NORTH CAROLINA'S RESPONSE TO THE DIRECTORATE OF HEALTH CARE STUDIES AND CLINICAL INVESTIGATION'S FINAL REPORT

ASSESSING POWER ANALYSIS APPROACHES FOR THE FORT BRAGG EVALUATION PROJECT
August 31, 1993
North Carolina’s Response to the
Directorate of Health Care Studies and
Clinical Investigation’s Final Report

Assessing Power Analysis Approaches for the
Fort Bragg Evaluation Project

August 31, 1993

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Mr. Leo Sleight  
US Army Health Services Command  
Attn: HSAA-C, Bldg. 2015  
Central Contracting Office  
Ft. Sam Houston, TX 78234-6000  

RE: DAD10-89-C-0013; Fort Bragg Child/Adolescent Mental Health Demonstration Project; Response to the Directorate of Health Care Studies and Clinical Investigation's Report "Assessing Power Analysis Approaches for the Fort Bragg Evaluation Project".

Dear Leo:

We have completed our review of the Army's report prepared by the Directorate of Health Care Studies and Clinical Investigation and entitled "Assessing Power Analysis Approaches for the Fort Bragg Evaluation Project". You will find that the review was completed in two stages. First, Dr. Leonard Bickman of Vanderbilt University, our subcontractor for the evaluation, completed the technical review of the document; and second, I engaged three independent consultants to review both the Army's study and Vanderbilt's response. Given the level of concern expressed in the Army's report about the appropriateness of Vanderbilt's statistical analyses, I believe it to be important that the work of our subcontractor be scrutinized carefully. And given that the evaluation by Vanderbilt University is of the clinical program operated by another of our subcontractors, I think that careful scrutiny is prudent, especially considering the potential use of the findings.

Regarding Vanderbilt University's response, in addition to the technical analysis, they engaged two consultants to review their work. Reports are provided from the following and their curriculum vitae are included:

Mark Lipsey, Ph.D., Professor of Public Policy, Vanderbilt University; and
James Mints, Ph.D., Professor and Chief of Methodology and Statistical Services Unit, Department of Psychiatry, School of Medicine, University of California at Los Angeles.

You will note that Dr. Lipsey is on the faculty of Vanderbilt University and he has been providing guidance to the project on the issue of power analysis. He is a recognized expert in the field of power analysis, and he is quoted as the author of a respected book on power analysis by the consultant to the Army, Asha Kapadia, who perhaps did not realize his role with the project. Dr. Bickman believed therefore that Dr. Lipsey would be a credible consultant to comment on the report.

On behalf of the State of North Carolina, I chose to engage three independent consultants who could be considered experts in three different aspects of this issue. Reports are provided from the following:

Edward Brandt, Jr., M.D., Ph.D., Professor and Co-Director, Center for Health Policy, University of Oklahoma;

Kenneth Land, Ph.D., Professor and Chairman, Department of Sociology, Duke University; and Senior Research Fellow, The IC2 Institute, University of Texas at Austin; and

Roger Straw, Ph.D., Acting Director, Office of Evaluation Extramural Policy, and Review, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.

You will note that all three are men of distinction, with substantial background in statistics. Dr. Brandt has served in the U.S. Department of Health and Human Services as the Assistant Secretary of Health and the Acting Surgeon General of the U.S. Public Health Service.

You will find absolute consistency in the Vanderbilt reply and the reports provided by the five consultants. None can find any basis for the position expressed in the Army's report and none of the consultants can find any disagreement with Vanderbilt's power analysis. The consultants' responses include varying degrees of criticism for the untenable approach in the Army's report; the most generous was that the authors did not understand the study that they were reviewing; the least generous was that the authors did not understand statistical methods.

Whatever the problems that the authors of the Army's report had that led to the production of such a questionable document, I very much appreciate your wisdom in not basing your decision regarding continuation of the evaluation study on that document. We are pleased that the comparative study of clinical outcomes of children treated in the demonstration project with those treated by traditional means will continue to completion. I anticipate
that the findings will be a substantial contribution to the field of children's mental health and that both the State of North Carolina and the Department of the Army will be proud of the findings.

Sincerely,

Lenore Behar, Ph.D.
Head, Child and Family Services Branch

LB/sw

cc: Mr. James Newman

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Appendix A.

Letter from Dr. Brandt
Consultant to the State of North Carolina
August 25, 1993

Dr. Lenore Behar
Division of Mental Health Services
325 N. Salisbury, Room 526
Raleigh, NC 27603

Dear Doctor Behar:

I have reviewed the material sent to me on the "Fort Bragg Child and Adolescent Mental Health Demonstration Project" including the consultants to the State, to Vanderbilt University, and to the Army in addition to the power analyses conducted both by the Army and by Vanderbilt.

In my view, the power analysis by Vanderbilt is the better and best describes the actual experimental situation. Drs. Lipsey and Mintz, consultants to Vanderbilt University, have described the reasons quite well. However, let me summarize my major reasons for agreeing with them.

First, I agree that basing the power analysis on a "one-tailed t test" is inappropriate for this study since it would fail to detect worse outcomes. To evaluate health services, one must not only look for better outcomes but for those that are worse as well. Selecting only a one-tailed test raises the power for the short term test.

Second, the analysis proposed by Vanderbilt (repeated measures ANOVA) is appropriate for this project since it will utilize all (or at least most) of the data generated in the three "waves", and it is consistent with the project design. Other analyses would not fulfill the latter.

Third, the power analysis performed by Vanderbilt is an accepted and acceptable method for the analysis they propose. Further, I find no flaws in the power analysis performed by the Army. However, the statistical test chosen is not the best, and so the power calculations are not appropriate.

Finally, I find nothing in the letters from Drs. Lipsey and Minsky with which I disagree, and I believe the detail in Dr. Lipsey’s letter supports my assertions cited above.
In conclusion, it is my view that the Vanderbilt University statistical method is the most appropriate for the project design and that their power analysis is also appropriate. In my judgement, the project should continue as designed.

Thank you for this opportunity. It is a fascinating project, and should yield important results for providing services to children.

My warm best wishes,

Edward N. Brandt, Jr., M.D., Ph.D.
Co-Director, Center for Health Policy
Professor, Department of Health Administration and Policy
Appendix B.

Letter from Dr. Land
Consultant to the State of North Carolina
August 24, 1993

Lenore Behar, Ph.D.
Special Assistant for Child & Family Services
Division of Mental Health, Developmental Disabilities and Substance Abuse Services
North Carolina Department of Human Resources
325 N. Salisbury Street
Raleigh, NC 27603

Dear Dr. Behar:

I now have spent considerable time studying the package of materials you sent to me concerning the power analysis of the evaluation of the Fort Bragg Child and Adolescent Mental Health Demonstration Project. This includes: i) the executive summary of the Demonstration Project, ii) Vanderbilt University’s statement of work for the evaluation of the Demonstration Project, iii) Vanderbilt University’s power analysis for the evaluation project, iv) the Army critique and alternative analysis (CR93-002), v) Vanderbilt University’s response to the Army report, vi) the letter from the Army’s consultant (Asha S. Vapadia, Ph.D.) and Vanderbilt University’s response to Dr. Kapadia, vii) the letters from consultants to Vanderbilt University (Mark W. Lipsey, Ph.D. and Jim Mintz, Ph.D.), and viii) the letter from the consultant to the State (Roger Straw, Ph.D.).

On the basis of my review and studies of these documents, I have formed a number of conclusions and recommendations:

(1) First, and perhaps most importantly, the Army’s power analysis for judging the adequacy of the two research plans is seriously flawed. The 1-tailed t-test on wave 3 data applied in the Army’s analysis would be appropriate if participants had been randomly assigned to experimental and control groups. As the Vanderbilt group points out in more than one document, this would provide assurance that participant characteristics on entrance into the Project were randomized with respect to the treatment program. But participants were not randomly assigned. This opens the possibility that the treatment and control group participants differed before assignment, and, indeed, the Vanderbilt group provides evidence that this is the case with respect to a number of measured variables. What the Vanderbilt group does not emphasize is that it also is possible that the two
groups differed with respect to a number of unmeasured or unobserved variables at intake (in the technical literature, this is called "hidden heterogeneity"). The consequence is that the t-test on wave 3 data confounds the effect of treatment with status at intake. In addition to making impossible a clean causal analysis of the Project data, this very simply and clearly invalidates the simple t-test.

(2) Secondly, the repeated measures ANOVA design proposed by the Vanderbilt group is an appropriate approach to the statistical analysis of the Project data. Of course, the power analysis conducted on the basis of this design implies that larger numbers of cases are necessary to complete the evaluation project; i.e., that the long-term data collection plan should be adopted. Alternatively, as Vanderbilt consultant Dr. Jim Mintz notes, a Bonferroni adjustment could be applied to two waves of Project data. This effectively would require use of $p=.025$ rather than $.05$ in the Army's 1-tailed t-test analysis, which again would point to the need for data on a larger number of Project participants.

(3) Thirdly, I found most interesting the discussion by Dr. Mark Lipsey of the implications for the analyses of raising the power threshold, i.e., of using a two-tailed alpha of $.05$ and raising beta to $.90$. As he indicates, this is very sensible when important, policy-relevant treatment effects are at issue. It also makes even more inadequate the short-term plan.

(4) Fourth, it seems clear to me that both the statisticians who produced the Army report CR93-002 (Dr. Wojcik, Ms. Stein, and Dr. Optenberg) and the Army's statistical consultant (Dr. Kapadia) either i) did not fully understand that the subjects of the Fort Bragg Project were not randomly assigned to experimental and control groups (as noted in point (1) above), or ii) if they were aware of this, did not understand the implications of it. If these scientists were not fully aware of the nonrandom assignment of Project participants, then this would explain their use of "off the shelf" textbook techniques for calculation of the numbers of subjects required to produce specified levels of statistical power. On the other hand, if these individuals were fully aware and cognizant of the nonrandom assignment, then they failed to appreciate the fact that this would seriously flaw the calculations they produced.

(5) Fifth, I similarly found much confusion on the part of the Army statisticians and statistical consultant over the use, meaning, and implications of the Vanderbilt Monte Carlo simulation analysis to compute sample sizes (N sizes) necessary
to reach a certain power level. Note that the objective here is to calculate the required $N$ sizes. Under conditions of random assignment of subjects to experimental and control groups, certain textbook formulas can be taken "off the shelf" (e.g., from books authored by Cohen and Lipsey) and applied to the data. Furthermore, because the mathematics in this simple case is relatively tractable, these formulas are what are called "closed-form" or "analytic" equations; i.e., one can simply plug the requisite experimental parameters in and compute out an exact number for the required $N$ sizes, as demonstrated in the Army report CR93-002. But a statistician could accomplish the same thing by pretending that the closed-form formulas did not exist and conducting a Monte Carlo simulation analysis to compute the required $N$ sizes. While the $N$ sizes computed in any given simulation analysis of a finite number of ANOVA runs will differ somewhat from the $N$ sizes computed from the textbook formulas, there is an impressive body of probability theory and statistical experience that implies that the simulation results should converge to the "analytic" solution, as the numbers of ANOVA simulation runs increase without bound (i.e., become very large).

Now, what should a statistician do to conduct a power analysis when the experimental situation is such that it is inappropriate to apply the standard closed-form textbook formulas (as in the present case)? Well, in this age of inexpensive and powerful PC or work station computing, one conducts a Monte Carlo simulation analysis that is "appropriate" and "valid" for the situation at hand. This is what the Vanderbilt researchers attempted to do.

In my opinion, the proper Army response should have been to study the extent to which the Vanderbilt simulations reached the goal of being appropriate and valid for the Fort Bragg study. One thing the Army could have asked for, as evidence of validation of the Vanderbilt study, is that the Monte Carlo simulation be capable of reproducing the results obtained from the textbook formulas that are appropriate for a randomized experiment. Interestingly, this replication was provided in the Vanderbilt response to the Army report. While the fact that the Monte Carlo simulation is capable of reproducing the results that can be obtained from application of the textbook formulas does not necessarily imply that the simulation is fully appropriate and valid for the non-textbook situation of the Fort Bragg study, it nevertheless does add some confidence that the simulation is valid and appropriate.
In addition to this, I would have thought it appropriate for the Army perhaps to request that the Vanderbilt team modify certain parameters and assumptions used in the simulation study and produce some alternative simulations to further study the robustness of the simulation results. What the Army report does instead, as Dr. Lipsey notes, is cast aspersions on the Vanderbilt analysis by presenting selected quotes from dated textbooks in operations research and econometrics to the effect that poor simulations yield poor results. This point-of-view completely ignores the simulation revolution that has been sweeping statistics over the past decade or so, as computing power has increased and costs have decreased. Simulations, of the type conducted by the Vanderbilt group, are becoming increasingly common and are allowing statisticians to study situations for which closed-form analytic solutions from standard textbooks are not available or are inappropriate.

(6) In conclusion, on the basis of the analyses and critiques available to me at this time, it seems clear to me that the long-term plan for completing the evaluation is the most appropriate from the perspective of statistical power.

Let me add that, on the basis of evaluation research I have recently conducted on an intervention that similarly required active counseling, I also would favor a longer-term evaluation of the Fort Bragg Project. The reason is that we found some decline in the enthusiasm and involvement of counselors in the later phases of a three-year evaluation project as compared to the earlier phases -- an outcome that we labeled "counselor burnout" and related to the "Hawthorne effect" of classic industrial relations experiments from the 1930s. The consequence for this study was a decline in the treatment effect over time (see the enclosed reprint, "Intensive Supervision of Status Offenders..."). I do not know whether or not there are similar circumstances or opportunities for a decline in enthusiasm or involvement of providers in the Fort Bragg Project, but my preference would be to let the project run sufficiently long so that any such effects would eventuate.
I appreciate the opportunity to comment on this very interesting evaluation project and the exchanges it has generated. If you have any additional questions, please contact me at (919) 660-5615.

Sincerely,

Kenneth C. Land, Ph.D.
John Franklin Crowell Professor
and Chairman of Sociology
Fellow, American Statistical Association
Appendix C.

Letter from Dr. Straw
Consultant to the State of North Carolina
July 27, 1993

Lenore Behar, Ph.D.
Head, Child and Family Services
Division of Mental Health, Developmental Disabilities, and Substance Abuse Services
325 North Salisbury Street
Raleigh, North Carolina 27603

Dear Dr. Behar:

As you requested, I have reviewed the Vanderbilt power analysis, the Army critique and alternate analysis, and the two reviews (Drs. Kapadia and Lipsey) completed prior to the time I was sent the materials. On the narrow question of which group has presented the better case for their preferred data collection strategy, I agree completely with Dr. Lipsey’s conclusion that the Army’s power analysis is seriously flawed for purposes of judging the adequacy of the two plans and that the Vanderbilt power analysis is more technically appropriate. The critical flaw in the Army’s analysis is that their statistical test is inappropriate to the study design; the reasons are clearly explicated in Dr. Lipsey’s comments. In addition, the critiques of the Vanderbilt approach by the Army and by Dr. Kapadia are not at all convincing. They do not address the issue of why their proposed analytic approach is more appropriate as a basis for power analysis than is the Vanderbilt approach, nor do they offer an alternative to the Monte Carlo procedure used by Vanderbilt.

On a broader level, the question of whether the primary analysis strategy proposed by the Vanderbilt group maximizes both appropriateness with respect to the presumed structure of the study and potential power is a question for which there is no simple answer. As several of the reports indicate, there are analysis strategies for improving internal validity as well as for improving statistical power that depend on factors such as the reasons for non-equivalency (i.e., selection biases), measurement error, and the regression of pretest scores on post-test scores. Sensitive analysis of the data would be necessary to address these issues. However, the gain, or loss, in statistical power is not likely to be enormous relative to the repeated measures approach proposed by the Vanderbilt group. In addition, these analytic strategies can still be used with the data at the appropriate time and their usefulness tested empirically.
In summary, the long-term plan for completing the evaluation is clearly more appropriate from the perspective of power. The additional data collection is, in my opinion, essential to ensure that the evaluation can detect the hypothesized effect of the "integration" activity, if it exists. If you have any additional questions, please do not hesitate to contact me at (301-443-7883).

Sincerely yours.

Roger Straw, Ph.D.
Acting Director
Office of Evaluation, Extramural Policy, and Review
Appendix D.

Curriculum Vitae of Dr. Brandt
CURRICULUM VITAE

EDWARD N. BRANDT, JR., M.D., PH.D.
Social Security Number: [REDACTED]

Professor and Co-Director
Center for Health Policy
University of Oklahoma Health Sciences Center
P.O. Box 26901
Oklahoma City, Oklahoma 73190
405/271-3230

BIOGRAPHICAL

Date and Place of Birth

Marital Status

Children

Home Address

EDUCATION AND DEGREES

1954  B.S. (Mathematics)  The University of Oklahoma
      Norman, Oklahoma

1955  M.S. (Mathematics)  Oklahoma State University
      Stillwater, Oklahoma

1960  M.D.  The University of Oklahoma Medical Center
      Oklahoma City, Oklahoma

1960-61  Internship  Veterans Administration Hospital
         Oklahoma City, Oklahoma

1961-62  Residency (5 Months)  The University of Oklahoma Medical Center
         Oklahoma City, Oklahoma

1963  Ph.D. (Biostatistics)  The University of Oklahoma Medical Center
      Oklahoma City, Oklahoma

1984  Doctor Of Humane Letters (LHD) Honorary  Medical University of South Carolina
      Charleston, South Carolina
EDUCATION & DEGREES (cont’d)

1984  Doctor of Science (DSC)  New York Institute of Technology
       Honorary  Old Westbury, New York

1985  Doctor of Humane Letters (LHD)  Rush University of Health Sciences
       Honorary  Chicago, Illinois

PROFESSIONAL EXPERIENCE

A. Academic Appointments

1. University of Oklahoma, Norman, Oklahoma
   1955-56  Special Teaching Assistant, Department of Mathematics
   1961-69  Research Associate, Department of Mathematics
   1964-69  Assistant Professor, Department of Civil Engineering

2. University of Oklahoma Medical Center, Oklahoma City, Oklahoma
   1961-67  Instructor to Associate Professor, Department of Preventive Medicine, School of Medicine
            Instructor to Assistant Professor, Department of Medicine, School of Medicine
   1967-68  Professor and Chairman, Department of Biostatistics and Epidemiology, School of Health
   1967-70  Professor, Department of Preventive Medicine, School of Medicine
            Associate Professor, Department of Medicine, School of Medicine
            Professor, Department of Biostatistics and Epidemiology, School of Health

3. University of Texas Medical Branch at Galveston, Galveston, Texas
   1970-84  Professor, Department of Preventive Medicine and Community Health, School of Medicine
   1973-84  Professor, Department of Family Medicine, School of Medicine
   1970-84  Member, Graduate School of Biomedical Sciences
PROFESSIONAL EXPERIENCE - Academic Appointments (cont’d)

4. University of Maryland at Baltimore
   1985-89 Professor, Department of Epidemiology and Preventive Medicine
   1985-89 Professor, Department of Family Medicine

5. University of Oklahoma Health Sciences Center
   1989- Professor, Department of Internal Medicine, College of Medicine
   1989- Adjunct Professor, Department of Family Medicine, College of Medicine
   1989-92 Adjunct Professor, Department of Health Administration, College of Public Health
   1989- Adjunct Professor, Department of Biostatistics and Epidemiology, College of Public Health
   1992- Co-Director Center for Health Policy and Professor, Department of Health Administration and Policy

B. Administrative Appointments

1. University of Oklahoma Medical Center, Oklahoma City, Oklahoma
   1962-65 Director, Medical Research Computer Center
   1962-67 Director, Biostatistical Unit
   1965-68 Director, Computer Operations
   1967-68 Assistant to the Vice President for Medical Affairs
   1968-70 Associate Director of the Medical Center and Associate Dean, School of Medicine

2. University of Texas Medical Branch at Galveston, Galveston, Texas
   1970-74 Dean, Graduate School
   1972-73 Associate Dean for Clinical Affairs, School of Medicine
   1973-74 Acting Dean of Medicine
   1974-76 Dean of Medicine
   1974-77 Chairman, Academic Council
   1976-77 Executive Dean
3. University of Texas System Administration, Austin, Texas
   1977-81 Vice Chancellor for Health Affairs

   1981-84 Assistant Secretary for Health
   11/4-16, Acting Secretary
   1983
   3/1-11/1, Acting Surgeon General, U.S. Public Health Service

5. University of Maryland at Baltimore
   1985-88 Chancellor
   1988-89 President (Title Changed)

6. University of Oklahoma College of Medicine
   1989-92 Executive Dean

COMMITTEE AND OTHER RESPONSIBILITIES

A. International
   1982-84 Member (representing United States), Executive Board, World Health Organization
       (Presidential Appointment)

       Served on Program, Drug Policy, and Non-Governmental Organizations Committees

   1981-84 U.S. Delegate to Pan American Health Organization

B. National
   1962-67 Consultant, Civil Aeromedical Research Institute Aviation Agency, Oklahoma City, Oklahoma

   1963-67 Consultant, Medical Research Division, The Upjohn Company, Kalamazoo, Michigan

   1968-71 Member, Scientific Awards Committee, American Society of Clinical Pharmacology and Therapeutics
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<td>1968-71</td>
<td>Chairman, Advisory Committee Traineeship Program in Biometry, Veterans Administration</td>
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<td>1968-73</td>
<td>Member, Board of Regents, American Society of Clinical Pharmacology and Therapeutics</td>
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<td>1969-70</td>
<td>Site Visit Consultant, Division of Physician Manpower, National Institutes of Health</td>
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<td>1970-77</td>
<td>Faculty Advisor, National Student Research Forum</td>
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<td>1971-72</td>
<td>Chairman, Committee to Effect the Optimization of Medical Statistical Interaction, American Statistical Association</td>
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<td>1972-73</td>
<td>Member, Special Review Committee, Federal-State-Local Cooperative Health Data System, Health Services and Mental Administration</td>
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<td>1973-74</td>
<td>Associate Editor, CONTINUING EDUCATION FOR THE FAMILY PHYSICIAN</td>
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<td>1974-77</td>
<td>Editor, CONTINUING EDUCATION FOR THE FAMILY PHYSICIAN</td>
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<td>1974-81</td>
<td>Faculty Advisor, National Council on Student Scientific Forums</td>
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<td>1975-79</td>
<td>Member, Primate Research Centers Advisory Committee, Division of Research Resources, National Institutes of Health; Chairman, 1978-79</td>
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<td>1976-77</td>
<td>Chairman, Southern Region Council of Deans, Association of American Medical Colleges</td>
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<td>1976-79</td>
<td>Member, Warner/Chilcott Residency Award Committee, American Academy of Family Physicians</td>
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<td>Member, Advisory Committee on Continuing Medical Education, American Medical Association</td>
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<td>1977-79</td>
<td>Vice Chairman, Section on Medical Schools, American Medical Association</td>
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<tr>
<td>1977-79</td>
<td>Member, Review Committee, Liaison Committee on Continuing Medical Education</td>
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<td>1977-79</td>
<td>Member, Ad Hoc Committee on Foreign Medical Graduates, American Medical Association</td>
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<td>1978-79</td>
<td>Member, Panel: Computer Technology and Physician Competence, Office of Technology Assessment, Congress of the United States</td>
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<td>1979-81</td>
<td>Chairman, Section on Medical Schools, American Medical Association</td>
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1979-80 Chairman, Committee on Accreditation of Continuing Medical Education, American Medical Association

1980-81 Consultant, Commission to Evaluate Foreign Medical Schools, Federation of State Medical Boards

3/81-11/81 Member, Board of Governors, Uniformed Services University of the Health Sciences

3/81-11/81 Member, Board of Regents, National Library of Medicine

1981-84 Member, Board of Governors, American Red Cross (Presidential Appointment)

1981-84 Member, National Arthritis Board, Department of Health and Human Services

1981-84 Member, National Diabetes Board, Department of Health and Human Services

1981-84 Member, National Digestive Disease Board, Department of Health and Human Services

1981-84 Chairman, Principal Working Group on Health, U.S. Emergency Preparedness Mobilization Board

1981-84 Member, Federal Coordinating Council on Science, Engineering and Technology, U.S. Government

1981-84 Member, Working Group on Food Safety, U.S. Cabinet Council on Human Resources

1981-82 Chairman, Interagency Radiation Research Committee, U.S. Government

1982-84 Chairman, Interagency Committee on Human Experimentation, U.S. Government

1982-84 Chairman, Executive Committee on Health Promotion, Department of Health and Human Services

1982-84 Chairman, Orphan Products Board, Department of Health and Human Services

1982-84 Chairman, Health Data Advisory Board, Department of Health and Human Services

1983-84 Chairman Pro-Tem, Agent Orange Working Group, U.S. Cabinet Council on Human Resources

1983-84 Member, Interagency Risk Management Council, U.S. Government

1984-84 Member, Working Group on Bio-Technology, U.S. Cabinet Council on Natural Resources
COMMITTEE & OTHER RESPONSIBILITIES - National (cont’d)

1985-91  Member, Science Advisory Committee, General Motors Corporation

1985-92  Member Advisory Council on Health Promotion, American Council on Life Insurance and Health Insurance Association of America

1985-93  Member-at-Large, National Board of Medical Examiners

1985-86  Chairman, Ad Hoc Committee on Science Policy, Association of American Medical Colleges

1985-89  Member, Board of Regents, National Library of Medicine, Chairman, 1987-89

1985-86  Member, Task Force on Physician Manpower American Medical Association

1986-91  Member, Governing Council, Institute of Medicine/National Academy of Sciences (Executive Committee 1986-87) (Vice Chairman 1987-91)

1986-86  Member, Nominating and Program Committees, Association of Academic Health Centers

1986-89  Chairman, Advisory Committee on Graduate Medical Education, U.S. Department of Defense

1986-88  Member, Board of Directors, National AIDS Network (Vice-Chairman 1987-88)

1986-     Principal, The Center for Excellence in Government

1986-89  Member, Executive Council, Association of American Medical Colleges

1987-88  Member, Association of American Medical Colleges - Association Academic Health Centers Forum

1987-90  Member, Joint Committee on Health Policy, AAU, NASULGC and ACE

1987-91  Member, Board of Directors, National Leadership Coalition on AIDS, Chairman, 1987-89

1987-91  Member, Advisory Council on Hazardous Substances Research and Training, National Institute of Environmental Health Sciences

1987-89  Member, Research Advisory Council, National Organization for Rare Disorders

1987-     Member, Special Medical Advisory Group, U.S. Veteran’s Administration

1988-90  Chairman, Committee on Implementation of Dietary Guidelines, National Research Council/National Academy of Sciences
COMMITTEE & OTHER RESPONSIBILITIES - National (cont'd)

1988- Member and Vice-Chairman, Secretary’s Council on Health Promotion, Department of Health and Human Services

1988- Member, Board of Trustees, University of Oklahoma College of Medicine Alumni Association (Treasurer, 1993-94)

1988-91 Editor, AIDS & Public Policy Journal

1988- Member, Board of Directors, Foundation for Biomedical Research

1989-93 Chairman, National Advisory Council on Injury Prevention and Control, Centers for Disease Control

1989- Chairman, Robert Wood Johnson Health Policy Fellowship Board, Institute of Medicine/National Academy of Science

1990-90 Chairman, Committee on AMA-AHA-AAMC Medical Education Conference

1990- President and Chairman, Board of Directors, Institute for Science in Society

1991-93 Chairman Elect and Chairman, Medical Sciences Section, American Association for the Advancement of Science

1991- Member, Kaiser Foundation Commission on the Future of Medicaid

1991- Member, Board of Directors, Partnership for Prevention

1992- Chair, Food Advisory Council, Food and Drug Administration

1992- Chairman, Health Statistics Forum, Institute of Medicine/National Academy of Sciences

C. State

1966-68 Member, Vocational Rehabilitation Advisory Committee, State of Oklahoma

1972-75 Member, Scientific Program Committee, Texas Academy of Family Physicians

1974-81 Consultant, Council on Medical Education and Hospitals, Texas Medical Association

1974-81 Chairman, Task Force on Graduate Medical Education and Teaching Hospitals, Texas Medical Association

1975-81 Member, Education Committee and Subcommittee on Core Curriculum, Texas Academy of Family Physicians

1976-81 Chairman, Task Force on Access to Health Care, Texas Medical Association
1979-81  Chairman, Task Force on Physician Manpower, Texas Medical Association
1980-81  Chairman, Medical Education Management Effectiveness Council, Governor, State of Texas
1980-81  Member, Committee to Enhance Leadership and Organizational Effectiveness, Texas Academy of Family Physicians
1980-81  Member, Future Planning Committee, Texas Academy of Family Physicians
1985-86  Chairman, Task Force on AIDS, Governor, State of Maryland
1986-86  Chairman, Task Force on Geriatrics, Governor, State of Maryland
1986-88  Vice Chairman, Task Force on Black and Minority Health, Governor, State of Maryland
1986-89  Member, Committee on Public Health, Medical and Chirurgical Faculty of Maryland
1987-89  Chairman, AIDS Advisory Council, Governor, State of Maryland
1987-89  Member, Board of Directors, Central Maryland Chapter, American Red Cross
1987-89  Member, Committee on Geriatrics and Long-Term Care, Medical and Chirurgical Faculty of Maryland
1989-    Member, Oklahoma State Medical Association Council on Medical Education and Accreditation
1989-    Member, Oklahoma State Medical Association Council on State Legislation and Regulation
1989-90  Member, Interim Legislative Task Force on State Employee Insurance Program, appointed by President Pro Tempore, Oklahoma Senate
1989-90  Chairman, Oklahoma Health Organization Study Commission - Gubernatorial Appointment
1990-90  Member, Ad Hoc Committee on Governance of the Oklahoma Medical Center - Gubernatorial Appointment
1990-    Member, OSMA-OUHSC Liaison Committee (Co-Chair, 1990-92)
1990-    Member, Alzheimer's Disease Research Council (Chair, 1990-92) - Gubernatorial Appointment
1992-    Member, Council on Federal Government Relations Oklahoma State Medical Association
<table>
<thead>
<tr>
<th>Year</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>Chair, Committee on Domestic Violence, Oklahoma State Medical Association</td>
</tr>
<tr>
<td>1993</td>
<td>Member, Board of Directors, Oklahoma Medical Political Action Committee</td>
</tr>
<tr>
<td>1993</td>
<td>Elected Member, House of Delegates, Oklahoma State Medical Association</td>
</tr>
<tr>
<td>1993</td>
<td>Chair, Committee on Domestic Violence, Oklahoma State Medical Association</td>
</tr>
<tr>
<td>1993</td>
<td>Vice-Chair, Committee on Violence and Public Health, State of Oklahoma</td>
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<tr>
<td>1993</td>
<td>Member, Advisory Council, Oklahoma Health Information System, State of Oklahoma</td>
</tr>
<tr>
<td>1993</td>
<td>Member, Advisory Committee on Preventive Services, Oklahoma Department of Health</td>
</tr>
</tbody>
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**D. Local**

<table>
<thead>
<tr>
<th>Year</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-70</td>
<td>Consultant, Oklahoma Medical Research Foundation, Oklahoma City, Oklahoma</td>
</tr>
<tr>
<td>1971-77</td>
<td>Member, Medical Advisory Board, Galveston County Coordinated Community Clinics</td>
</tr>
<tr>
<td>1972-76</td>
<td>Member, Career Opportunities Scholarship Committee, The Moody Foundation, Galveston, Texas</td>
</tr>
<tr>
<td>1973-74</td>
<td>Secretary, Galveston Chapter, Society of the sigma Xi</td>
</tr>
<tr>
<td>1974-75</td>
<td>President, Texas Alpha Chapter, Alpha Omega Alpha</td>
</tr>
<tr>
<td>1974-75</td>
<td>Member, Program Committee, Galveston County Medical Society</td>
</tr>
<tr>
<td>1975-77</td>
<td>Member, Board of Directors, Houston-Galveston Psychoanalytic Foundation</td>
</tr>
<tr>
<td>1975-77</td>
<td>Member, Board of Trustees, William Temple Foundation, Texas</td>
</tr>
<tr>
<td>1975-77</td>
<td>Member, Scientific Advisory Committee, Houston Gulf Coast Chapter, National Foundation for Ileitis and Colitis</td>
</tr>
<tr>
<td>1976-77</td>
<td>Chairman, Program Committee and Member, Executive Committee Galveston County Medical Society</td>
</tr>
<tr>
<td>1979-81</td>
<td>Member, Committee on Government Relations, Travis County Medical Society</td>
</tr>
<tr>
<td>1985-86</td>
<td>Member, Advisory Committee on Venture Capital, Mayor, City of Baltimore</td>
</tr>
</tbody>
</table>
COMMITTEE & OTHER RESPONSIBILITIES - Local (cont'd)

1985-89  Member, Economic Development Committee, Greater Baltimore Committee
1985-86  Co-Chairman, Panel on Education, Regional Planning Council
1986-88  Member, Board of Trustees, Education Center, Shepard and Pratt Hospital
1990-92  Member, Ex-officio, Board of Trustees, Oklahoma County Medical Society

MEMBERSHIP IN SOCIETIES

A. Professional

American Association for the Advancement of Science
Oklahoma State and American Medical Association
Oklahoma and American Academy of Family Physicians

B. Honorary

Phi Eta Sigma
Alpha Epsilon Delta
Phi Kappa Phi
Phi Sigma
Pi Mu Upsilon
Alpha Omega Alpha
Sigma Xi

HONORS

1961  Award for Outstanding Paper by an Intern, Oklahoma House Staff Association
1961  Superior Performance Award, Veterans Administration Hospital, Oklahoma City, Oklahoma
1962  Award for Outstanding Paper in Internal Medicine (co-recipient), Oklahoma House Staff Association
1966  Nineteenth Annual Stoneburner Lecturer, Medical College of Virginia
1967  Second Prize, Scientific Exhibits, American Society of Anesthesiologist (co-recipient)
1968 Certificate of Merit, Scientific Exhibits, American Medical Association (co-recipient)

1972 An Outstanding Educator of America for 1972

1974 Lloyd M. Southwick Memorial Award for best contribution to GP PRESS, Texas Academy of Family Physicians

1974 Texas Academy of Family Physicians' Special Award, "In Recognition of Significant Contributions to the Teaching of Family Medicine"

1975 The Nicholas and Katherine Leone Award for Administrative Excellence, The University of Texas Medical Branch at Galveston

1975 Lloyd M. Southwick Memorial Award for best contribution to GP PRESS, Texas Academy of Family Physicians

1975 Award for Meritorious Service, Texas Academy of Family Physicians

1975 Selected by Mu Delta Honorary Service Fraternity for dedication of the 1975 SYNDROME (Yearbook of the University of Texas Medical Branch at Galveston)

1976 Elected to Membership, Philosophical Society of Texas

1977 Outstanding Alumni Service Award "for outstanding contribution in academic medicine", Alumni Association University of Oklahoma College of Medicine (First such award)

1977 Distinguished Service Award "for outstanding contribution and dedicated service", The University of Texas Medical Branch at Galveston

1978 Award for Meritorious Service, Texas Academy of Family Physicians

1979 Elected Distinguished Service Member of the Association of American Medical Colleges

1981 Elected to Membership in the Institute of Medicine of the National Academy of Sciences

1981 Named "Outstanding Oklahoman" by Oklahoma State Society of Washington D.C.

1981 First Annual Lecturer, Thomas N. Lynn, Jr. Lectureship, University of Oklahoma Health Sciences Center

1981 Named "Territorial Marshal" by Governor, State of Oklahoma

1982 Presented Key to City of Kansas City by Mayor

1982 American College of International Physicians Award "in recognition of professional contribution to the promotion of the health of all people and the advancement of medicine"
HONORS (cont’d)

1983  Lecturer, R. Arnold Griswold Lectureship, University of Louisville School of Medicine
1983  Bronze Medallion Seal Award, Department of Health and Human Services
1983  Appointed Admiral, Texas Navy, by Governor, State of Texas
1984  Distinguished Health Service Award, New York Medical College
1984  Citation in Appreciation of Distinguished Contribution to Public Health, American College of Chest Physicians
1984  Director's Award "for outstanding contributions to the field of Health Statistics", National Center for Health Statistics, U.S. Public Health Service
1984  Presented Key to City of Dallas by Mayor
1984  Harvey Wiley Award, Food and Drug Administration
1984  Distinguished Leadership Award, Department of Health and Human Service (Highest Department Award)
1984  Commissioner's Special Citation, Food and Drug Administration
1984  Resolution of Commendation, American Medical Association House of Delegates
1985  Convocation Medalist, American College of Cardiology
1985  Honorary Fellow, American College of Cardiology
1985  Award of Special Recognition, American Council on Transplantation
1985  Annual Recognition Award for "Distinguished Contributions to Health Care", American Association of Physicians for Human Rights
1985  Special Recognition Award for "Outstanding Contributions to Medical Research and Education", Association of American Medical Colleges
1985  Award for Exceptional Achievement in Orphan Products Development, U.S. Public Health Service
1985  Elected Fellow, American College of Medical Informatics
1986  Alpha Omega Alpha Visiting Professor, Texas A&M University
1986  Keynote Lecturer, National Student Research Forum, Galveston, Texas
1986  Award for Outstanding Service, National Disaster Medical System, U.S. Government
HONORS (cont’d)

1987  Certificate of Appreciation, Baltimore Federal Executive Board

1987  Distinguished Public Service Award, U.S. Department of Defense  
      (Highest Department Award)

1987  First Annual Lecturer, Robert M. Bird Society, University of Oklahoma College of Medicine

1988  Award for “Distinguished Community Service”, Health, Education and Resources 
      Organization, Baltimore, Maryland

1988  President’s Award, American Association of Public Health Dentistry

1989  Resolution of Appreciation, Board of Regents, University of Maryland System

1989  Distinguished Alumni Award, Central High School, Oklahoma City, Oklahoma

1989  Establishment of Edward N. Brandt, Jr. Award, National Leadership Coalition on AIDS

1990  Central High School, “Outstanding Life Achievement Award”

1990  Oklahoma County Historical Society Cardinal Service Award for “Distinguished Career in 
      Medicine”

1992  Presidential Citation, Oklahoma State Medical Association

1992  Public Health Award, American Academy of Family Physicians for “Extraordinary 
      Contributions to Public Health”.

LISTINGS

American Men and Women of Science

Who’s Who in America

Who’s Who in the Southwest

Who’s Who in the East

Who’s Who in the Frontiers of Science and Technology

MILITARY SERVICE

1981-84  U.S.P.H.S., Assistant Surgeon General, RADM-08
### PUBLICATIONS

#### A. Journal Articles


<table>
<thead>
<tr>
<th>No.</th>
<th>Author(s)</th>
<th>Year</th>
<th>Title and Journal Details</th>
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<tr>
<td>78.</td>
<td>Brandt, E.N., Jr., W.N. Mayer, J.D. Mason, D.E. Brown, Jr., and L.E. Mahoney</td>
<td>1985</td>
<td>&quot;Designing a National Disaster Medical System&quot;</td>
</tr>
<tr>
<td>90.</td>
<td>Brandt, E.N., Jr.</td>
<td>1989</td>
<td>&quot;Health Care Workers and AIDS&quot;</td>
</tr>
</tbody>
</table>
B. Editorials


C. Book Chapters and Monographs


Editor


2. Brandt, E.N., Jr., ed. 1968. Proceedings of Conference. The Use of Computers in Medical Education. The University of Oklahoma Medical Center, Oklahoma City, Oklahoma.

Contributor


F. Reviewer


As of 8/6/93
Appendix E.

Curriculum Vitae of Dr. Land
CURRICULUM VITA
KENNETH C. LAND

CURRENT POSITIONS (Duke University)

John Franklin Crowell Professor and Chairman
Department of Sociology
2681 Sociology-Psychology Building
Duke University
Durham, North Carolina 27708-0088
(919) 660-5615

and

Senior Research Fellow
Center for Demographic Studies
2117 Campus Drive
Duke University
Durham, North Carolina 27706
(919) 684-6126

CURRENT POSITIONS
(University of Texas)

Senior Fellow
Center for the Study of Aging
and Human Development
Box 3003
Duke University Medical Center
Durham, North Carolina 27710
(919) 684-6118

and

Senior Research Fellow
The IC^2 Institute
2815 San Gabriel
The University of Texas at Austin
Austin, Texas 78705-3596
(512) 478-4081

DATE AND PLACE OF BIRTH

PROFESSIONAL HONORS


Fellow, American Association for the Advancement of Science, 1992-present (Elected February, 1992)

Member, Sociological Research Association, 1981-present (Elected July, 1981) [Membership in the Sociological Research Association is restricted to 150 pre-age 60 members plus approximately 100 members who are age 60 or over.]

Listed in American Men and Women of Science and Who's Who in America
EDUCATION

B.A., Sociology (major) and History (major), Texas Lutheran College, Seguin, Texas, May, 1964
M.A., Sociology (major) and Mathematics (minor), The University of Texas at Austin, May, 1966
Ph.D., Sociology (major) and Mathematics (minor), The University of Texas at Austin, August, 1969

SELECTED SCHOLARLY HONORS

NIMH Predoctoral Fellow, The University of Texas at Austin, 1965-1966
NDEA Title IV Predoctoral Fellow, The University of Texas at Austin, 1966-1969
Social Science Research Council Postdoctoral Fellow, Columbia University, New York, New York, 1969-1970
Qualified for and became a member of MENSA, April, 1987 [MENSA is an international society in which the sole requirement for qualification for membership is a score at or above the 98th percentile on a standard IQ test.]

PROFESSIONAL EXPERIENCE

Teaching Assistant, Department of Sociology, The University of Texas at Austin, 1964-1965
Lecturer, Department of Sociology, University of Wisconsin at Madison, Summer Session, 1971
Lecturer, Department of Sociology, Columbia University, New York, New York, 1970-1973
Associate Professor, Department of Sociology, University of Illinois at Urbana-Champaign, 1973-1976
Director, Social Science Quantitative Laboratory, University of Illinois at Urbana-Champaign, 1974-1981
Professor, Department of Sociology, University of Illinois at Urbana-Champaign, 1976-1981
Professor, Graduate College Statistics Program, University of Illinois at Urbana-Champaign, 1980-1981
Visiting Professor, Department of Sociology, Institute for Advanced Studies, Vienna, Austria, June, 1982
Professor, Department of Sociology, The University of Texas at Austin, 1981-1985
Associate Director, Center for Statistical Sciences, The University of Texas at Austin, 1983-1985
Director, Social Science Computing Laboratory, The University of Texas at Austin, 1983-1985
Bonita Granville Wrather Centennial Fellow, The IC² Institute, The University of Texas at Austin, 1983-1985
Research Associate, Population Research Center, The University of Texas at Austin, 1981-1987
Senior Research Fellow, The IC² Institute, The University of Texas at Austin, 1986-present
Professor and Chairman, Department of Sociology, Duke University, Durham, North Carolina, 1986-present
John Franklin Crowell Professor of Sociology, Duke University, Durham, North Carolina, 1990-present
Senior Research Fellow, Center for Demographic Studies, Duke University, Durham, North Carolina, 1986-present
Senior Fellow, Center for the Study of Aging and Human Development, Duke University, Durham, North Carolina, 1987-present

RESEARCH INTERESTS

Mathematical Sociology/Demography (population mathematics, stochastic models of social processes, models of macro social change); Social Statistics (linear models, path analysis, structural equation systems, time series analysis, sample selection bias methods, methods of evaluation research, techniques of social impact assessment); Demography (demographic accounting, applications of multistate life tables to schooling, labor force participation, and voting, political demography, trends in nuptiality, fertility, mortality, morbidity); Criminology (criminal opportunity theory, explanations of crime rate trends and distributions, micro-models of criminal careers); Organizations and Markets (environmental variability and technical efficiency, organizational effectiveness, organizational ecology, consumer satisfaction); Social Trends and Social Forecasts (social indicators, forecasting models, limits to forecasting accuracy)

PROFESSIONAL AFFILIATIONS

American Sociological Association
Population Association of America
American Society for Criminology
American Statistical Association
Econometric Society
International Institute of Forecasters
World Future Society

American Public Health Association
Society for the Study of Social Biology
American Association for the Advancement of Science

Southern Sociological Society
Southern Demographic Association
North Carolina Sociological Association
Triangle Area Population Society

PROFESSIONAL ACTIVITIES

Offices Held

(1) Elected Member, Council of the Methodology Section, American Sociological Association, 1973-1976

(2) Elected Chairman, Methodology Section, American Sociological Association, 1976-1977

(3) Elected Publications Officer, Social Statistics Section, American Statistical Association, 1987-1989

(4) Editor, Newsletter of the Crime, Law and Deviance Section, American Sociological Association, 1989-1992


(6) Elected Member, Council of the Methodology Section, American Sociological Association, 1993-1995


Committee Service

(1) Chairman, Methodology Section Nominating Committee, American Sociological Association, 1973-1975

(2) Member, Samuel Stouffer Award in Methodology Committee, American Sociological Association, 1973-1975
(3) Sociology Member, Mathematical Social Science Board, 1973-1977. The Board was funded by a grant from the National Science Foundation to organize research conferences, workshops and seminars on applications of mathematics in each of the social sciences. It was administered by the Center for Advanced Study in the Behavioral Sciences, Palo Alto, California through 1977. In January, 1978, it was reconstituted as a Research Planning Committee (the Committee on Mathematics and Social Sciences) of the Social Science Research Council, New York, New York.

(4) Member, Social Science Research Council Committee on Mathematics and the Social Sciences, 1978-1979

(5) Member, Social Science Research Council Advisory and Planning Committee on Social Indicators, 1976-1982


(8) Chairman, Social Science Research Council Committee on Social Indicators, 1982-1985

(9) Member, Advisory Panel, Measurement Methods and Data Improvement Program, Division of Social and Economic Science, National Science Foundation, 1987-1990


(12) Member, Task Group on Graduate Education (TAGGE), American Sociological Association, 1990-1991

(13) Chairman, Publications Committee, Crime, Law and Deviance Section, American Sociological Association, 1989-92

(14) Member, Publications Committee, Crime, Law and Deviance Section, American Sociological Association, 1992-present

(16) Member, Committee on the Status of the Profession, Southern Sociological Society, 1993-present

Sessions Organized (at Meetings of Professional Associations)


(3) "Methodology Section Day Program," American Sociological Association Annual Meeting, Chicago, Illinois, September 5-9, 1977


(5) "Demographic Forecasting Models and Methods," Population Association of America Annual Meeting, Boston, Massachusetts, March 28-30, 1985

(6) "Social Models and Forecasts," Southern Sociological Society Annual Meeting, Atlanta, Georgia, April 9-12, 1987


(10) "What Have We Learned from Empirical Applications of Sample Selection-Bias Models?" American Statistical Association Annual Meeting, Atlanta, Georgia, August 18-22, 1991


EDITORIAL ACTIVITIES

Guest Editor (with Dennis A. Ahlburg), Special Issue on "Population Forecasts," *International Journal of Forecasting*, Volume 8, Number 3, December, 1992


Guest Editor (with Stephen H. Schneider), Special Issue on "Forecasting in the Social and Natural Sciences," *Climatic Change: An International Journal Devoted to the Description, Causes and Implications of Climatic Change*, Volume 11, Numbers 1/2, August/October, 1987

Advisory Editor, *Social Science Quarterly*, 1969-present

Associate Editor, *Social Science Research*, 1971-present

Editorial Board, *Social Indicators Research*, 1978-present

Editorial Board, *Journal of Mathematical Sociology*, 1978-present


Associate Editor, *Criminology*, 1988-present

Associate Editorial Consultant, *Journal of Criminal Law and Criminology*, 1991-present

Editorial Board, *Journal of Quantitative Criminology*, 1989-present

Associate Editor, *Journal of the American Statistical Association-Applications*, 1989-present


Editorial Advisory Board, *Demography*, 1984


Associate Editor, *Sociological Methods and Research*, 1971-1975


OTHER (OCCASIONAL) REFEREE SERVICES

Research Funding Agencies

National Science Foundation, Division of Social and Economic Science, Sociology Program

National Science Foundation, Division of Social and Economic Science, Measurement Methods and Data Improvement Program

National Institute of Mental Health
National Institute of Child Health and Human Development, National Institutes of Health
National Institute on Aging, National Institutes of Health

Journals

*American Sociological Review*
*American Journal of Sociology*
*Sociological Methods and Research*
*Demography*
*Social Forces*
*Social Problems*

SELECTED CONSULTING ACTIVITIES

North American Rockwell, Inc., Los Angeles, California, 1970
Booz Allen Public Administration Services, Inc., Washington, D.C., 1972
Children’s Television Workshop, New York, New York, 1973
Economic Council of Canada, Ottawa, Canada, 1973
International Labor Organization, Geneva, Switzerland, 1973
Agency for International Development, Washington, D.C., 1974
Abt Associates, Cambridge, Massachusetts, 1974
Illinois Bar Association, Springfield, Illinois, 1977
National Institute on Aging, National Institutes of Health, Bethesda, Maryland, 1980
Klein and Shafer, P.C., Okemos, Michigan, 1989-1990
National Center for Educational Statistics, 1992

FUNDED RESEARCH AND GRANT PARTICIPATION

*Research Assistant* Population Research Center, The University of Texas at Austin, 1966-1969


National Science Foundation, Division of Social Sciences, Special Projects and Social Indicators Program, "Demographic Accounting and Social Indicator Models for the United States," 1975-1977. **Principal Investigator** with Marcus Felson (Co-Principal Investigator) and Robert Schoen (Faculty Associate). Total budget: $149,900.


National Science Foundation, Division of Social Sciences, Special Projects and Social Indicators Program, "Demographic Accounting and Macro Social Indicator Models for the United States," 1978-1981. **Principal Investigator** with Marcus Felson (Co-Principal Investigator), Lawrence E. Cohen (Faculty Associate), Robert Schoen (Faculty Associate), and Ross M. Stolzenberg (Faculty Associate). Total budget: $149,794.


University of Illinois at Urbana-Champaign, Research Board, "Demographic Accounts for the United States, 1940-80," 1981. Principal Investigator. Total budget: $2,748.


PUBLICATIONS

Books


Articles and Essays in Refereed Journals


(69) 1993 Kenneth C. Land and Jack M. Guralnik, "On the Estimation of Increment Decrement Life Tables with Multiple Covariates from Panel Data: The Case of Active Life Expectancy," submitted for journal review.


Invited Chapters and Other Contributions to Books


Technical Reports, Articles in Proceedings and Nonrefereed Journals


Articles Reprinted


Book Reviews and Review Essays


PAPERS AND OTHER PARTICIPATIONS AT MEETINGS OF PROFESSIONAL ASSOCIATIONS


(2) "Duration of Residence and Prospective Migration: Further Evidence." Paper presented at the annual meetings of the Population Association of America, Boston, Massachusetts, May, 1968.


(16) Discussant. Session on Trends in Divorce. Annual meetings of the Population Association of America, St. Louis, Missouri, April, 1975.


(29) "The Demographic Approach to Social Indicators," (with Marilyn M. McMillen). Luncheon Roundtable Presentation at the annual meetings of the Population Association of America, Atlanta, Georgia, April, 1978.


(35) "Has the Post-World War II Trend in Cancer Mortality Been Up or Down?" (with Marilyn M. McMillen). Roundtable Presentation at the annual meetings of the American Sociological Association, Boston, Massachusetts, August, 1979.


(38) "Problems in the Development of Demographic Accounts," (with Marilyn M. McMillen). Luncheon Roundtable Presentation at the annual meetings of the Population Association of America, Denver, Colorado, April, 1980.


(64) Chair. Session on Social Models and Forecasts. Annual meetings of the Southern Sociological Society, Atlanta, Georgia, April, 1987.


(78) Presider. Session for Address by the President of the American Sociological Association (Joan Huber). Annual meetings of the Southern Sociological Society, Norfolk, Virginia, April, 1989.


(82) Anchor for "I just had breakfast with ...” Breakfast Roundtables Session at the annual meetings of the American Society of Criminology, Reno, Nevada, November, 1989.


(89) Panel Member. Session for Chairpersons of Sociology Departments at the annual meetings of the Southern Sociological Society, Atlanta, Georgia, April, 1991.


(94) "Productive Efficiency Under Capitalism and State Socialism," (with C. A. Knox Lovell and Sten Thore). Paper presented at the 47th Congress of the International Institute of Public Finance, Leningrad, U.S.S.R., August, 1991. The Congress was cancelled because of the Soviet coup d'etat, but the papers that were to be presented still will be published in a proceedings volume.


SPECIAL CONFERENCES ORGANIZED AND/OR PARTICIPATED IN


(3) Participant. NSF Conference on Social Indicators, directed by Elliot R. Morss, George Washington University, Washington, DC, November 5-6, 1971.


(10) Participant. SSRC Conference on Socioeconomic Modeling, directed by Robert Parke, SSRC Center for Coordination of Research on Social Indicators, Washington, DC, October 3-5, 1974.


(16) Session Chairman. SSRC Conference on the National Longitudinal Surveys, directed by Robert M. Hauser, SSRC Center for Coordination of Research on Social Indicators, Washington, DC, October 14-16, 1977.


(21) Moderator. Session on Data Bases and Non-University Job Opportunities for Health-Care Research. Second Conference on the Clinical Application of the Social Sciences to Health, co-organized by Ann Barry Flood and William C. Cockerham and sponsored by the University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois, October 16-17, 1980.


(23) Discussant. Conference on Indicators of Organizational Change, co-directed by Gudmund Hernes and Albert J. Reiss, Jr. and sponsored by SSRC Center for Coordination of Research on Social Indicators, Washington, DC, December 3-4, 1981.


(30) Participant. Conference on New Uses of DEA in Management, co-directed by Abraham Charnes, William W. Cooper, and Arie Y. Lewin and sponsored by the IC² Institute, the University of Texas at Austin, Austin, Texas, September 27-29, 1989.

INVITED PRESENTATIONS AT OTHER UNIVERSITIES

(1) Colloquium Presentation, Department of Sociology, Cornell University, Ithaca, New York, April, 1971.

(2) Colloquium Presentation, Department of Sociology, Indiana University, Bloomington, Indiana, April, 1971.

(3) Workshop Presentation, Department of Sociology and Behavioral Sciences Group, Graduate School of Business, University of Chicago, Chicago, Illinois, April, 1972.

(4) Colloquium Presentation, Department of Sociology, Indiana University, Bloomington, Indiana, November, 1974.

(5) Colloquium Presentation, Department of Sociology, The University of Iowa, Iowa City, Iowa, March, 1975.


(7) Colloquium Presentation, Department of Sociology, The University of Nebraska, Lincoln, Nebraska, March, 1978.

(8) Colloquium Presentation, Department of Sociology, The University of Texas, Austin, Texas, September, 1979.

(9) Colloquium Presentation, Department of Sociology, University of Illinois, Chicago Circle, December, 1979.

(10) Colloquium Presentation, Department of Sociology, Texas A&M University, College Station, Texas, September, 1983.

(11) Colloquium Presentation, Department of Sociology, University of Minnesota, Minneapolis, Minnesota, November, 1984.


Appendix F.

Curriculum Vitae of Dr. Straw
CURRICULUM VITAE

Roger Brian Straw, Ph.D.

PERSONAL INFORMATION:

Address: 

Telephone: 

Birth date; SSN 

EDUCATION:

Hope College, Holland, MI 
B.A., cum laude, 1973

The Pennsylvania State University 
M.S., 1976

Northwestern University 
Ph.D., 1982

PROFESSIONAL EXPERIENCE:

1992-present 
Acting Director 
Office of Evaluation, Extramural Policy, and Review 
Center for Mental Health Services 
Substance Abuse and Mental Health Services Administration 
Rockville, MD

1990-1992 
Associate Director for Research 
Office of Programs for the Homeless Mentally Ill 
National Institute of Mental Health 
Rockville, MD

1983-1990 
Project Manager 
Program Evaluation and Methodology Division 
United States General Accounting Office 
Washington, DC
1982-1983 Regional Health Planner
Piedmont Health Systems Agency
Greensboro, NC

1980-1982 Research and Evaluation Consultant
Winston Salem, NC

1977-1978 Inpatient Aide/Evaluator
Quinco Consulting Center
Columbus, IN

PROFESSIONAL ORGANIZATIONS:

American Evaluation Association
American Public Health Association

SELECTED PUBLICATIONS AND PRESENTATIONS:

GAO reports and testimony

PEMD-84-6 An Evaluation of the 1981 AFDC Changes: Initial Results (1 testimony)
PEMD-86-10 Posthospital Care: Efforts to Evaluate Medicare Prospective Payment Effects Are Insufficient (2 testimonies)
PEMD-87-5BR Posthospital Care: Discharge Planners Report Increasing Difficulty in Placing Medicare Patients (2 testimonies)
PEMD-88-14 Medical Devices: FDA's 510(k) Operations Could Be Improved
PEMD-90-7 Medicare: Improvements Needed in the Identification of Inappropriate Hospital Care
PEMD-90-14 Quality Assurance: A Comprehensive, National Strategy for Health Care is Needed

Publications


Straw, M.K., Straw, R.B., and others. The Master Questionnaire: Preliminary


Presentations


Straw, R.B. Federal efforts to address the problem of homeless mentally ill persons or individuals with Alcohol or other substance abuse disorders. Invited panel presented at the annual convention of the American Evaluation Association, Washington, DC, 1990.


AWARDS

GAO

Special Commendation Award (5/84) for extraordinary analytic efforts leading to achievement of a superior and complex report on the 1981 AFDC changes

Special Commendation Award-1985 for exceptional effort in completing the multiple products requested by the Senate Special Committee on Aging

Special Commendation Award-1987 for exemplary management, meeting all milestones on time, completing the job within planned costs and without problems, leading to a quality report on an important problem

Outstanding Achievement Award-1987 for sustained overall outstanding performance and contributions to the mission and goals of the Program Evaluation and Methodology Division

Special Commendation Award-1988 for your outstanding work in the highly detailed medical devices study and your exceptional contributions technically, managerially, and personally

Pay-for-performance bonus-1989

NIMH/ADAMHA

Special Achievement Award (1990, 1991, 1992) for superior job performance

Administrator’s Award for Meritorious Achievement-1991 (group award) in recognition of outstanding national leadership in stimulating research on homeless mentally ill persons and working with other federal, state, and local agencies to address their needs