions. The instrument included fifty-five observational items and a number of open-ended items. It could take as long as four hours to administer. Second, while the initial survey had used clinical professionals to administer the instrument, NORC used professional interviewers. One surprising finding from the follow-up was a substantial improvement in the mental health status of women. In 1954, 21 percent of women aged forty to forty-nine years suffered "emotional impairment sufficient to interfere with daily living," compared with 9 percent for a similar group in 1974 (Hacker, 1979).

The NIMH-sponsored Epidemiological Catchment Area program also used professional interviewers instead of clinical professionals. The study investigated the extent of mental disorders in Baltimore, New Haven, North Carolina, Saint Louis, and Los Angeles, using an instrument called the Diagnostic Interview Schedule (DIS) (Freedman, 1984). Under the direction of Saint Louis Principal Investigator Lee N. Robins, NORC collected the data for Saint Louis in 1981. In a 1984 article comparing preliminary findings from New Haven, Baltimore, and Saint Louis, Robins and her colleagues stated that anti-social personality and alcohol abuse were the predominate disorders among men while depression and anxiety were predominate among women. The researchers also expressed surprise that persons sixty-five years or older had the lowest lifetime prevalence of psychiatric disorders, and persons aged twenty-five to forty-four years had the highest. The researchers had expected that having already passed through much of the portion of the lifecycle where such disorders are manifest, older persons should have exhibited rates the same as or higher than found among the younger persons.

Another mental health study that used NORC's services was the 1964-70 Woodlawn Mental

Health Study that investigated the effects of poverty-related stress on a sample of Chicago school children. The study began when the children were in the first grade. NORC helped design the interview schedule and conducted companion interviews with the children's mothers (Kellam et al., 1975). In 1992, NORC will conduct a follow-up to this survey, seeking out members of the original sample of first-graders who will now be in their late twenties or early thirties. The questionnaire will focus on employment, family formation activities, and psychological well-being. The follow-up effort is led by Principal Investigator Margaret Ensminger of Johns Hopkins University.

The General Social Survey also contains a number of questions on happiness, satisfaction with one's circumstances, and alienation. These are valuable in making comparative analyses of the relationship between demographic and economic circumstances and happiness, and also understanding the impact of national and world events on personal well-being.

Special populations. A number of NORC surveys have addressed the health care needs of special populations. These have included studies of medical care needs of the elderly, minority group members, AIDS patients, and the poor; two studies of cigarette smoking; and a survey of physicians on venereal disease reporting. In 1991, in association with Robert J. Blendon of the Harvard University School of Public Health, NORC began a national survey that would chronicle the experiences of low-income Americans as they use the public programs designed to supply them with health care. Among the study's aims are two important comparisons: the experiences of different segments of the low-income population (such as the elderly or minority group members) in safety net programs designed for their particular situation and the

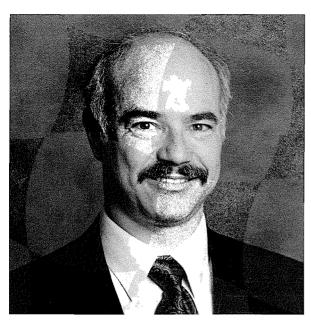
overall health care experience of the poor as compared to the general population. The study also seeks to establish where health-related problems rank on the list of important problems faced by the poor. The survey is supported by the Henry J. Kaiser Family Foundation.

Between 1968 and 1971 NORC conducted separate surveys in nine urban and two rural low-income areas to assess the need for and functioning of neighborhood health centers. The study was supported by the centers' funding agency, the U.S. Office of Economic Opportunity. Approximately 1,500 respondents were interviewed in each of the surveys.

In 1952, NORC participated in the innovative Hunterdon County Study. The project was conceived to document the extent and effects of chronic illness in a rural setting, in this case Hunterdon County, New Jersey. It was a companion to a Baltimore assessment of chronic illness in an urban setting. The project had several components. In the spring an NORC-developed self-administered health inventory was distributed to all Hunterdon County residences. Later that year, NORC surveyed 4,000 households, collecting detailed information on health circumstances of and medical care use by approximately 13,000 individuals. Later still, subsamples of this population were recruited for clinical examination. NORC assisted in the design of the subsamples and performed data processing for the clinical evaluation data and other related tasks (Trussell & Elinson, 1959).

Health Care Systems

NORC is also heavily involved in "big picture" health care studies. NORC has maintained a longterm relationships with the U.S. Department of Health and Human Services, a major sponsor of research in this area, and with other organizations that sponsor health services research.



CURRENT DIRECTOR OF THE WASHINGTON OFFICE DEAN R. GERSTEIN IN 1992.

In 1954, NORC began its longstanding relationship with the Health Information Foundation. The first HIF study, the Costs of Medical Care, interviewed a national sample of 2,809 on health care service use, costs associated with health care, and the distribution of health insurance coverage. A related project, also sponsored by HIF, compared Blue Cross plans in Boston and Birmingham in the same year. The 1954 effort was followed in 1955 by the study Attitudes, Information, and Customary Behavior in Health Matters sponsored by HIF and the American Cancer Society.

From these initial efforts there came a series of national and physician surveys sponsored by HIF or by its successor, the University of Chicago's Center for Health Administration Studies (CHAS), and others sponsored by the federal government. The 1955 effort took into account such issues as prescription drugs, the polio vaccine, health insurance, dental care, and hospitals and hospital food. Providers, such as

physicians and pharmacists mentioned by respondents, were also surveyed, an innovation that is related to the physician and facility followback surveys conducted in the 1986-1991 National Medical Expenditure Survey and its predecessor, the National Medical Care Expenditure Survey (NMCES). Beginning in 1958, NORC repeated the 1955 study with a new national sample to study change in medical expenditures over the period.

In their comprehensiveness the 1953 and 1955 studies laid the groundwork for all of NORC's future medical care research. In many cases, the efforts represented the first time that NORC had addressed these topics. For example, utilization of health care services, comprehensively addressed during the earlier studies, was the subject of efforts conducted for HIF (later CHAS) and for the federal government in 1963, 1970, and 1975. In 1977 NORC conducted the National Medical Care Expenditure Survey for the U.S. Department of Health, Education, and Welfare. The study was done in association with the Research Triangle Institute. NMCES was the first longitudinal study addressing these issues. It was followed in 1980 by the National Medical Care Utilization and Expenditures Survey (NMCUES), and in 1986-1991 by the National Medical Expenditure Survey (NMES). NMES was, at the time of its initiation, the largest health care survey ever issued. Its design included a longitudinal survey of a household sample of 14,000, a survey of caregivers and next-of-kin to 11,000 persons residing in mental institutions and homes for the aged, a survey of 2,000 American Indians and Alaska natives, and followback surveys of physicians and health insurance providers. Over the past fifteen years, NORC has conducted several HHS-sponsored studies of physician practice arrangements, costs, and income and also the ten National Ambulatory Medical Care Surveys, which collected data on

caseload and diagnosis from a sample of officebased physicians.

In 1991, NORC conducted the National Survey of Functional Health Status for the New England Medical Center. The survey investigated the effects of the cost containment efforts in the area of health care delivery on the patients' health status and ability to function.

In addition to the dental care items on the 1955 Attitudes, Information, and Customary Behavior survey, NORC addressed dental research again in 1959 with a survey of dentists and other oral health professionals sponsored by the American College of Dentists and the University of Chicago; in 1965, with a survey of families on dental services utilization; in 1982-85, with a survey of dentists seeking to assess their knowledge of the infection endocarditis; and in 1988 when, in association with CHAS, NORC designed the questionnaire and training materials for a tennation survey of oral health treatment sponsored by the World Health Organization.

NORC began to study the utilization of health insurance in 1944 with a national survey on socialized medicine. Health insurance was an important component of the 1954 and 1955 surveys. It was the focus of a 1959 survey of members of the International Association of Machinists sponsored by that union and of almost all the national medical care surveys sponsored by HIF, HEW, and HHS.

Between 1975 and 1981 NORC participated in the Health Insurance Experiment under subcontract to the Rand Corporation. HIE was a massive undertaking, a five-year experiment that compared a sample of families provided with health insurance with a sample not given insurance. NORC conducted more than 20,000 interviews over five years.

Research in New York

While NORC was addressing national health care issues in the surveys described above, it was also conducting a number of locally-focused efforts from its New York office. (The New York office also directed the national, large-scale studies NMCES, NMCUES, and a four-decade series of telephone surveys of physicians conducted for John Colombotos of Columbia University.)

Among the surveys directly focused on the New York City area are an almost continuous series of studies devoted to health care use by the poor. The first of these, a 1957 effort, evaluated the use of and attitudes toward two health insurance plans in New York by labor union members who were subscribers. This was followed by an eight-year (1961-1969) investigation of the use of medical facilities by welfare clients. From 1957 to the present, an array of studies addressed such topics as infant welfare, family planning, family health, health care programs for the eld-



LONGTIME NORC STAFF MEMBER FANSAYDE CALLOWAY JONES (NORC 1950-1984) IN 1981.



LONGTIME NORC ASSOCIATE DIRECTOR FOR SURVEY OPERATIONS CELIA HOMANS (NORC, 1966-1987) IN 1981.

erly, mental health, and the functioning of particular clinics and facilities. Some studies had a regional or city-wide focus, others addressed particular neighborhoods or parts of neighborhoods. Among these efforts was the nation's first study of the needs of AIDS patients, conducted for the state of New Jersey in 1984, an early survey on the attitudes of physicians toward abortion fielded in the 1970s, and several studies of health issues affecting poor and minority New Yorkers. Sponsors of such research included Columbia, Cornell, Fordham, and New York universities; the Albert Einstein College of Medicine; city, state, and federal agencies; hospitals; health insurance providers; and private social welfare organizations.

Labor Force

The study of work and occupations in the United States received an enormous boost during the Second World War, when the federal government embarked on an effort to direct the production and consumption of goods on a scale never before or since attempted. Of the 160 studies NORC conducted for the federal government related to the war, nineteen addressed employment-related issues and nearly fifty were focused on home-front issues related to the war economy. The latter group included surveys addressing such issues as the collection of waste fats, dealing with the tire shortage, gasoline rationing, and food conservation. These pictures of domestic life were very important in appraising the needs of the population.

Today, labor research at NORC encompasses a broad range of studies on work experience, training, consumption, and the study of the highly intricate relationship between education, age, experience, and worker satisfaction and success. A key component of labor force research has been the collection of detailed labor histories, most notably in the conduct of the National Longitudinal Surveys of Labor Market Experience/Youth Cohort (NLS/Y).

The just treatment of employees by employers was an important concern of Harry Field's. Herbert Hyman (1991) notes in his memoirs that Field's populist sentiments are reflected in the name of the research company he founded in 1939 and ran until 1941, the People's Research Corporation. Field wrote in 1921:

Employers complain that the cost of production is greatly increased by the yearly labor turn-over, often 120 per cent. And nobody can dispute the fact. But, it is equally indisputable that, in spite of any improved labor conditions, and in spite of the most liberal welfare work, more will have to be done by the majority of employers, as well as by the government,—more and deeper thought given, more intelligent and further-reaching measures taken, more

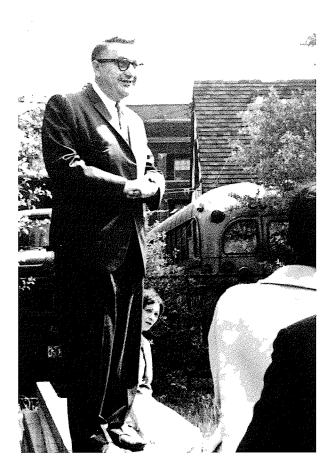
present profits devoted to the effective enlightenment of their human material—if the labor turn-over is to be perceptibly reduced . . .

NORC's studies of working life between 1941 and 1947 were all related to the war effort and the postwar situation—the latter including a number of studies on foreign trade and tariffs. Between 1947 and 1965, NORC conducted a handful of labor force studies. These included three of the esteem in which particular occupations are held. All of the other efforts now have a certain historical importance. But the studies of occupational prestige have proven to be of enduring research use, have made NORC's name known around the world, and represent a continuing theme in NORC efforts.

Occupational Prestige

NORC's first occupational prestige study, the first national survey of its kind, was conducted in 1947. It was directed by Paul K. Hatt and Cecil C. North. The status of ninety occupations were rated using a national sample of 2,920 adults and teenagers. The status categories available were excellent, good, average, somewhat below average, and poor. From this study came what was called the North-Hatt occupational prestige scale. Further work was done in 1963, 1964-65, and 1989. In 1963 the same occupations were rated in the same manner by a sample of 651 respondents. The 1964-65 studies ranked 204 occupations. That data collection was conducted at NORC by Robert W. Hodge, Paul M. Siegel, and then-Director of NORC Peter Rossi. The scale derived from the later effort came to be known as the Hodge-Siegel-Rossi scale or, more simply, the NORC occupational prestige scale. Donald J. Treiman used the results of these studies in his 1977 volume comparing international occupational prestige data.

In 1989, an occupational prestige module was added to that year's General Social Survey. The module, covering 740 occupations, was designed by Hodge, then a professor in the University of Southern California Department of Sociology. Hodge's fellow researchers were Judith Treas of the University of California at Irvine and Keiko Nakao of the University of Southern California. Treas and Nakao continued the study following Hodge's death in 1989. On the 1989 survey, high prestige was accorded to professionals, academics, government officials, and astronauts. Except for the addition of new occupations, such as astronaut, the 1989 rankings were similar to those of 1947.



THEN-DIRECTOR PETER ROSSI AT THE GROUNDBREAKING FOR THE NORC BUILDING AT 6030 SOUTH ELLIS AVENUE IN CHICAGO IN 1965.

Other Research Since 1960

Occupational prestige aside, NORC labor force surveys since 1960 have fallen into three areas, each with a practical application. The first is the evaluation of job training programs. Such studies were conducted in 1964, 1966, 1969-71, and 1986-1991. The most recent one, an evaluation of the programs of the Job Training Partnership Act, is a classical experiment in which JTPA applicants are randomly assigned to the program or to the control group which was excluded from the program. Both treatment and control groups were surveyed repeatedly using computer-assisted telephone interviewing if the respondent had access to a telephone, and in person if the respondent did not. The Congressionally-mandated evaluation will help establish whether the program is effective in helping the unemployed re-enter the labor force.

The second category of research is the collection of elaborate labor histories to explore lifecycle labor force behavior. NORC is the data collection subcontractor for the National Longitudinal Surveys of Labor Market Experience/Youth Cohort (NLS/Y). The NLS/Y is an ongoing effort that investigates the labor force behavior of 11,500 youth. It is sponsored by the U.S. Department of Labor's Bureau of Labor Statistics and conducted under subcontract to the Center for Human Resource Research at Ohio State University. The youth cohort survey is part of the National Longitudinal Surveys program begun at Ohio State in 1966. The survey respondents-a national sample of Americans with oversamples of African-Americans, Hispanics, and economically disadvantaged whites-were first interviewed in 1979 when they were fourteen to twenty-one years old. NORC has interviewed them annually since then. The interview covers educational and employment history and includes some attitudinal measures. The 1989 NLS/Y included an experiment in which part of the data collection—consisting of a representative sample of 328 interviews in Ohio—was conducted using computer-assisted personal interviewing (CAPI). In 1990, a 5,000-case split-sample CAPI experiment was conducted as part of the same survey.

In 1986, 1988, and 1990, a special supplement to the NLS/Y was fielded in which data were collected on the biological children of female respondents; this supplement is a valuable source of data on the children's cognitive, emotional, and physical development over time. The supplement is supported by the National Institute of Child Health and Human Development. (Because the survey collects household data, the earlier rounds yielded information about the respondents' own parents as well, thus securing information on three generations.) The Principal Investigator for both the NLS/Y and the Child Supplement is CHRR's Randall J. Olsen.

Besides the child supplement, other supplemental data collections have been appended to the NLS/Y over the years. NORC Research Associate R. Darrell Bock led an effort in which interviewers administered the Armed Services Vocational Aptitude Battery (ASVAB) to members of the NLS/Y sample in 1980 in order to compare the aptitude of persons in the military with those in the general population. In 1988, three additional supplements were sponsored by the National Institute on Drug Abuse, NICHD, and the National Institute on Alcoholism and Alcohol Abuse. NIDA supported a series of questions on illegal drug use, comparable to NLS/Y drug use data collected in 1984, but with an expanded section on cocaine. NICHD sponsored a supplement on respondent knowledge of AIDS, in part, to determine the level of knowledge among the persons most at risk, the young and economically disadvantaged. NIAAA sponsored a series of questions about family histories of problem drinking. Specialized analyses of the NLS/Y include the work of NORC Research Associate Thomas MaCurdy of Stanford, who is using the data to study the effect of unemployment insurance on labor market experiences.

There is the a third category of labor force research. Since the 1960s NORC evaluated the needs of particular professions. Journalists, trial judges, physicians, and lawyers are some of the groups who have reported on their professional lives on NORC surveys. NORC has also conducted a series of studies on farmers, beginning with war-linked efforts during the 1940s and continuing through several studies in the 1970s and 1980s, that address such issues as the use of information by farmers and the role of women in farm management.

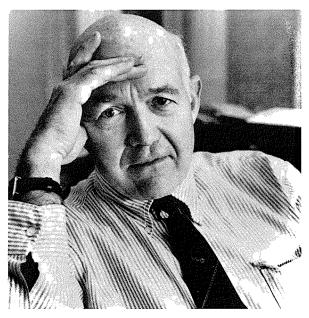
Education

As it is with so many sections of this report, the story of education research at NORC begins in Denver in 1941. The study number is 101. It was the first bit of data collection NORC ever did. NORC surveyed over 1,000 residents of Denver to assess the need for adult education programs and to determine whether the adult education courses then offered by the University of Denver were of the type desired and were scheduled at convenient times for the night school student population. This study represented a very practical return on the University's gamble in sponsoring NORC in the first place. Another early NORC study addressed issues of self-education. In 1945, NORC conducted a study sponsored by the American Library Association that surveyed persons in seventeen cities to find out whether and why people used their public libraries.

NORC research on education from 1945 to 1958 was eclectic. Small studies were conducted, such as an investigation into the readership of the magazine *School Life* and an evaluation of the

Great Books Program. The latter study, led by James A. Davis, featured NORC's most entertaining questionnaire. The Great Books Foundation of Chicago had organized adult study groups that read and discussed classics of western literature. In 1957-58, the Fund for Adult Education commissioned NORC to evaluate the effect of participation in these discussions on the knowledge and thinking of the participants. The portion of the NORC questionnaire investigating historical knowledge featured cartoons on historical topics. At another point respondents were asked to evaluate a poem (Davis, 1964).

In 1958, NORC conducted the first study in what might be thought of as a new kind of education research. In that year James S. Coleman, along with Peter H. Rossi, Phillips Cutright, and Walter Wallace, launched the Study of High School Climates. Eight thousand five hundred collegebound seniors from northern Illinois were surveyed, along with their parents and teachers. The students were later re-surveyed during their first year in college. High School Climates was



RESEARCH ASSOCIATE JAMES S. COLEMAN.

the first NORC study to address the issue of school social systems, and the impact of the system on the student. It also introduced the concept of assessing whether the student's plans were ever realized. This is a major component of current education research.

In 1961, NORC also conducted a large survey of college students, College Career Plans, which interviewed 33,898 members of that year's college graduating class. Davis, Norman Bradburn, and Joe L. Spaeth were the study directors for this effort. Over two dozen reports, papers, and articles were produced from this study and its follow-ups. These focused on the graduates' assessments of their educational experience and that of their fellow students, and on their plans for the future. College Career Plans was repeated for the class of 1964.

A technological revolution served as the basis of another NORC education study—a 1965-66 investigation into the extent of photocopying in American elementary and secondary schools and colleges. The aim of this study, sponsored by two publishing associations, was to determine how much copyrighted material was being photocopied or otherwise duplicated. Its purpose was to inform the process of copyright law revision.

Longitudinal Surveys in Education

High School Climates and College Career Plans presaged later education research at NORC in two ways. They were large-scale panel studies and they took into account social environments in which the students existed. From these early efforts, NORC gained the experience necessary to play its role in the U.S. Department of Education's longitudinal studies—High School and Beyond, the National Longitudinal Study of the High School Class of 1972, and the National Education Longitudinal Study of 1988.

High School and Beyond (HS&B) began in 1980 with a nationally representative sample of public and private school seniors and sophomores, totaling approximately 58,000 persons. Data were also collected from the students' parents, principals, and teachers during the base year. Following that first survey, the students or a subsample of them were surveyed every two years through 1986. The 1986 data collection was conducted in conjunction with the fifth follow-up to an earlier Department of Education study, the National Longitudinal Study of the High School Class of 1972 (NLS-72). The NLS-72 fifth follow-up surveyed 14,000 individuals who had been high school seniors in that year. In 1992, NORC will re-interview 14,000 members of the HS&B sophomore cohort. The NORC Project Director is Barbara K. Campbell.

HS&B and NLS-72 provide irreplaceable information on the lives of American young peopledetailing not only their performance and experiences, but also their hopes and plans and the hopes and plans their parents have for them. Federal and academic education strategists can find in these longitudinal data a guide to which professions will have too many trained individuals in the future and which professions will have too few. For example, the dramatic decline in the numbers of persons choosing to make careers as teachers is graphically demonstrated by the data from these studies.

When the Department decided to obtain a picture of the next generation of high school students, it launched the National Education Longitudinal Survey of 1988 (NELS:88). Like the earlier efforts, NELS:88 encompassed the key adult actors in the lives of the 26,000 students surveyed. But NELS:88 also started with younger students than did HS&B and NLS-72. NLS-72 began with high school seniors, the youngest cohort of HS&B was high school sophomores.

However, students can drop out of high school before their sophomore year. The designers of NELS:88 wished to capture the experience of these dropouts, both before they leave school and after it. Thus, NELS:88 was begun in eighth grade, before most students could legally absent themselves from classes. Senior Survey Director Steven Ingels, the Manager of NORC's Education Studies Department, is the NELS:88 Project Director.

NORC researchers, both survey and academic professionals, have explored the datasets of these education studies in great detail. Coleman, an architect of the High School Climates Study, was the HS&B base year Principal Investigator. He is the author of a number of books and articles on the underlying causes of student success or failure that draw from these data. Two recent volumes by Coleman-High School Achievement, written with Thomas Hoffer and Sally Kilgore, and Public and Private High Schools: The Impact of Communities, written with Hoffer-use HS&B data to explore the differences in outcome between public and private schools. In Public and Private High Schools Coleman and Hoffer argue that Catholic schools enjoy an advantage over public schools because they provide a "functional community." A distinguishing characteristic of a functional community is that students know the parents of their friends, parents know other parents, and parents know teachers. This network helps create a context that fosters individual learning. Such networks are often lacking in large, inner-city public schools.

In 1990, Coleman and Acting Commissioner of Education Emerson Elliott were the featured speakers as the Department of Education released the base year NELS:88 data at a meeting of the Education Writers Association in Chicago. Elliott told the assembled reporters:

This study is especially timely because the data directly relate to a number of the national education goals that President Bush and the governors have established for the year 2000–reducing dropouts, improving students' academic performance, and decreasing the amount of drugs and violence in our schools. (*Bloomington* [Indiana] *Herald-Telephone*, 1990)

Other Education Research

Although the big, comprehensive, longitudinal studies became far and away the largest NORC efforts in education research, NORC also conducts narrowly focused education research, such as studies of particular school districts and programs, parochial education, the experiences of minority college and professional school students, and students in specialized programs. NORC surveyed the parents of children in Head Start programs during the 1970s in a nine-wave study called Follow Through that was conducted



CURRENT SPECIAL ASSISTANT TO THE ASSOCIATE DIRECTOR FOR SURVEY RESEARCH MIRIAM K. CLARKE IN 1990.



CURRENT SENIOR SURVEY DIRECTOR AND EDUCATION DEPARTMENT MANAGER STEVEN INGELS IN 1992.

in association with SRI, Incorporated. School integration was also an important research topic throughout the 1960s and 1970s. Studies were conducted in Chicago (1964), Boston (1974-75), and Philadelphia (1983), and a national study of desegregation was conducted in Northern urban school districts in 1965 and 1967.

NORC also works in the field of educational testing. Research Associate R. Darrell Bock of the NORC Methodology Research Center has, throughout the 1980s, directed a program that explores ways to measure the quality of reading, mathematics, and science instruction provided to secondary school students. Bock's work has included performance assessments tested in the states of Illinois, California, and New York based on the duplex design. The duplex design provides two kinds of data. The information gathered by the tests can be used to determine individual student proficiency, and then to identify any gaps or problem areas or to channel that student's talents appropriately. The data can also

be aggregated for group-level measures for monitoring the success of school, district, system, or state-wide curriculum and teaching initiatives.

NORC's special relationship with the research community in the city of New York is evident in surveys addressing the concerns of parents in particular New York school districts and neighborhoods. School personnel were also surveyed in New York and in 1970-72 a longitudinal study of the mothers of elementary school children in the city was conducted.

International Research

NORC conducts two kinds of international research, surveys conducted in the United States but focused on international issues, and surveys conducted in other countries.

International Questions at Home

NORC's rapid growth following its founding was not entirely the result of the vision of Harry Field, the generosity of Marshall Field, or the congenial home provided by the University of Denver. NORC was also one of a number of small organizations that came of age during the war. All of NORC's war-related research could plausibly be termed research on international problems, since it affected how America was going to fight the war.

Throughout the 1940s and 1950s NORC conducted a series of post-war foreign policy studies. These efforts were sponsored by the U.S. government and many included items on attitudes toward various foreign countries and asked respondents to evaluate U.S. foreign policy in general.

Much of the government-sponsored research after the war was directed at the new reality revealed in the horrifying flash of the atomic bomb. The U.S. was not only a world power, but now knew it. In 1939, Charles Lindberg said, "Let us not delude ourselves, if we enter the quarrels of Europe during war, we must stay in them in peace as well" (Manchester, 1972). America, while overwhelmingly rejecting Lindberg's call for isolation in 1939, did recognize the truth of the statement for the post-war world. The U.S. State Department, seeking to know the public's understanding of the world situation, sponsored a number of studies related to foreign affairs. NORC researchers embraced the challenges of peace as vigorously as they had sought to serve their country during war. In a 1947 speech at Mills College in Oakland, NORC's Gordon M. Connelly said:

We who conduct public opinion polls call them scientific. They are scientific to the extent that we try to employ in our study of man every discipline employed in the science of matter. Work is going on constantly in many universities to make our work more scientific than it already is. With the atomic scientists so far ahead of us we had better succeed-but fast! Nothing, I believe, emphasizes the urgency for removing the present disparity between the physical sciences and the social sciences so much as a news story I read one month ago. Dr. Stafford Warren warned that the destruction of every human being, plant, and animal in the world could result from the dropping of 500 Hiroshima-size Abombs. Dr. Warren, dean of the UCLA Medical School, formerly was the medical chief of the Manhattan Project, which turned out the atomic bomb. This doctor, who should know if anyone knows, declared "Unleashing 250 bombs in the air and 250 under water would wipe out our great cities and create poisonous radioactive clouds which would sweep around the

world, raining slow and unseen death on every living thing."

Our choice is, in a very real sense, democracy or Dr. Warren's dead world.

Both the State Department and NORC saw themselves as engaged in the battle to avoid a dead world. The United Nations was seen as a principal tool in this battle. As early as 1942 NORC was collecting data on attitudes toward a world organization that would help settle disputes between nations.

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) was the subject of a 1947 NORC study that explored the organization's standing with the American people. The federal government was very interested in promoting U.S. participation in UNESCO, convinced that its exchange programs would foster international cooperation and promote peace. The key to public support for UNESCO was thought to be a series of regional and national citizen programs and committees that would sponsor seminars, documentary films, visiting artistic groups from other countries, and public forums in support of UNESCO. Such a plan was detailed in the 1947 State Department booklet UNESCO and You. Secretary of State George Marshall opened UNESCO and You with these words:

The people of the world must learn to live together. The evils of ignorance must be countered by knowledge; suspicion must be offset by trust, and jealousy, by mutual respect.

The aim of UNESCO is to bring men and ideas together, but its success will depend largely on individuals, members of various organizations believing in UNESCO, who take an active part in this campaign to



PRESIDENT OF THE NORC BOARD (1943-1948) BEN MARK CHERRINGTON IN THE 1940S.

resolve the misunderstandings, the fears and suspicions now so prevalent among the peoples of the world. (U.S. Department of State, 1947)

The vehicle for coordinating Marshall's "various organizations believing in UNESCO" was the Department of State's U.S. National Commission for UNESCO. Milton S. Eisenhower was Chairman of the Commission and NORC Board President Ben Mark Cherrington was a member of the its Executive Committee. Cherrington had also served, in the middle 1940s, as a special counsel to the State Department's Cultural Cooperation Division. Cherrington was a strong supporter of UNESCO who, according to a history of the Social Science Foundation, "played a major role in the activities which finally resulted in the establishment of UNESCO and the participation of the United States government in that body" (University of Denver, 1967). NORC's Don Cahalan (1991) recalls that at the end of the war the D.U. campus seemed "consistently optimistic and full of ideals" and that great things were expected from the UN. Cahalan attributes this in part to the influence of Cherrington.

It is not surprising, given the commitment of its Board President and researchers such as Connelly, that NORC was employed to find out what the public knew and felt about UNESCO and about the world's future. What NORC found was that 63 percent of the public expected the U.S. to fight another war in the next twenty-five years, but that a majority of the public believed that education and cultural exchange could serve the cause of peace. The study revealed that support for UNESCO itself was passive rather than active and that large numbers of people, particularly less well educated, lower income, and rural respondents, were pessimistic about UNESCO's aims and many were unaware of the organization itself. In its report UNESCO and Public Opinion Today (NORC, 1947c) NORC recommended reaching out to the better educated but inactive supporters of UNESCO. The report also noted that "The less well educated, the poorer people, the manual workers, and the farmers need to be convinced that there is a way to peace." Also in 1947, Cherrington and NORC Director Clyde Hart were involved in planning a regional conference for UNESCO in Colorado.

The UNESCO studies were one part of a larger program of State Department-sponsored research that ran until 1957. In addition to research on the UN, NORC examined attitudes on foreign policy, foreign aid, the proper role of the United States in world affairs, and compulsory peacetime military service. In 1948, NORC found that 68 percent of Americans favored the continuation of the Marshall Plan, then only a few months old, but a substantial number of Americans thought it was costing too much. In 1949, NORC found that 78 percent of Americans endorsed President Truman's inaugural address

call for technical assistance to underdeveloped countries (Foster, 1984).

These studies were designed to provide the Department with an independent gauge of public opinion that could be used in making internal decisions. NORC was compelled to keep the existence of the studies secret, although permission was occasionally granted to use some of the data in journal articles and reports. This secrecy was believed necessary by the Department for a variety of reasons, in part because the Department believed widespread knowledge of State Department data on American attitudes toward foreign countries could cause embarrassment for those countries or for the U.S. To help restrict knowledge of these studies they were financed through a fund reserved for emergencies in the diplomatic and consular services.

This secrecy proved their undoing. Among those unaware that diplomatic emergencies included periodic surveys on foreign policy were members of the U.S. Congress. Someone in the Department leaked data on attitudes toward foreign aid (which the administration favored and many members of Congress opposed) to the Washington Star. There was a similar leak to the New York Times. A House investigation was launched and in committee hearings Michigan Republican Victor Knox demanded of the Department's H. Schyler Foster, "You don't admit that it [the survey result] was released for a specific purpose, and that was to endeavor to try to influence the members of Congress that 90 percent of the people of the United States were for foreign aid?" The Representatives also felt that the purpose of keeping the polls secret was to ensure that the administration had information that Congress couldn't get.

NORC's Clyde Hart and Paul Sheatsley testified before the House Committee on Government Operations, International Operations Subcommittee in the summer of 1957. Hart conducted a lengthy, but cordial, discussion of survey sampling and question wording. At one point Hart said he'd like to hire Subcommittee Chairman Porter Hardy, Jr., of Virginia as an interviewer because of Hardy's knack for probing for an answer (U.S. Congress, 1957). Viewed from the perspective of the 1990s, it seems unusual that NORC would consent to keeping any data secret, even at the client's request. The staff may have been conditioned by the secret work NORC did during the war to agree to this arrangement.

Between 1963 and 1966 NORC conducted four national studies for professor Jiri Nehnevaja of the University of Pittsburgh on foreign affairs and civil defense issues. More lighthearted was the three-phase study of the vacation habits of Americans, with special emphasis on vacations in Canada, fielded in 1947, 1948, and 1951. Since 1972, the General Social Survey has provided data on a wide range of foreign policy issues, attitudes toward the UN and other countries, and on issues relating to war and military service, continuing the time series for questions first asked by NORC at the behest of the State Department before V-J day.

In 1981, NORC began collecting data for the Soviet Interview Project. SIP was sponsored by the National Council for Soviet and East European Research and led by James Millar, then of the University of Illinois and now a professor at George Washington University. SIP interviewed three cohorts of recent immigrants to the U.S. from the U.S.S.R. in Russian. Daily life, employment, and politics were the focus of this effort, which, in some measure, replicated Harvard University studies of Soviet immigrants con-



CURRENT CHIEF ACCOUNTANT LULA BAKER AND CONTROLLER FREDERICK F. BONE IN 1990.

ducted in the 1950s. Respondents were asked to report on the last normal period of their lives, that is, just before making application to immigrate. Among the senior researchers involved in the study design was NORC's Norman H. Nie, a professor of political science at the University of Chicago. The survey component was directed by Esther Fleischman in the NORC New York office, and later by Miriam K. Clarke and Alicia Schoua-Glusberg in Chicago. NORC sponsored a conference on SIP in Chicago in 1989.

Research on Other Countries

Harry Field had long believed that survey research would strengthen democracy, not only in the United States, but abroad as well. He had worked actively to expand the use of scientific survey research throughout the world, and was in Europe to promote a plan for coordinated international research when he was killed in the crash of a French airliner outside of Paris on September 4, 1946. NORC had been in existence for five years.

Before going to Paris, Field had met with researchers in Belgium, the Netherlands, and the United Kingdom. According to Connelly (1991b), Field's aim in Britain and the low countries was:

. . . to encourage the creation and development of research centers like NORC in those countries . . . Field had been instrumental in forming the Gallup polls in Britain [headed] by Henry Durant (BIPO), France [headed] by Alfred Max (FIPO), and Australia [headed] by Roy E. Morgan.

The *Denver Post* (1946b) reported that Field's goal in Paris was to "contact the headquarters of UNESCO to attempt to persuade that organization to incorporate public opinion polls in its charter." He was returning to England to visit with his brother when he was killed (NORC, 1946c & d; Sheatsley, 1982). A telegram from Jean Stoetzel of the French Institute of Public Opinion dated September 5 reads:

Harry Field killed with twenty others in DC-3 plane accident Paris-London line September 4. Back from visiting polling organizations Holland Belgium France. Been guest French Institute Public Opinion. Made also official contact in France for eventual UNESCO world surveys. Please inform Gallup and others. Airmailing details. Very sympathetic. Stoetzel. (Telegram copied from Field Foundation archives.)

Field's dream of a social science component for UNESCO was shared by other social scientists. Harvard psychologist Jerome S. Bruner wrote to Cherrington in April, 1946, urging that UNESCO establish a psychological department. During the same month Cherrington (Cherrington, 1946) met with Rensis Likert, Angus Campbell, and others representing the American Sociological Association, who wished to explore ways

that the ASA might cooperate with UNESCO, particularly in the area of survey research. Connelly suggests that Field may have believed that a personal visit was necessary since the efforts of Likert and Campbell had not led anywhere. Anne Zanes agrees with this assessment, noting that Field tended to keep quiet about his objectives until he had some prospect of success.

During Field's lifetime one other international effort was conducted. An NORC report from 1942 analyzes the results of a study conducted in Great Britain in 1942 that questioned respondents about their attitudes toward the war effort.

In 1960 international efforts resumed, NORC conducted the U.S. portion of the data collection for a five-nation study of political attitudes. This study, led by Gabriel A. Almond and Sidney Verba, investigated public attitudes toward the various political systems, which the authors called political culture, in the U.S., the U.K., West Germany, Italy, and Mexico (Almond & Verba, 1963). In 1965, NORC designed a national study of Canadian youth aged thirteen to twenty years to investigate attitudes toward biculturalism and bilingualism. The effort was sponsored by Canada's Royal Commission on Bilingualism and Biculturalism. Data were collected by Canadian Facts and analyzed by John W. C. Johnstone of NORC. The study sought to capture the perceptions of Canadian society among both English and French speakers. Regional differences in attitudes were also explored (Johnstone with others, 1969).

NORC's Carol Bowman Stocking worked with Tamotsu Sengoku, director of the Japan Youth Research Institute, to design a Japanese project to parallel the Department of Education-sponsored High School and Beyond. The base year (1980) instruments for HS&B and the Japanese study contained fifty identical questions on such

issues as student attitudes toward school, values, participation in extracurricular events, and self-perception. Stocking analyzed the comparative data in her chapter "Comparing Youth Cultures" in the 1986 volume *Educational Policies in Crisis*, revealing several instances where common stereotypes each society holds about the other's educational system were not supported by the data. One example of this is the perceived influence of Japanese students' mothers on their schooling. Stocking writes:

Another stereotype, the "education mama" (kyoiku mama), has had some currency in the U.S. press. Although the HS&B data sets contain only indirect evidence about this issue, it is noteworthy that 86 percent of U.S. seniors reported that their mothers monitored their school work but only 47 percent of Japanese seniors did so. Forty-three percent of U.S. seniors and 13 percent of Japanese seniors reported that their mothers influenced their post-high school plans a great deal.

Also in the early 1980s, Stocking worked with Estonian sociologist Mikk Titma, who was in the process of conducting longitudinal studies in ten republics and language areas of the Soviet Union. The goal of this project was to help conform some of the Soviet study variables to HS&B variables for proposes of comparisons. Soviet researchers were also interested in the computer programs that NORC used for data analysis. Stocking also held discussions with Lithuanian scholars (Stocking, 1991).

It was in 1982 that NORC's international research program really took off. In that year the GSS and West Germany's Zentrum für Umfragen, Methoden, und Analysen (ZUMA) began to include identical question modules in their annual data collections. From this collaboration came a

greater effort, the fielding of identical question modules on a number of national surveys under the name International Social Survey Program (ISSP). This allows a crossnational comparisons on a scale never before attempted on such topics as social networks, attitudes toward the proper role of government, and labor force participation by women. The ISSP modules are now included on national surveys in nearly two dozen European and Asian nations, including a number from former Soviet-block states.

In 1987, NORC began an effort focused on the Soviet Union. During meetings in Tallin, Estonia, in 1987 and on Martha's Vineyard in 1988, researchers developing a study of participation in the political process in America met with Soviet researchers who wished to do a similar study in the U.S.S.R. A collaboration was suggested and the American team from NORC-Research Associates Sidney Verba of Harvard, Kay L. Scholzman of Boston College, Nie, and Henry E. Brady of the University of Chicago-agreed to help in the design of the Soviet effort. Four Soviet researchers from the U.S.S.R. Academy of Sciences-Michael Piskotin, William Smirnov, Aleksander Obolonsky, and Vladimir Andreenkov-spent a portion of 1989 in residence at NORC. Nie and Verba spent the summer of 1990 at the Soviet Institute for Law and Society. Although the great difference between the political systems limits the comparability of the data, some joint analyses and further cooperation are planned. The visit of the Soviet scientists to NORC was sponsored by the Chicago-based John D. and Catherine T. MacArthur Foundation.

Allensbach Institute

In 1984 the University of Chicago and the Institut für Demoskopie at Allensbach, Germany, concluded an agreement to facilitate international cooperation in social science research. Since that time Allensbach and NORC researchers have worked at each other's institution and have collaborated on research efforts. Among the scholars who have visited NORC is Allensbach Institute founder and owner Elisabeth Noelle-Neumann. A number of NORC researchers have worked at Allensbach. NORC and the Allensbach Institute cosponsored a conference on the family in Chicago in 1985.

Mass Communication

The business of survey research is linked inextricably with the history of the newspaper and the news media. Newspaper straw polls were the precursors to opinion polls. Newspapers were the first clients and are continuing clients of survey research organizations. The breakthroughs made by George Gallup, Elmo Roper, Archibald Crossley, and other research pioneers were explored and used by the newspapers in order to provide more and better information to readers, and, as a result, to acquire more and better readers.

While NORC does not supply information to the media on the scale it once did when it sponsored a magazine, it is intertwined with the media. NORC scientists are frequently cited as sources, commentators, and referees. NORC data are often compared with those of other organizations in news stories. NORC surveys can provide context or counterpoint to the comments of individuals claiming to speak for a particular section of our society or for the society as a whole.

The Press

Harry Field, who had worked as a journalist and in advertising, was very conscious of the media's great ability to influence and educate the public. "If we are to accomplish our purpose of helping democracy work," Field wrote in 1942(b), "the results of our surveys should be broadcast as far as possible." Edward R. Murrow (1967) put it

well, speaking of television but expressing a sentiment with resonance to all mass media:

This instrument can teach, it can illuminate; yes, it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights in a box.

NORC, with the encouragement and support of the Field Foundation, sought to illuminate and to teach through the dissemination of survey results. In its early years NORC produced a fortnightly magazine called *Opinion News* to present the data of important surveys before the public. *Opinion News* survived for five years before it was overwhelmed by its costs in 1948. Each issue was devoted to a particular current research topic. The magazine featured data and analysis from NORC surveys and surveys by others (Allswang and Bova, 1964).

Opinion News provided subscribers, including newspapers, with quick and easy access to the views of the public and was a constituent part of Field's dream of informing the elected leaders of the views of those they represent. Opinion News was not sent directly to members of Congress, except for those known personally by NORC staff and trustees and those who asked for copies, on the advice of George Gallup. Having given his permission for Opinion News to use Gallup Poll data, Gallup (1943) wrote to Field:

I think it would be a very serious mistake on your part and on our part, however, to send this material to members of Congress. If you do this, then you become merely another pressure group and we become liable to investigation . . .

Field acquiesced, and the idea of sending Opinion News to all members of Congress was

shelved. Field could only hope that members would ask for it or read their newspapers. NORC also supported a vigorous news release program, issuing forty-two press releases between October 1941 and May 1943 (Field, 1943b).

The need for a magazine like *Opinion News* no longer exists. The media has embraced the science of survey research completely: they now sponsor and conduct polls, and present the results on a wide variety of general interest and specialized topics. But, issues addressed by *Opinion News*, such as politics, race relations, and foreign policy, are topics of continuing interest both in the press and at NORC.

Radio and Television

Research on the public perception of the media was also an important topic in NORC's early life. NORC studied the impact of war reporting, beginning in 1942, and addressed such topics as



COMMUNICATIONS DIRECTOR SUSAN CAMPBELL (NORC 1973-1990) ADDRESSES THE UNIVERSITY OF CHICAGO'S WILLIAM BENTON FELLOWS IN BROADCAST JOURNALISM IN 1987. MARTIN FRANKEL OF NORC IS IN THE BACKGROUND.



CURRENT DEPUTY ASSOCIATE DIRECTOR FOR SURVEY RESEARCH NICHOLAS A. HOLT IN 1990.

the impact of realistic pictures of battle and casualties, the public assessment of the quality of war information, the effectiveness of war-related posters, and the impact of presidential addresses on the state of the nation. One NORC study, conducted for Columbia Broadcasting System, had a question seeking to determine how people first learned that President Roosevelt had died. CBS must have been pleased to discover that those hearing about it on the radio far outnumbered those reading about it in the newspaper.

Research on mass communications was vigorously pursued into the 1960s. A 1945 survey of radio listeners produced the 1946 volume *The People Look at Radio*, by Paul F. Lazarsfeld of Columbia University and Harry Field. In all, five assessments of radio were conducted, the last in 1947. Radio scores well in the 1946 assessment. Seventy-two percent of the sample say that radio does a good or excellent job, slightly higher than the number saying that churches do a good or

excellent job and substantially higher than those so favoring newspapers.

NORC studied the impact of television as well. An eight-year, ten-study project, launched in 1950 and sponsored by the National Collegiate Athletic Association, assessed the impact of television on college football game attendance. NORC collected and analyzed the survey data for the first five years, and was responsible for analysis, but not data collection, after that. These studies revealed that while, in 1950, attendance at games had declined with the advent of games broadcast on television, that the combined effects of limiting the number of allowable broadcasts and rising college enrollment and national income had allowed for a recovery in attendance (NORC, 1957).

NORC also participated in the data collection for a 1960 survey of attitudes toward television viewing. The study was conducted for University of Chicago professor Gary A. Steiner and sponsored by CBS. Two independent samples of 1,200 respondents were drawn, one surveyed by NORC and the other by Roper. Issues addressed included evaluations of the medium itself and of program preferences. The study found that television was firmly entrenched in American life. When asked to list technological innovations that had made life more enjoyable, pleasant, or interesting, 62 percent of men and 61 percent of women named television (excluding the seventy-one non-owners who said that they never watch). Eleven percent of those naming television did so exclusively. The next most frequently named life-improving devices were automobiles for men, chosen by 37 percent, and home laundry equipment for women, at 51 percent (Steiner, 1963).

NORC's most recent assessment of television was a 1970 evaluation of the program Feeling

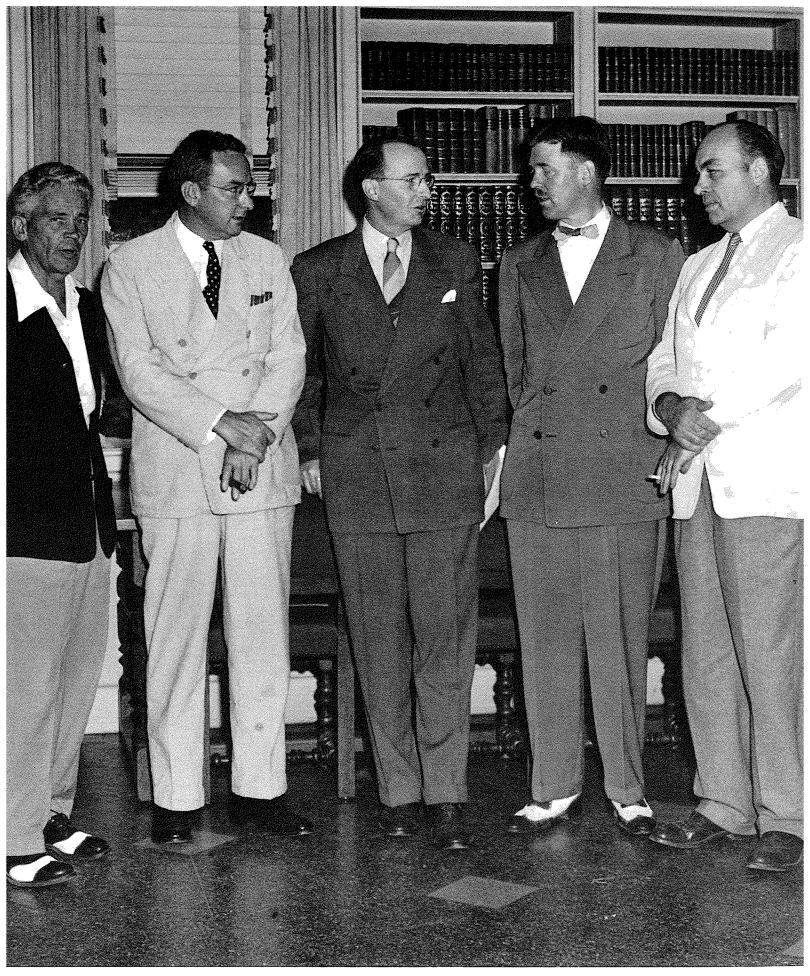
Good. Feeling Good was devoted to health issues and broadcast on the Public Broadcasting System. NORC surveyed a low-income population in Dallas to determine whether the program was reaching its intended audience.

Working for the Press

On the other side of the copydesk, NORC conducted a 1991 survey of physicians for US News & World Report that gathered doctors' assessments of the best hospitals and clinics for particular specialties. In 1989, an NORC-designed questionnaire was the basis for a two-night NBC documentary on race relations, reported by Bryant Gumble and featuring NORC Research Associate Tom W. Smith and GSS Board of Overseers member Lawrence Bobo. In 1988, survey sampling was the subject of an episode in the PBS series on statistics, Against All Odds. Over one dozen NORC researchers and staff members were featured. Also, NORC conducted studies for NBC and for CBS in the middle-1960s that served as the basis for programs exploring the honesty among the American people (reported by Frank McGee) and the attitudes of young persons in one town (reported by Charles Kuralt). The NBC program examined the circumstances in which people approve of deceitwhen lying is acceptable. The CBS program, which surveyed a sample of sixteen-year olds in Webster Groves, Missouri, explored attitudes toward domestic and international political and social issues.

These four television programs are really anomalous and rather spectacular episodes in NORC's history. Under normal circumstances NORC deals with the press in a much more restrained fashion. Sensitive surveys, such as a 1970 study of sexual behavior, called for an intensive media effort. For that project Paul B. Sheatsley went on television talk shows to alert as many respondents as possible to the scientific

aims of that rather sensitive data collection effort. One of Sheatsley's purposes was to combat what an article on the study (Fay et al., 1989) later termed "Societal intolerance . . . [that] may cause some survey respondents to conceal histories of same-gender sexual contact." The data from this survey were used, nearly two decades later, to help model the potential spread of the human immunodeficiency virus.



PICTURED AT THE 1947 WILLIAMSTOWN CONFERENCE AT WHICH AAPOR WAS FOUNDED ARE (LEFT TO RIGHT) STUART CHASE, ELMO ROPER, NORC DIRECTOR AND FIRST AAPOR PRESIDENT CLYDE HART, ELMO WILSON, AND GEORGE GALLUP.

IMPROVEMENT OF SURVEY PRACTICE

t the core of NORC's founding principles is the improvement of survey practice. NORC has pursued this goal through survey methods research, improvement in survey techniques, development and implementation of modern survey tools, and through the sponsorship of a vigorous program of data analysis. This section discusses all four of these activities. Because the aim of improving survey practice is usually pursued through the conduct of research projects, there will necessarily be some overlap with the previous section of this book.

Survey Methods

The advancement of survey methods was at the heart of Harry Field's vision of NORC. The science of survey research had to be accurate if surveys were to play the important role for which he felt them destined. For example, Harry Field thought of NORC as a vehicle to evaluate other national surveys. His initial proposal (1941a) to the Field Foundation suggests that NORC would be, in part, an "Audit Bureau of Polls." NORC did some work evaluating other national survey questionnaires, and there is a thank-you letter from George Gallup which illustrates that this kind of service was appreciated. Marshall Field echoed Harry Field's belief in the importance of survey methods research, writing of NORC in his 1945 autobiography, "The Center . . . is attempting not only to report opinion but also to get closer to an explanation of opinion, to go deeper into what people think and feel about ordinary matters."

It may be, although it is unlikely that anyone ever asked him, that Harry Field cared more about survey methods than he did about NORC. Not long after NORC was established Field set the wheels in motion for a conference on public opinion. That 1946 conference, improbably held in Central City, Colorado, when almost the entire

industry was located on the east coast, laid the foundation for the organization of the American Association for Public Opinion Research. At the Central City Conference, *Denver Post* publisher E. Palmer Hoyt declared that survey reliability problems should be cleared up by checks and research by public opinion experts themselves, implicitly endorsing AAPOR's role as a guardian of survey standards (*Denver Post*, 1946a).

One can only speculate what might have happened had Field lived to see AAPOR's creation the next year in Williamstown, Massachusetts. Some inference can be drawn from the fact that sociologist Clyde W. Hart, a man Field lobbied hard to join NORC, became in 1947 both Director of NORC and first president of AAPOR. Eight others associated with NORC have served as AAPOR president and nine have chaired the AAPOR standards committee.

Methodological questions are considered in the design of every NORC survey effort and research devoted exclusively to survey methods is an important component of NORC activities. The 1985 establishment of the NORC Methodology Research Center provided a base for these activities. The goal of methods research is simpleto understand and reduce survey error. Norman M. Bradburn (1983) points to two main sources of survey error. Some errors result from the process of sampling; others from the survey measurement process. Measurement errors, or response effects, are engendered by problems with the definition of the survey task, problems with the interviewer, and problems with the respondent. NORC has devoted substantial effort and resources to studying nonsampling and sampling issues.

Definition of the Survey Task

Problems with the appropriate definition of the survey task are cited by Bradburn as the greatest

single cause of nonsampling error. He writes: "the characteristics of the task are a major source of response effects and are, in general, much larger than effects due to interviewer or respondent characteristics" (Bradburn, 1983, emphasis Bradburn's). Two important issues to be considered in defining the survey task are choosing the appropriate mode of survey administration and phrasing the questions properly.

The scope of the potential problems posed by nonsampling error is revealed by the 1949 Denver Validity Study. The study, conducted by the University of Denver Opinion Research Center and directed by Don Cahalan and Helen V. Huth, compared reports on a number of factual items found on official documents-such as drivers' licenses and library cards-with those same facts as reported by respondents. This was the most comprehensive study of validity up to this point. Cahalan was planning to conduct a study of civic problems in Denver. That study, Cahalan recalls (1991), "readily provided opportunity for a piggy-back on validity (or accuracy) questions, and also for an assessment of interviewer effects on respondents' accuracy of reports . . . "

For the Denver Validity Study, 920 Denver residents were interviewed about matters that could then be checked with official records. Some of the study's items, such as whether the respondent had voted in the past six city-wide elections and whether the respondent held a Denver library card, were deemed higher prestige issues—issues on which there was a prestigious or socially desirable answer—and thus liable to distortion. The study found that amounts of invalidity ranged from five to fifty percent on various factual items. Assessing the effort, Hugh J. Parry and Helen M. Crossley (1950) cautioned "invalidity, in the final analysis, is not inevitable. It has causes that can be found in the question-

naire, in the respondent, in the interviewer, and above all in the interpretation of the data."

Survey administration. In 1942, Field and Gordon M. Connelly conducted a test of survey administration in Boulder, Colorado. The experiment was conducted in cooperation with the government officials in Boulder, and with the University of Colorado. Field and Connelly described this effort in a 1942 Public Opinion Quarterly article as transforming Boulder into an open-air laboratory to test whether opinions expressed in surveys are the same as those expressed in voting booths. NORC first took a sample survey a few days before a 1942 election in Boulder. Residents were surveyed on three opinion issues and also on their preferences among gubernatorial and senatorial candidates. On election day, voters were asked to mark a survey ballot after they had completed their official ballot, but while they were still in the voting booth. The survey ballot was then put into a special survey ballot box. Every Boulder voter was asked to participate in this exit poll.

The special survey ballot contained the same three opinion questions along with demographic items, such as respondent age, gender, and the value of an owned home or dollar amount of rent paid. The results of the study demonstrated that the opinions voiced in the pre-election survey were largely reflected in the voting booth survey. The pre-election survey was also spectacularly accurate (within .3 percent) in predicting the outcome of the senate and governor's races.

Since this experiment, survey administration methods have been tested in an increasingly complex series of experiments. In the 1960s NORC explored the feasibility of using the telephone for data collection; in the late 1980s

NORC conducted a national experiment using computer-assisted personal interviewing.

One of the earliest NORC telephone surveys was a 1964-1970 effort conducted for Professor John Colombotos of Columbia University. This five-wave panel study, which investigated physician attitudes toward Medicare, included a sample interviewed in person and one interviewed by mail to test the efficacy of using the telephone as a data collection tool. Colombotos concluded that the telephone and in-person data collections yielded comparable results (Colombotos & Kirchner, 1986). In *Physicians and Social Change* he thanks Paul Sheatsley for encouraging him to use the telephone.

The telephone interviewing for this effort was conducted from the interviewers' homes. Special telephone lines were installed for the project and interviewers were told to be prepared to conduct an interview at any time. Project Director Pearl Zinner recalls that this mode of administration proved to be a great boon to the survey because it allowed the physician maximum flexibility in scheduling an interview to suit his or her convenience. Another notable example was telephone screening to locate visually-impaired respondents, the subject of a 1963 effort overseen by Herbert Hyman.

NORC has recently conducted several tests of computer-assisted personal interviewing (CAPI) as a survey administration tool. These tests are described in more detail below under Survey Tools. A key question about CAPI administration was whether respondents would be put-off by the use of a computer. In a national survey conducted in 1989 NORC found a largely favorable attitude toward CAPI among respondents.

Asking prestige or sensitive questions. Asking sensitive questions is important because of the substantial number of surveys that touch on

personal issues. These include investigations of sexual behavior, drug use and other illegal activities, and alcohol consumption. In the last two decades, dozens of such efforts have been fielded. Led by Norman Bradburn, the 1974 national survey on sensitive questions and successor surveys conducted during the 1970s and 1980s have been important in establishing a reliable guide to choosing the method of survey administration and to the art of questionnaire design. To find the best way to ask sensitive questions Bradburn and his colleagues tested four modes of administration-in person, telephone, self-administered questionnaires, and a random response technique. The random response technique allows a respondent to answer a threatening question without the interviewer knowing which question is being answered. Bradburn and his colleagues found a general tendency for the more anonymous methods of asking questions, such as self-administered questionnaires and random response proce-



CHARLES GOODRICH OF THE NEW YORK HOSPITAL-CORNELL MEDICAL SCHOOL, HERBERT HYMAN, PAUL SHEATSLEY. AND DAVID WALLACE OF COLUMBIA UNIVERSITY IN 1963.

dures, to be more effective than the personal methods for sensitive or prestige items. But, as Bradburn (1983) noted in the *Handbook of Survey Research*:

Offsetting the potential benefits of anonymity, however, is the increased motivation that may come from the interviewer being with the respondents in person and encouraging them to take the time to consider the questions carefully.

Question wording. As with the selection of the appropriate administration method, the careful crafting of questions is vital in obtaining reliable data. Paul Sheatsley wrote in 1983:

Certainly the best questionnaire writers today, aided by changes in the social climate, have pushed back the frontiers from the recent past when it was generally assumed that one could not ask questions about drinking, drugs, sexual behavior, income, cancer, and a host of other taboo items in a household interviewer situation. But even today valid answers to such topics require careful introduction, proper survey auspices, and a well-planned line of questioning that does not depend on one or two blunt items.

Bradburn and his colleagues tested the effectiveness of a carefully planned line of questions by exploring the issue of library use, which had also been tested in the earlier Denver Validity Study. While the Denver study asked about whether respondents held library cards, the later NORC studies added questions about library facilities and family members holding cards, to distribute the burden away from a single question. However, this distribution did not reduce the overreporting of library card holding. On the other hand, in seeking information on alcoholic beverage consumption, NORC asked a series of questions about specific beverages rather than alcohol in general, which was the content of a similar Gallup question. In *Asking Questions* (1982), Seymour Sudman and Bradburn concluded that the NORC question was less threatening, and it produced higher reporting of beer and wine consumption. From this research, Sudman and Bradburn conclude:

Threatening behavior questions are intrinsically more difficult to ask than non-threatening questions. As the questions become more threatening, substantial response biases should be expected, regardless of the survey techniques or question wordings used. For less threatening questions, carefully designed question formats and wording can substantially improve response accuracy.

Respondent Memory

Whether survey respondents tell the truth is a question of enduring interest at NORC and within the discipline. Bradburn and Sudman supplied an answer in their 1988 volume *Polls and Surveys:*

In general-as shown by the success of surveys in forecasting elections and in other areas where validity checks can be made-deliberate lying by respondents is not a major problem with surveys. In some instances, of course, respondents may not always tell the truth; and surveys about sensitive topics, such as drug use, tax evasion, or criminal behavior, may not elicit the same degree of truthfulness as surveys about consumer behavior or politics. But a potentially more serious problem, for questions about past behavior, is that respondents may fail to recall their past behavior correctly or to make an effort to recall all past events being asked about.

The latter point, respondent memory and cognitive processes, are the subject of an aggressive research effort at NORC. Bradburn, Roger Tourangeau, Kenneth A. Rasinski and other researchers from NORC, the University of Chicago, and other institutions, have conducted a number of such projects throughout the 1980s and into the 1990s designed to determine the thinking process that respondents go through as they answer questions. One focus of this work has been the influence of prior questions on respondent attitudes. Sudman and Bradburn (1982) write: "The potential biasing effect of the positioning of questions in a questionnaire has long been recognized as a problem in survey and market research."

To investigate the effect of question order, and other cognitive process issues, Bradburn, Tourangeau, Rasinski, and anthropologist Roy D'Andrade of the University of California at San Diego embarked on an intensive study of cognitive processes in the middle 1980s. The project involved three related activities. One was a series of scaling studies that examined beliefs about abortion and welfare. The second was a study designed to determine how quickly respondents answered questions about their attitudes toward these issues. The third line of activity measured the effects of prior questions in a questionnaire on response to subsequent questions. Among the findings was that respondents with conflicted views about a particular issue were affected more by prior questions than those with more definite views (Tourangeau et al., 1989).

Related efforts have been conducted using the General Social Survey. Tom W. Smith (1987) analyzed the difference in support for "welfare" versus support for "assistance (or caring) for the poor" using data from the 1984 and 1985 surveys. On average, the support for helping the

poor ran 39 percentage points higher than that for welfare. In 1986, Peter H. Rossi, along with GSS Principal Investigators James A. Davis and Smith, designed a series of vignettes that revealed some of the economic circumstances of hypothetical families. Questions were then asked to determine support for public aid. Ten families were profiled in the vignettes, seven with young children and three of elderly women living alone. The vignettes also varied the circumstances of each family, such as income, marital status, age of children where appropriate, and other characteristics (Duncan and Groskind, 1987). These are merely a sampling of the methodological analyses conducted using the GSS. Over seventy methodological assessments have been written by Davis, Smith, and their colleagues.

Interviewer Effects

A key issue in survey research is the influence on data quality of interaction between the interviewer and the respondent. An early test of interviewer effects was conducted at NORC in 1942, when African-American respondents were surveyed about attitudes toward U.S. activities in World War II. The sample of respondents was divided into two parts, one part surveyed by interviewers of their own race and the other by white interviewers, to help determine whether the interviewer's race had any effect on the data the respondent provided. The study showed that African-American respondents were less reluctant to report experiences of discrimination to black interviewers than to white interviewers. Later, when the study was repeated in Memphis, these differences were more pronounced, leading Hyman (1954) to conclude that the differing state of race relations in Memphis and New York influenced respondent caution in dealing with an interviewer of another race.



NORC'S FIRST SAMPLING STATISTICIAN WILLIAM SALSTROM IN THE EARLY 1940S.

This effort was followed by other interviewer effects research, including several studies led by Hyman in 1949 and 1950. These efforts were initiated at the urging of NORC Trustee Samuel A. Stouffer, who was then the chairman of the Social Science Research Council/National Research Council Committee on the Measurement of Opinion, Attitudes, and Consumer Wants. This committee also sponsored the Denver Validity Study. The interviewer effects studies were an exhaustive investigation of the ways in which respondent-interviewer interaction influenced the quality of the data collected, and addressed such issues as social status and education level of the interviewer, the interviewer's expectations about respondent attitudes, and racial considerations. Hyman and his colleagues underscored the importance of these efforts in the 1954 book Interviewing in Social Research:

If interviewer error were unitary and easy to determine, there would be no need for such discussion, but this is not the case. Error is of two major types and, in certain instances in social research, very difficult to measure. In social research, the measuring instrument is the interviewer. We use many instruments for a large-scale survey and our aim is to insure that the instruments are reliable—that the results do not change with the accident of which particular interviewer is employed.

Converse (1987) writes, "The interviewing project directed by Hyman became NORC's most important contribution to methodological research in this period."

Since that time research on interviewer effects has proceeded in a number of ways. Sheatsley directed a 1970 survey that required special training for interviewers so that they would be comfortable if respondents used sexually graphic language. Barbara K. Campbell, Patricia Phillips, Rebecca Zahavi, and Sara R. Murphy (1989) addressed the establishment of a "comfort zone" to allow interviewers to ask highly sensitive questions for the National Study of Health and Sexual Behavior.

There is another aspect of methods research that goes beyond the improvement of survey process. In the Methodology Research Center a variety of research programs are exploring new areas of data use and analysis. These are described below in the section on data analysis.

Sampling

In its early days NORC, like most survey research organizations, was devoted to quota sampling. At the 1946 Central City Conference, the Census Bureau's Morris H. Hansen (later an NORC Trustee) argued that area probability sampling met the three necessary criteria for reliable samples—that the precision of the estimates produced by those samples be subject to reliable

measurement, that the methods be simple and straightforward, and that the sample design provide the maximum information for dollar spent. Quota samples, argued Hansen, do not always meet these objectives. Lucien Warner, Associate Director of Research for Life, served on the same panel as Hansen. Warner contended that Life had tested area and quota techniques and found that the latter to be satisfactorily accurate. Elmo C. (Budd) Wilson, NORC's former OWI client (and at the time Director of Research for CBS), called for further research and suggested that different methods may be appropriate for different research aims. Harry Field mentioned that the cost of setting up an area sample was substantial and Hansen replied that continued use of the sample spread those costs across a number of surveys (NORC, 1946a). In the 1940s NORC suggested an experiment that would test the reliability of a quota versus a probability sample to be conducted in Denver. The costs of the project killed it, but NORC did make comparisons between its own quota sample results and the area probability results obtained by the Census Bureau.

National Samples

NORC's early national cross-sections were developed by William Salstrom, who was, according to Field "like any statistician worthy of his salt . . . never satisfied with a cross-section." NORC Trustee Samuel Stouffer obtained for NORC pre-release 1940 Census figures for use in refining those cross-sections (Field, 1941c). NORC's cross-sectional samples are described in a memorandum filed with the OWI correspondence. Although the memo lacks a date, a note that copies were to go to Julian Woodward of OWI and Paul Sheatsley of NORC places it sometime after the middle of 1942. It reads in part:

The samples ordinarily used by NORC in its national surveys may be classified as

mainly "stratified-purposive" samples. By this, it is meant that in the choice of both the areas to be sub-sampled (inter-area sampling) and the choice of respondents within each area (Intra-area sampling), units (places and persons) are chosen according to a predetermined criteria so that the end-result is representative of the entire adult population of the United States according to those criteria, as well as others. (NORC, n.d.)

The memo further indicates that NORC national surveys used the nine Census divisions and nine size-of-place categories in constructing its sample and rated major cities by the dominant form of economic activity, such as manufacturing or retail trade. Individuals were assigned to the quotas by race (black and white only), gender, and four income levels.

With the rest of the survey industry NORC moved more and more to area probability samples. NORC conducted its first national survey using an area probability sample in 1953. NORC's current national sampling frame, which was prepared using 1980 Census data and is continuously updated, contains eighty-four primary sampling units, with an additional eightyfour units held in reserve. With the exception of virtually unpopulated sections of northern Alaska, the frame provides complete coverage of the land area of the U.S. NORC maintains a complete listing of all of the dwelling units on the more than 30,000 blocks that comprise the frame. NORC Senior Statistical Scientist Martin R. Frankel is leading the effort to draw the new NORC frame based on the 1990 Census data.

Other Samples

The Department of Education's NELS:88 and HS&B studies have given NORC the opportunity to draw school-based samples that yield national



CURRENT SENIOR STATISTICAL SCIENTIST MARTIN R. FRANKEL IN 1987.

and regional estimates. These studies use twostage samples. First, a sample of schools is drawn for the universe of secondary (for HS&B) or primary (for NELS:88) in the U.S. These include both public and private schools within and outside district boundaries. Then a random sample of students is drawn from participating schools. Both the HS&B and NELS:88 samples include oversamples of ethnic and economic groups of special research interest.

Local surveys often have different sampling requirements than national surveys. The appropriate sample type can range from list or convenience samples to probability samples of small areas. One interesting sampling effort is Frankel's sample design for the Study of the Homeless of Chicago. NORC interviewed streetlevel authorities—police, clergy, direct service providers, and others—to discover where in Chicago homeless persons were most likely to be found. The 1980 U.S. Census had identified approximately 19,000 blocks within Chicago.

Each block in the city, and all off-grid areas such as parks and railyards, were ranked for high-, medium-, and low-expectation of finding homeless persons on them. Blocks were then chosen at random (without replacement) for each of the homeless-density levels. A total of 168 blocks were selected in all (Frankel, 1986). Shelters were sampled from a list of shelters. This survey is described in more detail in the next section.

Survey Techniques

The improvement in survey techniques is best illustrated by the discussion of several NORC surveys that required new and innovative procedures to successfully achieve their aims. At times we have been asked to apply the forms of this discipline to areas in which they have not before been attempted; at other times NORC has been asked to take a more traditional area of study and address it more quickly or with greater accuracy than has been done before. NORC has addressed these issues through the conduct of a number of national and local surveys, both those focused on broad areas of concern and those narrowly targeted on specific issues. To illustrate such effort-without promising to capture all such efforts-this section will discuss several particularly challenging surveys and the NORC program in longitudinal research.

Study of the Homeless

Among the more challenging social surveys NORC has conducted in the past fifty years was the 1985-1986 Study of the Homeless of Chicago. The Principal Investigator for that effort, conducted under subcontract with the Social and Demographic Research Institute of the University of Massachusetts, was SADRI Director (and former NORC Director) Peter Rossi. Rossi secured funding for this ground-breaking effort from several sources, including the Robert Wood Johnson Foundation, the Pew Memorial Trust,

and several agencies of the State of Illinois. Blocks in Chicago were classified according to the estimated probability of finding homeless persons on them. Two cycles of interviewing were conducted—one in the fall months of 1985 and the second in the following winter. The survey interviewed homeless persons living in shelters and on the streets. Interviewing in shelters was done in the early evening, interviewing on the streets was conducted between midnight and six in the morning. Interviewers encountering persons sleeping outside, in boxcars, automobiles, or abandoned buildings were instructed to awaken them without touching them, and then secure an interview.

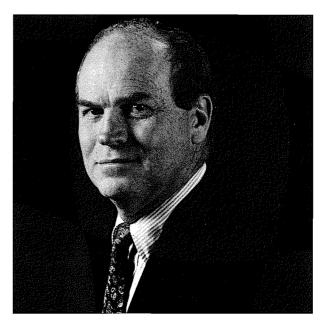
The study provided the first reliable estimates of the number of homeless population of Chicago, and also obtained life and work histories from homeless persons that allow social service professionals to better understand the causes and remedies of homelessness. That study, and related research, is detailed in Rossi's 1989 book *Down and Out in America*.

Rapid Response Research

Rapid response research, a particularly innovative stream of inquiry, grew out of governmentsponsored surveys related to the war effort. In his memoir, Taking Society's Measure, OWI staff member (and later NORC researcher) Herbert H. Hyman describes NORC's first foray into rapid response research, the telegraphic survey. Hyman points out that wartime policy decisions had to be made quickly, and that analyses that took too long were useless. To this end NORC developed the telegraphic survey for OWI. Interviewers were armed with instructions for fulfilling their quotas in advance. When the need arose, questions were wired to the interviewers, who then leapt into action. According to Hyman, aggregate data from a national sample could then be available no later than forty-eight hours

after the first telegram. NORC fielded thirty-three such surveys for OWI. These studies were indepth, in-person surveys on disasters and other important national events. The data were detailed, reliable, and useful in planning for disasters, such as the aftermath of a nuclear attack. Rapid response efforts are conducted at NORC to the present day. This research is a highly specialized area, requiring intensive effort, meticulous preparation, immediate decisions, and, all in all, a rather substantial gamble that decisions made rapidly will be correct.

The telegraphic surveys represent NORC's greatest technological achievement of the time in the sense that they used the available technology, the telegraph, to the fullest extent possible. They also illustrate how the drop-everything requirements of an immediate national survey had to be balanced with the needs of other clients and of the organization. When the Columbia Broadcasting System wished to do a survey immediately following the death of President Roosevelt,



CURRENT ASSOCIATE DIRECTOR FOR ADMINISTRATION THOMAS G. GERST IN 1990.

Harry Field sent two telegrams to Eastern Representative Paul Sheatsley in New York. These read:

Frank Stanton CBS will call Monday regarding a telegraphic to go out Wednesday or Thursday and a larger sample later. Give him estimates. Am satisfied about his credit. Hire typist for 232 [another ongoing project] if necessary.

and

Wire if you want us to send new telegraphic cross section to interviewers tonight or will it interfere with instructions already mailed?

These wires were dated April 15 and 16. On April 17, a three-page telegram was sent to NORC interviewers. On it were eighteen questions about Roosevelt and Harry Truman. Interviewers replied by collect telegram beginning on April 18.

The Disaster Research Group was formed at NORC in the early 1950s to conduct fast turnaround efforts for federal clients. Studying reactions to disasters helped government agencies understand how people might react in the face of an attack. Disaster research also provided information on planning for other disasters-such as tornados, large-scale industrial accidents, and fires. Eventually, the Group was disbanded as a formal entity, but such research efforts continued. Rapid research techniques developed in these studies of the 1950s were brought to bear on later emergencies, such the Northeast power blackout. More recently, the 1990 Chicago Neighborhood Studies-personal interviews with a sample of 2,000 respondents on their feelings toward attitudes toward their neighborhoodswere launched within two weeks of a telephone request from the City of Chicago.

Disaster research was a complicated process, as is revealed in a 1953 NORC report titled *Conference on Field Studies of Reactions to Disasters*. At that conference Shirley A. Star of NORC expressed the aims of disaster research: "If you want to reduce it to a single sentence," she told the assembled participants, "our objective is and has been from the first formulation we ever made, investigating just about every aspect of human behavior that has to do with disasters."

One problem of this type of research was training interviewers to be professional in the face of extraordinary personal tragedy. (Early disaster studies at NORC included one of an air show plane crash that killed twenty persons, most of them children, in a small Colorado town.) The effects of such disasters on the persons who experience it are profound, yet varied. The interviewers had to be equipped to complete their tasks in a professional way, but be prepared to accommodate the special stress felt by the respondents. A telling example from the 1953 report is a statement by a Brighton, New York, woman. In Brighton, in 1951, the accidental destruction of regulator valves released natural gas into a number of homes. Several exploded. Even after the disaster had passed, persons living in the neighborhood took a long time to recover. This woman told an NORC interviewer that even after the disaster, "I would listen to hear if I could hear any unusual noises I would go down to the basement each night before I went to bed and twice during the night to see if I could find any accumulation of gas."

And it was necessary to try to retain the specially trained interviewers for the disaster studies. Despite their special training, these persons were not permanent NORC employees. Sometimes they had full-time jobs or other obligations that they were required to leave, perhaps even quit,

on a moment's notice in order to conduct disaster interviews.

In 1963, Norman Bradburn led a team conducting studies on the influence of external events on individual happiness. Two pilot tests were conducted as part of this effort, which is described in the section of this report on health care. Just after the first pilot test, the Cuban missile crisis erupted. Seizing the opportunity to study the effects of this event on happiness and well-being, NORC researchers reinterviewed respondents in the most prosperous and the least prosperous of the sample towns. The new questionnaire contained the same measures of feeling states as the earlier one, but also had special questions related to the Cuban crisis. Interviewers were in the field within five days of President Kennedy's October 22 announcement of the naval blockade of Cuba (Bradburn & Caplovitz, 1965).

Probably the most widely known of the instant research efforts was the study of the public reaction to the assassination of John Kennedy. NORC Sampling Director Seymour Sudman (1964) wrote:

There is a tremendous scientific value in being able to measure the impact on the public of a crisis while the crisis is still in effect. Emotions and attitudes which might normally be hidden or obscure become clearer and easier to measure under the stress of a national crisis.

Kennedy was murdered on November 22, 1963. An emergency meeting of social scientists was held in Washington on the morning of Sunday, November 24. NORC's Director Peter Rossi attended the meeting, where he wrote the first draft of the survey questionnaire. Rossi (1991) recalls:

Everybody wanted to do something. It seemed to be perfectly sensible for researchers to go to Washington to talk about doing some research on it. There must have been about half a dozen people and all that they would talk about is how they were emoting. So I went off into a corner, found myself a Selectric typewriter, and said what we really need is to see what impact this event has on people. We should do it quickly so we find out, for example, how people found out about it. What networks were used by people to find out about significant events: Was it the media? Was it others talking to them, calling them? What were their emotional reactions to it: Who cried? Who didn't cry? Who was glad? Who was sad? Who was angry?

At the end of the meeting I presented the questionnaire and said, "Look, this is something we can do. We can start a national



LONGTIME ACCOUNTANT ALICIA EVANS (NORC, 1965-1990) AT NORC'S 1967 CHRISTMAS PARTY.

survey and get this information." Everybody was delighted.

Of the knowledge to be gained from such research, Paul Sheatsley and Jacob Feldman of NORC wrote in 1965:

As unique as the assassination was, it nevertheless provided an opportunity to learn something about more normal phenomena. For instance, we know surprisingly little about the meaning of the presidency to the American public. Many studies have been made of voting behavior with respect to that office, but we haven't much idea of just what it is that people feel they are electing... the death of a chief of state can reveal a great deal about the sentiments that normally surround the incumbent of that office.

Sheatsley, Feldman, and other staff members worked around the clock to turn Rossi's draft into a final questionnaire. Recognizing this was a once-in-a-lifetime opportunity, the questionnaire team included some relevant questions from earlier NORC national surveys to allow for comparative analysis. "Fortunately," Sudman later reported, "... a national sample had already been prepared for another study which was scheduled to go into the field the following week." The questionnaire was delivered to O'Hare Airport for mailing before dawn on Tuesday morning. While the questionnaire was being developed the NORC field office was busy alerting interviewers with telephone calls and telegrams. Ninety percent of those interviewers contacted were willing to work, a figure 10 percent higher than was usual, despite the closeness of Thanksgiving (Sudman, 1964). One thousand, three hundred and eighty-four interviews were completed by Saturday, November 30. This is remarkable not only for the speed at which the study was put into the field, but also because data collection was completed so quickly, yet no interviews were attempted on November 28, Thanksgiving Day (Sheatsley & Feldman, 1965).

Rossi remembers being surprised by how fast news of the assassination traveled. Sheatsley and Feldman wrote:

The increasing size and urbanization of the population, and the ubiquity of radio and television now make it possible for virtually 100 per cent of the public to become aware of a crucial event within a very few hours. Hardly anyone is so isolated from his fellow citizens or so cut off from the mass media that he will not quickly receive word.

Other findings included widespread grief, even among Kennedy's political opponents; a tendency for that grief to be experienced in personal terms; and beatification of Kennedy expressed by respondents that was comparable to similar extravagant tributes from public figures following the deaths of other presidents (Sheatsley & Feldman, 1965).

In addition to the national study of the Kennedy assassination, there were two smaller studies. NORC returned to the respondents from the happiness studies who had been interviewed during the Cuban crisis, to see how the murder influenced their feelings of well-being, and two small-scale data collections were conducted, in Detroit and Washington, to gauge psychological well-being. These efforts yielded a number of interesting findings. The fact that the Detroit sample was entirely composed of African-Americans and the Washington sample largely white allowed for comparison of the depth of the reaction. Bradburn and Feldman (1965) wrote that the African-American respondents in Detroit "showed both the most grief and the

most concern over possible political consequences." The authors suggested that Kennedy's identification with the civil rights movement might lie behind this more intense reaction.

Census Participation and Census Adjustment Surveys

One of the most controversial data collections conducted in the United States is the decennial Census. Enshrined in the Constitution is the directive that, every ten years, the population be enumerated. This directive has been translated into the Census, an effort to collect data from the entire U.S. population. How well the Census performs the enumeration has been a matter of debate since the first one was fielded in 1790. President Washington thought that the 1790 count-3.9 million persons-might be too low (Anderson, 1988). Today, mayors, city councils, community groups, and special interest organizations representing particular communities and ethnic groups charge that the Census under- or overcounts urban, minority, or other populations. Because the count achieved by the Census is used to make many important decisions-such as how much federal money a community will receive or the number of representatives a state sends to Congress-the debate about the Census can be quite heated.

In 1990, the Bureau of the Census asked NORC to conduct a survey of the nation to determine why the Census mail return rate was lower than expected. The Census Participation Survey was led by Associate Director for Survey Research Richard A. Kulka. The Census assessment effort was launched under extreme time pressure. The national in-person collection of data from 2,478 households, using a thirty-minute questionnaire, was begun within five and one-half weeks of the initial telephone call from the government. The selected respondent was the person in the household who had the most to do with the

Census form. A key question was at what point persons ran into problems—whether they never received the form, whether they opened it, whether they began work on completing it, and whether they bad finished but not returned it, or whether they completed and returned it. Factors that might influence response, such as time pressures on the citizen and objections to the Census because of privacy or other concerns, were also explored.

The survey revealed that the reason most persons gave for failing to respond was that they never received the form. Nearly 11 percent of the sample said that the Census materials had never arrived. (It is likely that a substantial portion of this 11 percent did in fact receive the form, but failed to recognize it.) The next highest category of Census non-response contained those persons who opened the envelope but did not begin to work on the form, a status reported by about 4 percent of respondents. NORC researchers (Kulka et. al, 1991) found that gender, income level, education, English-language proficiency, and geographic region of residence were among the factors that influenced response.

The next research question the Bureau asked NORC to address was what impact adjusting the Census count would have on future Census efforts. NORC conducted a new study, the Census Adjustment Survey, to determine whether the public understood the political and social issues behind the question of adjustment, whether persons actually believed that an adjustment had already been made, and if they would be more or less willing to participate in future Censuses if adjustments were or were not made. NORC returned to the Census Participation respondents over four weeks in the spring of 1991. This time, interviewing was done using computer-assisted telephone interviewing. The



CURRENT SENIOR SURVEY DIRECTOR AND GENERAL STUDIES DEPARTMENT MANAGER ALICIA S. SCHOUA-GLUSBERG IN 1990.

questionnaire, designed to explore these issues and the depth of the respondent's feeling on them, was a maze of branching questions. Had it been printed on paper instead of loaded in to a computer, there would have been over one dozen versions. As with the early rapid response surveys, the ability of NORC's staff to effectively use current technology was a key to the study's success. In the end, NORC determined that the decision whether or not to adjust the Census would have a significant, although likely modest, effect on willingness to participate and that the effect was likely to be negative, no matter what decision the government chose. In the end the Commerce Department decided not to adjust the Census figures.

Non-Shared Environment in Adolescent Development

NORC has recently concluded data collection for an innovative study of why siblings are not always as alike as two peas in a pod and is now conducting its follow-up. Under the unwieldy title of Nonshared Environment in Adolescent Development, this effort focuses on those factors that shape the intellectual and emotional development of a child, but are not genetically shared among siblings. This study—which featured some of the longest interviewing times in NORC history and required scheduling and planning worthy of a moon shot—will provide scientists with a window into the process of growing.

This study of siblings is conducted for the National Institute of Mental Health. Three scientists guided its development and oversee its execution. The Principal Investigator is David Reiss, M.D., Director of the George Washington University Medical Center Department of Psychiatry. Reiss is a specialist in the study of family processes and development.

There are two Coprincipal Investigators—behavioral geneticist Robert Plomin of Pennsylvania State University, and developmental psychologist E. Mavis Hetherington of the University of Virginia. The NORC survey team is led by Senior Survey Director Alicia S. Schoua-Glusberg, a cultural anthropologist.

The study data will help researchers assessing which aspects of an adolescent's behavior and level of competence are influenced by genetic factors, and which are influenced by family interaction processes, interactions with peers, and other environmental factors. Reiss and his fellow researchers will pay particular attention to those episodes, situations, and circumstances that point to the sources of juvenile behavior problems and depression.

Seven hundred and nineteen families were interviewed during the study's first data collection. Some of these families were chosen using random-digit dialing, but most were selected from the consumer panels of two market research

firms. The information already on file regarding these families-such as number and ages of children and the biological and legal relationship between the children and the household adults-substantially reduced the need for screening. The key characteristic required of the sample families was having two children of the same gender who were between the ages of ten and eighteen years and were not more than four years apart. A number of these families included both of the children's natural parents. For the remainder of the families one or both parents were step-parents, allowing a number of different family constellations characterized by different relationships among the siblings. The families composed of children living with their natural parents formed the control group against which the other families were compared. Three hundred and forty-eight families containing twins were added to the sample in 1989, an augmentation funded by the W. T. Grant Foundation.

Each family was surveyed twice by a team of two interviewers. These sessions were conducted between four and fourteen days apart. For each session respondents completed a three-hour, self-administered questionnaire in the interviewers' presence. In addition to the self-administered questionnaire, the basic data collection instruments were a vocabulary test and a video camera. The self-administered questionnaire, answered by all family members, asks about the relationships between the married couple, between the parents and their children, between siblings, and between family members and their friends.

All family members were asked to provide information about themselves. For example, they answered questions about "the kind of person you are, how you react to certain kinds of situations, and about your thoughts and mood"

on the self-administered questionnaires. This questionnaire also asked about the children's performance in school. The information the respondents supplied was verified by comparison with data collected from the children's teachers. Interviewers administered the vocabulary test to all four family members and collected demographic data on the family from one of the adults.

Interviewers videotaped a total of nine separate ten-minute discussions among family members (six dyads, two triads, and one tetrad). These discussions centered on topics that respondents have identified as areas of disagreement in the self-administered questionnaire.

Scheduling two occasions within a two-week period when all four members of a family were in the same location at the same time, and would be there for three hours with nothing more pressing to occupy their time, was a difficult task. Interviewers happily performed some of



CURRENT COORDINATOR OF FIELD MANAGEMENT PATRICIA PHILLIPS WITH DISTRICT MANAGER ELLEN WILLIAMS AND CHICAGO STAFF MEMBER LETTICIA GUZMAN IN 1990.

the family chores, such as washing dishes, so that the respondents could devote themselves to completing their questionnaires. The videotaping also posed some special problems—since the location for shooting was inappropriate to the task and furniture often needed to be moved or another location found.

For the study's 1992 follow-up NORC will reinterview members of over 400 families from the original sample that still have the same structure, and still have both children living with them. Although the interviewer will spend less time in the home than in the base year study, data collection will still require three to four hours and, in addition, respondents will complete lengthy self-administered questionnaires. Family interactions will again be videotaped.

Panel Surveys

In sharp contrast to the frantic activity of the rapid research efforts are panel surveys. These efforts, by their nature, take years to realize their full utility. NORC has been a contractor for a wide range of difficult longitudinal data collections-and many of these are described above under the research topics they address. The nature of panel surveys requires that careful records be kept of respondent addresses, telephone numbers, and contact persons in order that they may be repeatedly interviewed. Even with such records, locating respondents can be a thorny problem. One NORC interviewer followed the lettuce harvest up the state of California in order to find and interview a panel study respondent who was a migrant worker.

Particularly challenging longitudinal survey efforts included the follow-up to the 1953 Midtown (Manhattan) Study, which was done twenty years after the initial interview and used an instrument that took two to four hours to administer, and the National Study of Women's

Drinking, which has a large number of sensitive questions. Both surveys are described under health and medicine in this report. Similarly, NORC conducted a 1964 national survey on social class and psychological functioning for Melvin Kohn of the National Institute of Mental Health, and its follow-up a decade later (Kohn & Schooler, 1983). More recently, NORC has conducted three large-scale panel surveys for the U.S. Department of Education-High School and Beyond (HS&B), the National Longitudinal Study of the High School Class of 1972 (NLS-72), and the National Education Longitudinal Study of 1988-which taken together represent hundreds of thousands of interviews. These are described above in the section on education.

NORC has had great success in retaining panel members through repeated surveys. HS&B response rates have ranged between 82 and 95 percent for its four waves. The NLS-72 fifth follow-up, surveying respondents for the first time in seven years, had an 89 percent response rate. NORC's longest-running longitudinal survey, the Department of Labor's annual National Longitudinal Surveys of Labor Market Experience/Youth Cohort (NLS/Y) has consistently attained response rates of 90 percent or better through its thirteen rounds.

While the great asset of panel surveys is their ability to chart changes in respondent situation and aspirations over time, one of the potential difficulties of such research is that attrition could eventually distort the representativeness of the sample. To address this problem NORC houses an ongoing program of research on the analysis of longitudinal datasets that is led by U.C. economist James J. Heckman of the Economics Research Center. This program included a 1989 series of workshop conferences held at NORC to address issues of bias due to sample attrition.

The conferences were sponsored by the Alfred Sloan Foundation.

Survey Tools

The application of technology to survey projects at NORC has been focused on three areas. These areas are the application of technology to solving data analysis problems, to the management and monitoring of costs and overall production, and to particular data collection tasks such as telephone or personal interviewing. A major driving force behind the development of modern technological tools in the survey research industry has been the expanded capability for analysis offered to researchers by the computer. As the ability to manage larger and more detailed datasets and the ability to conduct more intricate surveys grew, so did the desire for such data on the part of the government and academic researchers. Former NORC Director Kenneth Prewitt wrote in 1983:

The heavy use of survey research by the mission agencies of the federal government has imposed severe demands on both the survey technology and on the organizations that have conducted large-scale evaluation studies and social experiments.

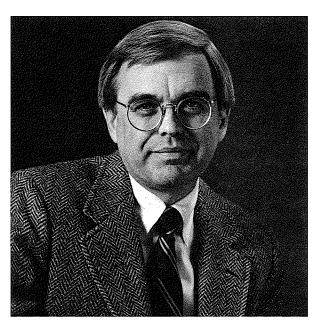
Tools for Analysis

NORC's earliest high tech machines were punchcard sorters. These were in place in the Denver offices in the early 1940s and were lent to NORC by International Business Machines. NORC's first computer was an IBM 1620 that was installed in the NORC offices in 1961. The machine was shared between NORC and social and geophysical sciences departments at the University of Chicago. During the first year it became clear that NORC's computer needs were so extensive that sharing a machine was not feasible. It was also clear that the scientific applications useful to the academic departments were not the same applications most useful to NORC. NORC replaced the 1620 with its own IBM 1401.

The purposes of these machines, from cardsorter to the 1401 and its successors, were constant. They represented incremental improvements in discrete steps of data processing. They made the data available to researchers more quickly and allowed for more complicated analyses. The highwater mark of this application (although the application itself is still very much alive at NORC today) came in the late 1960s and early 1970s when Norman H. Nie, of NORC and the University of Chicago, and a team of colleagues, developed the Statistical Package for the Social Sciences, or SPSS. Nie, who went on to found the SPSS corporation, was confronted with the problem that there was no integrated and comprehensive software designed to address the needs of social scientists. Work on SPSS began at Stanford in 1965 and then came, with Nie, to NORC and the University (Nie et al., 1975). It is important to note that NORC has as a mission



FORMER DIRECTOR AND CURRENT TRUSTEE KENNETH PREWITT.



CURRENT ASSOCIATE DIRECTOR FOR INFORMATION SERVICES REGINALD P. BAKER IN 1990.

the improvement of the survey practice and Nie's development of this new tool to analyze data is firmly in step with this ideal.

Large-Scale Surveys

Before the 1970s, the majority of NORC surveys were small in size compared to some of the mammoth efforts fielded today. The survey process was automated in a piecemeal fashion. That is, discrete steps such as analysis functions were automated, but this automation was largely a mechanically assisted version of the older, manual way of doing things. In 1979, NORC began to conduct the National Longitudinal Surveys of Labor Market Experience/Youth Cohort (NLS/Y), an annual interview with a nationally representative sample of young adults. With over 12,000 respondents, and including data collection on military bases around the world, the NLS/Y presented a staggering management task.

Computer-based systems were required to organize the NLS/Y, manage the data collection, monitor the progress, and keep track of costs. Under the old procedures used for smaller surveys, such information would have been out of date by the time it had been gathered and put in a form useful to the project manager. New computer-based monitoring systems were devised. The first was NASS, the NORC Automated Survey System, a mainframe-based sample management and survey control system. NASS was followed by the Project Management System (PMS), that presented financial data in a variety of useful comparisons. The PMS (a microcomputer-based successor version is still in operation at NORC) allowed financial control to be exercised in a timely manner to identify problems and prevent them from becoming crises. It would be nice to say that NORC perceived all the new management needs arising from largescale surveys before any went into the field, and that we lived happily ever after. In fact, some errors were made along the way.

Survey Automation

The development of computer systems to automate the survey demands a re-engineering of the survey process. Automated processes should not be machine versions of manual processes, but should be new steps altogether. NORC Associate Director for Information Services Reginald P. Baker noted in 1990 that a class of survey innovations that have brought a revolution to the survey process are those automations that combine or replace an entire series of individual manual operations.

A particularly dramatic illustration of this virtual revolution is the rise of computer-assisted telephone interviewing. The convergence of two new technologies, inexpensive long distance telephone service as represented in WATS (wide-area telecommunications service) and the

use of computers as the medium holding the questionnaire, has meant that extraordinarily complex survey instruments can be fielded over the telephone. An example is a recent NORC CATI national survey for which a paper edition of the questionnaire would comprise over one dozen different versions. The survey's elaborate branching and skip patterns would be very difficult to pursue either as a face-to-face interview or over the telephone with a hardcopy questionnaire. The combination of interviewing, data entry, and editing is another time and money-saving benefit of the technologies. And with this combination of traditional steps, new quality management procedures are required in order to prevent new problems.

In 1985, NORC took another step in the direction of improving the automated environment. In that year the decision was made to switch to a microcomputer-based information environment and to put a microcomputer on nearly every desk in the building, all tied together by a local area network (LAN). The goal was to heighten information exchange to introduce a new speed and accuracy into the management of survey processes. NORC's aim is to make employees their own information suppliers. Programmers are merely technicians if their days are spent generating tables. NORC programmers design systems so that managers can retrieve the information they want themselves. With the networked systems, project managers design their own project reports, rather than studying the useful but cumbersome standardized tables that were produced by NASS. The LAN also links not only members of the Chicago staff with each other, but also links together Chicago, the nationwide staff of Field Managers, NORC offices in Washington and New York, and a number of NORC clients through a commercial electronic mail system. This allows nearly instantaneous

transmission of project and corporate information.

The comparative advantage gained from technological progress does not come from proprietary systems, as good as they may be, but from the proficiency in the use those systems, the skill gained through using those systems, knowledge of what systems to use and when to use them, and the flexibility that an organization can offer its own employees and its clients. Beginning in 1990, a number of NORC clients and subcontractors were linked to the NORC LAN, sharing the advantages of instant access to progress reports and other information enjoyed by the survey managers.

Computer-Assisted Capabilities

In 1990, NORC opened a new office devoted to telephone interviewing and data preparation. Located within a mile of NORC's headquarters, this Lake Park Facility provides a central location for these activities, and thus aids in efficient management. The Telephone Center has sixty-



SHIRLEY KLEIS OF NORC IN 1944.



SENIOR PROGRAMMER/ANALYST CAROL ZMUDA IN

three interviewer stations and four stations devoted to respondent locating. All interviewer and locating stations are equipped for CATI data collection. The Data Preparation Center is responsible for the receipt and logging of hardcopy questionnaires and study materials from in-person data collections. The Data Preparation Center has forty-five data entry stations (which can also be used for telephone interviewing on evenings and weekends should further capacity be required). The grouping of these highly automated activities in one facility, and building maximum flexibility into the office organization (such as the data entry stations' capacity to double as telephone interviewing stations), have concentrated professionals skilled in automated tasks, and their tools, in an efficient environment.

The other computer-assisted data collection technology, computer-assisted personal interviewing (CAPI), is also in development at NORC. The replacement of a paper questionnaire with

a machine can have an impact on data quality and on interviewer comfort, and may introduce response effects that are as yet unknown but are under study at NORC. Beginning in 1989, several CAPI experiments were conducted at NORC, including the survey of a randomly selected portion of the NLS/Y sample-a random half of the NLS/Y respondents residing in Ohio. The next year a 5,000-case, split-sample, national CAPI experiment was conducted during the NLS/Y. Respondent computer wariness, data loss, transmission quality and security, and cost were among the important issues addressed in these efforts. The experiments were highly successful, revealing a modest increase in cost, no loss of data quality, few transmission problems, and resulting in enhanced speed through the reduction of data processing chores. Respondents to the CAPI-administered survey were asked to complete a CAPI feedback questionnaire at the end of the interview. Preliminary analysis shows that respondents were general favorable to computer administration, often enthusiastic (Bradburn, 1991; NORC, 1990). CAPI is a capability NORC is now prepared to offer clients whose research needs require both enhanced speed and personal interviewing.

Data Analysis and Archiving

NORC maintains a vigorous program devoted to the analysis of survey data—both those datasets that NORC has originated and those collected by other organizations. Sometimes these efforts are related to a particular contract. At other times they are initiated by and conducted in one of the NORC programmatic research centers.

The two research centers operated exclusively by NORC are the Economics Research Center, founded in 1980, and the Methodology Research Center, founded in 1985. NORC also participates in two other centers, which are affiliated with both NORC and the University of Chicago. These

are the William F. Ogburn-Samuel A. Stouffer Center for the Study of Population and Social Organization and the Chapin Hall Center for Children. Each of these centers is composed of scholars who conduct empirical data analysis projects at NORC. Many of these researchers are from institutions in the United States, particularly the University of Chicago, but a number of foreign academics are also NORC Research Associates.

Economics Research Center

The Economics Research Center is the home of a vigorous program of economic studies of work and personal lives. The ERC was established in 1980 under the leadership of Robert T. Michael, who was recruited from Stanford University for that purpose by Norman M. Bradburn and Kenneth Prewitt. Michael helped organize a distinguished group of economists, including Gary S. Becker and James J. Heckman of the University of Chicago, and provided in the ERC a congenial home for research into the economics of the family (a discipline largely invented by Becker), studies of the impact of economic factors on family formation in the United States and other countries, economic behavior over the lifecourse, and a host of other market-related analyses and modeling techniques. The ERC placed NORC at the very forefront of the burgeoning world of economic analysis. Michael, writing in 1982, defined the role of the ERC:

For economists at the University of Chicago working on empirically oriented projects, the Center provides a congenial environment, housing professors, their graduate students, and research assistants, a data archive, workshops, and other facilities used in research. For economists from around the nation working on a few specific topics the Center provides an oppor-

tunity to work together, sharing techniques, data, and expertise. (NORC, 1982)

It was during Michael's tenure that the Journal of Labor Economics and the ERC discussion paper series were launched. In 1984, Michael became Director of NORC, and was succeeded as director of ERC by Christopher Winship of Northwestern University and later by Robert J. Willis of the University of Chicago. In 1989, Michael resigned as Director of NORC to became the first Dean of the Irving B. Harris Graduate School of Public Policy Studies at the University of Chicago, succeeding NORC Trustee and U.C. statistics professor William Kruskal who had been the school's Dean Pro Tempore. Under Willis's administration ERC continued to expand its activities. The group of scholars associated with ERC has grown to include researchers from Sweden, Israel, and India.

Michael and Willis were the architects of a 1986 supplement to the NLS-72 fifth follow-up that yielded data on family formation. Sponsored by



FORMER DIRECTOR AND CURRENT RESEARCH ASSOCIATE ROBERT T. MICHAEL IN 1990.



ERC DIRECTOR ROBERT J. WILLIS IN 1990.

the National Institute of Child Health and Human Development and released in as a special edition datatape and codebook, the NLS-72 family histories data have spawned an impressive program of research on such questions as the economic impact of divorce, the role of divorce courts in economic arrangements, and the durability of cohabitational relationships.

Methodology Research Center

Established in 1985, the MRC continues under the leadership of its founding director, Bruce D. Spencer of Northwestern University. Spencer is the Chairman of the Northwestern Department of Statistics. MRC scientists conduct survey methods research relating to both sampling and nonsampling error. The research on respondent cognitive processes conducted by Norman Bradburn and others, described above in the section on survey methods, is housed in this center, as is a program of studies on decision making processes. NORC Senior Statistical Scientist Martin R. Frankel and Associate Director for Survey

Research Richard A. Kulka are, like Bradburn, MRC Research Associates.

Researchers from the MRC are also investigating new ways of analyzing medical data. Such projects include one headed by Christine K. Cassel of the University of Chicago Department of Medicine that explores life expectancy. Cassel, Spencer, and their colleagues hope to provide a formula for understanding the personal, economic, and social burdens of increasing the lifespan to its realizable limit. Research by Theodore Karrison and Paul Meier, also of the University of Chicago Department of Medicine, investigates the effects of Agent Orange on the health of Vietnam veterans as part of the larger Air Force Health Study conducted in the NORC Survey Research Group.

Spencer directs a project to assess the total error in the dual-system estimation process used to establish the size of the 1990 U.S. Census undercount. In the dual-system estimation two samples of the population are taken. In the case of the 1990 Census, the first sample is the Census itself, and the second is the large Census postenumeration survey taken later that year. Spencer and his colleagues will determine whether estimates of the Census undercount are more accurate when based on the Census alone, or when calculated using the dual system. The project is supported by the U.S. Bureau of the Census.

Spencer and Research Associate Shelby Haberman of Northwestern are currently conducting an analytic study called the Aptitude Score Distribution Study. The effort equates the tests given to high school seniors for the NORC study High School and Beyond with the administration of the Armed Services Vocational Aptitude Battery (ASVAB) to NLS/Y respondents. Both sets of test data are from 1980. The merged dataset will then

be used to develop statistical models so that ASVAB scores can be estimated for small population groups.

Research Associate R. Darrell Bock of the University of Chicago Department of Education has conducted a series of projects that use a school-level scoring system to evaluate the effectiveness of public education. Research Associate Donald Rubin of Harvard University has led in the development of methods to impute missing data based on other information from the same questionnaire.

Chapin Hall Center for Children

The Chapin Hall Center for Children has the most unusual origins of any of the research centers associated with NORC. Chapin Hall was the name of a building that once housed the Chicago Nursery and Half-Orphan Asylum. The Asylum, founded in 1860, began its work caring for children and families dislocated by the Civil War. Widely known as Chapin Hall, the direct care facility evolved into an orphanage and then a residential treatment center. It ceased operation in 1984 and used its resources to establish at the University of Chicago a research center devoted to issues of children's policy. This center, established in 1985, subsumed the activities of the NORC Social Policy Research Center, which addressed similar issues. SPRC founding director, Harold A. Richman, became the director of the new Chapin Hall Center for Children at the University of Chicago.

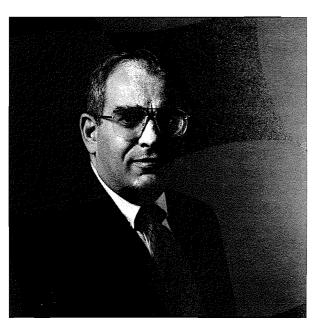
The Center's activities are clustered in three major areas: improving the data available to monitor the condition of children and reform children's services, facilitating the improved delivery of services to children in need, and seeking ways to foster the development of all children. In conducting projects in these and other areas, Chapin Hall maintains a dual commitment

to conducting research of the highest quality and to making that research accessible to the policy makers and providers who can put it to use in the service of children.

One of the major data-based efforts at Chapin Hall is the creation of a database on children's services, an effort led for the last several years by Research Fellow Robert Goerge. This ongoing project has drawn on databases maintained by the several state agencies concerned with aspects of child and family welfare, integrating data across agency boundaries to allow analyses focused on the child's experience throughout the service system. An additional benefit of this approach is that it allows the state data, collected for the agencies' administrative purposes, to be used for other purposes as well-including policy-making and planning, agency management, and case management. Goerge and his colleagues are now exploring the possibility of using this methodological breakthrough to address the need for national child welfare data.



MRC DIRECTOR BRUCE D. SPENCER IN 1990.



CHAPIN HALL DIRECTOR HAROLD A. RICHMAN IN 1990.

Two major projects have been the focus of the Center's efforts in the area of publicly funded services. The recently completed Children's Policy Project, led by Center Director Harold Richman and Research Fellow Matthew Stagner, was a comprehensive examination of the Illinois Department of Children and Family Services. The project analyzed all major aspects of the agency's operation and led to the conception of an alternative approach to the state's response to troubled children and families. The second major project in this area is evaluating the state's family preservation program. Family First offers intensive services to families where children are at risk of foster care placement. Faculty Associates John Schuerman and Tina Rzepnicki, both of the University's School of Social Service Administration, and Research Fellow Julia Littell are leading the project's data collection and analytic efforts.

A study of children's services in metropolitan Chicago also developed an alternative approach

to service delivery. This alternative focuses on the role of services in the development of all children, as well as the response to children in need. It proposes that service planning and delivery take advantage of the everyday activities and facilities of childhood, such as organized sports teams and drama groups, as well as libraries, parks, and museums; that these "primary services" be incorporated into a comprehensive system along with the specialized services that traditionally constitute the service system for children; and that this new service system be based in communities. The study led its sponsor, the Chicago Community Trust, to create a \$30 million grant-making initiative. This initiative will fund organizations committed to trying this new approach to children's services, and will allow the ideas developed at Chapin Hall to be tested in practice. The initiative will be studied by the same staff who did the original study-Harold Richman, Research Fellow Joan Wynn, and Faculty Associates Joan Costello and Robert Halpern.

These projects exemplify Chapin Hall's work not only in substance but in locus. Most of the Center's projects are focused on children in the state of Illinois, and some are focused on the city or the metropolitan area. This state and local focus has worked well for the Center, given that children's policy is generally made at this level, but Chapin Hall's work often has the power to illuminate the condition of children nationwide. Moreover, children's concerns are increasingly being defined as a national issue, and Chapin Hall's focus is changing with this broadening of interest and activity. The federal government provided some evidence for children's rising position on the national agenda and for Chapin Hall's involvement with issues outside the state by naming Chapin Hall one of three national child welfare centers in October of 1990.

One aspect of Chapin Hall's work under the Center grant is a summer training program for students. This program, involving research seminars and placements in child or family policy settings, has developed an association with a comparable program based at a Columbia University family policy research center. This fellowship program is one of two currently active at Chapin Hall. Together they constitute one of the major ways in which Chapin Hall fulfills its commitment to training the next generation of researchers in child and family policy.

Ogburn-Stouffer Center

The Ogburn-Stouffer Center for the Study of Population and Social Organization (OSC) was organized at the University of Chicago in 1983. In 1988, it established an affiliation with NORC and is now housed with NORC. Its director is University of Chicago faculty member Charles E. Bidwell, a sociologist who specializes in organizational theory and the sociology of education. The OSC's two lines of research—population and social organization—are complementary. The OSC research program provides a base for practical research training in sociology, and it has become the principal location for research apprenticeships for sociology graduate students at the University of Chicago.

Ongoing efforts in education include analytical work on a multi-year study on the organizational and functional aspects of elementary and secondary schools funded by the National Science Foundation and the National Center for Education Statistics. Longtime University of Chicago faculty member and NORC researcher James S. Coleman and Bidwell were the Principal Investigators. In population studies, Marta Tienda is studying undocumented immigrants legalized in the recent amnesty program authorized by Congress with support from the Department of Health and Human Services. She has recently

begun a major study of Puerto Rican poverty sponsored by the National Institutes of Health. Douglas S. Massey received funding from the NIH to build a major national database on Mexican immigration, and with a grant from the Sloan Foundation used these data to evaluate the effects of the 1986 Immigration Reform and Control Act.

The work of Tienda and Massey places a strong emphasis on relationships between social institutions and individual behavior. The substantive foci of their demographic work includes population migration, inequality, and the urban setting, with special reference to Hispanic migration to and economic and other social participation in the United States. The Center's recent social organization research dealt primarily with American society, with education, urban and rural community organization, and the social etiology of health.



OSC DIRECTOR CHARLES E. BIDWELL.



DIRECTOR OF FACILITIES MANAGEMENT ADAM MENDEZ AND FACILITIES MANAGEMENT SPECIALIST ELENA S. ROSAS.

In 1991, OSC housed four post-doctoral fellows in population studies. These fellows pursued their own advanced research. In addition, apprentice training in survey methods and techniques of sociological field work was provided for some forty graduate student research assistants in one or another of the Center's research projects. In demography, formal support for this training was provided by NIH and Hewlett Foundation research training fellowships. Each of these student assistants was supervised by a faculty Research Associate. In the OSC workshops, these students presented their research at various stages, and the OSC working paper series afforded an opportunity for the broader exposure of their research.

During 1991 four new senior faculty members were appointed to the University of Chicago's Department of Sociology and as OSC Research Associates. These four are Linda J. Waite, Robert J. Sampson, Ross M. Stolzenberg, and Kazuo

Yamaguchi. With the transfer of their research projects to OSC, both the demographic and social organizational work of the Center have become more fully representative of the innovative areas of activity in the discipline. In demography, Waite, formerly of the Rand Corporation, is conducting work on family formation and fertility, with special emphasis on the variation of these phenomena across the lifecourse. In social organization, Sampson has brought from the University of Illinois at Urbana a major project on the social etiology of criminal and other deviant behavior, also studied over the life course. Stolzenberg, from the Graduate Management Admissions Council and Yamaguchi from UCLA, have each undertaken research on social stratification and mobility and on the development of quantitative research methods. Further expansion has included the affiliation with OSC of three NORC researchers of long-standing-James A. Davis and Tom W. Smith of the General Social Survey and Andrew M. Greeley. These three have a common interest in describing the context in which political and social action is undertaken, and the motivations of individuals, groups, and nations within that context.

In addition to these ventures by new Research Associates, Bidwell (in collaboration with Mihaly Csikszentmihalyi, a social psychologist, and Larry V. Hedges, a quantitative methodologist, both of the University of Chicago) is undertaking a long-term study of the development of conceptions of work and of the process of job choice in adolescence and early adulthood. This study will be supported by the Sloan Foundation.

The OSC and ERC jointly share a population research center, headed by University of Chicago economist V. Joseph Hotz and supported by the NICHD.

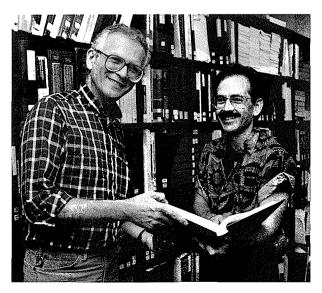
Paul B. Sheatsley Library

The library at NORC was named for Paul B. Sheatsley at a November 21, 1986, ceremony marking his retirement. The Sheatsley Library holds over 6,000 books and subscribes to over 150 journals and newsletters. The library serves as a resource for NORC's own staff, the local university community and for students, scholars, researchers, journalists, and interested persons.

Library activity began as soon as NORC opened its doors in 1941 and has always had several purposes. It is first a resource for the staff, preserving the record of project activities and materials, methodological experiments, publications and correspondence, and providing access to a collection designed for staff needs. The library maintains a substantial collection of work on survey methods, augmented by works on methods purchased with a fund established in honor of Sheatsley. More recently materials relating to the study of population have been added, enhanced by the addition of material acquired with a fund established in honor of NORC Life Trustee Evelyn Kitagawa.

The library's second purpose is as a resource for the larger community. Scholars and students from universities across the country and throughout the world come to NORC to conduct research, or contact the Sheatsley Library for assistance. Recent foreign visitors have included scholars from Russia and Taiwan.

The library also acts as an archive of data from older NORC projects that are not already deposited in other arcives and for more recent projects which are for one reason or another not available elsewhere. In 1991, NORC Librarian Patrick Bova and Associate Librarian Michael Worley compiled a bibliography of NORC reports and papers covering the entire fifty-year period. The bibliography is available from the Sheatsley Library.



CURRENT LIBRARIAN PATRICK BOVA AND ASSOCIATE LIBRARIAN MICHAEL PRESTON WORLEY IN 1990.



NORC CONTESTANTS IN A RADIO WORD-LISTING GAME, 1946. SEATED FROM LEFT: HAZEL VOLKMAR, CAROLINE GOETZEL, LOUISE VAN PATTEN. STANDING: GORDON CONNELLY, DON CAHALAN, OLIVE HALBERT, AND ANNOUNCER LEE JONES OF RADIO STATION KLZ.



RALPH UNDERHILL AND TOSHIKO TAKAHASHI AT NORC'S 1967 CHRISTMAS PARTY.



FROM LEFT: JAMES THAYER, JACOB FELDMAN, JOSEPHINE WILLIAMS, PATRICIA MUIR SHERWOOD, AND ERWIN LINN, 1949.



PEARL ZINNER, ROBERT BANACKI, KIT HARDY, PAUL SHEATSLEY, MIKE MCGARRY, PAUL BORSKY, AND PAT LAVIOLA, NEW YORK OFFICE CHRISTMAS PARTY, 1962.



FORMER NORC SAMPLING DIRECTOR SEYMOUR SUDMAN, MARIA GONZALES OF THE OFFICE OF MANAGEMENT AND BUDGET, SENIOR SCIENTIST ROGER TOURANGEAU, FORMER SENIOR SURVEY DIRECTOR KAREN S. TOURANGEAU, AND SENIOR SURVEY DIRECTOR BARBARA K. CAMPBELL.

NORC AT HOME

ssues of national interest do not always require national samples. NORC has explored important issues with surveys focused on much smaller geographic regions. Often such efforts have implications for other parts of America. A particular point of pride for NORC is that we have always been good corporate citizens in the cities where we were active, and have behaved in the other areas where we worked as if we were working in our hometown. That should probably be hometowns, because NORC has had substantial operations in four cities-Denver, Chicago, New York, and Washington. NORC has actively sought the opportunity to use the tools of social science research to better the lives of the persons living in these cities. Most of these efforts have been described above in other contexts.

Denver

In Denver, NORC's first home, we conducted surveys focused on disease, literacy, and adult education that were of direct benefit to persons living there and of indirect importance to others facing similar situations in their hometowns. The Denver office also coordinated a number of national surveys and played a major role in the work conducted for the federal government related to the war effort, although much of the management tasks for the latter were handled from New York. During its days at Denver, NORC's offices were in the Mary Reed Library at D.U. Employees of the time recall it as an exciting and fun place to work and describe a feeling of being part of a team solving the world's problems. NORC was, from the first, interested not only in national and international questions, but also in providing useful, reliable information and expert services to the city of Denver.

Chicago

Chicago has been NORC's home for over forty years. NORC was housed in several buildings during its early days in Chicago. The first was the former home of Julius Rosenwald, (who had been both president and chairman of Sears, Roebuck and Company, a University of Chicago trustee, and founder of the Museum of Science and Industry), a mansion in the Kenwood neighborhood located about one mile from the University of Chicago campus. NORC later moved closer to campus and eventually built its own building on Ellis Avenue in the 1960s helped by a National Science Foundation grant recognizing it as a national science facility. NORC remained in that building until 1986, when it moved to 60th Street, next door to the University of Chicago Law School. The Harris Graduate School of Public Policy Studies is housed in the same building.



DIRECTOR NORMAN BRADBURN AND U.S. COMPTROLLER GENERAL CHARLES BOWSHER IN WASHINGTON IN 1991



GORDON CONNELLY (NORC, 1942-1950), JAMES KAPLE (NATIONAL INSTITUTE ON DRUG ABUSE), AND PEARL R. ZINNER (NORC, 1951-PRESENT) IN WASHINGTON IN 1991.

Chicago has also been the subject of efforts focused on quality of life, education, and service delivery by government agencies. Notable examples include the 1960s Woodlawn Mental Health Study and the 1970s Chicago Neighborhood Study described above. Recently, NORC worked with the city of Chicago to investigate the attitudes of residents of two south side neighborhoods toward those neighborhoods. This study, whose immediate focus was a proposed airport, is the most recent of a number of quality of life studies conducted in Chicago since the 1960s.

New York

For fifty years NORC has recognized the special need for social research in the nation's largest city, and maintains a senior researcher to serve as the liaison with that city's research community. From 1942 to the present NORC has conducted approximately 200 studies, both large

and small, focused on health, social services, and education in the five boroughs and Northern New Jersey. NORC's first Eastern Representative was John F. Maloney, who left NORC to enter the military. From 1942 until 1962 Paul B. Sheatsley was NORC's Eastern Representative. When Sheatsley came to Chicago to manage the NORC Survey Research Service—the NORC contract research division that was the predecessor of today's Survey Research Group—he was succeeded by Pearl R. Zinner, who had joined NORC in 1951 as an interviewer at fifty cents an hour. Zinner continues to serve as a New York-based NORC executive.

The New York operation was not solely dedicated to New York-related research. Survey contracts were divided between New York and Chicago based on the workload in each office and the expertise of the survey staff. A substantial portion of NORC health-related research, including a number of national studies, were conducted from New York during the late 1970s. In part, this was because the staff there had the expertise to design and manage such efforts, gained through NORC's aggressive program of health-related research in New York. The office also benefitted from a pool of former NORC employees in New York. Researchers like Herbert Hyman, Anne S. Zanes, and Ann Brunswick, who had once worked for NORC, later returned as clients.

The New York office also led NORC as a whole into some new research areas. NORC's first survey related to AIDS, an assessment of the needs of AIDS patients in Northern New Jersey, was designed and managed by Brad Edwards. Edwards became New York Office Director when Zinner was named one of the organization's Associate Directors.

Washington

In 1991, NORC opened an office in Washington. The purpose of opening this office is to facilitate interaction with federal users of survey research services. Longtime National Academy of Sciences researcher Dean R. Gerstein joined NORC to direct Washington operations. We hope to establish a relationship with that city's research community similar to the ones we have enjoyed in Denver, Chicago, and New York. And we hope to serve the residents of that city as we have served the residents of the other communities.

The People of NORC

NORC's interest in working within the community is no doubt shaped by the kinds of people who work at NORC. Gordon Connelly and Anne Zanes both stress that working at NORC allowed them to participate in the great decisions of the day, in politics, race relations, foreign policy, and education. Don Cahalan recalls "Harry's outlook inspired his staff . . . and the optimistic UN-oriented immediate postwar climate also contributed to the NORC staff's Holy Grail attitude toward public opinion research."

Throughout its history, NORC has either been fortunate enough to employ persons with a commitment to the well-being of their community, or has been the kind of organization that attracts such people. A number of examples, Cherrington being perhaps the most notable, are available. Former NORC researcher Barbara Flynn Currie is now a Democratic State Representative in Illinois. Original Trustee J. Quigg Newton, Republican Mayor of Denver between 1947 and 1955, is credited (Abbott et al., 1982) with running "the sort of businesslike government that turn of the century progressives had dreamed about." Several former Trustees—Robert S. Ingersoll, John J. Lewis, Jr., Peter G.

Peterson, George P. Shultz, and W. Allen Wallis to name five—have held high federal office. Other Trustees who hold or have held important positions include Walter E. Massey, the Director of the National Science Foundation; Robert McC. Adams, Secretary of the Smithsonian Institution; and Vincent P. Barabba, former Director of the Census and now Executive Director of Market Research and Planning at General Motors. Current Director Norman Bradburn is a founder of the Metropolitan Chicago Information Center and former Director Kenneth Prewitt is Senior Vice-President of the Rockefeller Foundation

In 1950 a cancer clinic for impoverished patients was opened in Denver with the support of the Denver Medical Society and the Colorado division of the American Cancer Society. The clinic was named in memory of Harry Field in recognition of his fund-raising efforts on the Society's behalf (*Denver Post*, 1950). NORC believes that research in the public interest begins with the interests of the people of the communities in which we live and work.



CURRENT DIRECTOR OF CONTRACTS AND GRANTS ROBERT L. STANTON AND SENIOR GRANTS ADMINISTRATOR MARY A. WESTBROOK IN 1990.

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