

A.S.A.
AMERICAN STATISTICAL ASSOCIATION

PROCEEDINGS

of the

SOCIAL STATISTICS SECTION

1964

Papers and discussions presented at the 124th Annual Meeting of the American Statistical Association, Chicago, Illinois, December 27-30, 1964, under the sponsorship of the Social Statistics Section.

Price: \$4.00

AMERICAN STATISTICAL ASSOCIATION

810 18th Street, N. W. Washington, D. C. 20006

INDEX OF PARTICIPANTS

Curtis Aller.....	144	Regina Loewenstein.....	9
Morris Axelrod.....	32	Robert W. Marker.....	114
James M. Beshers.....	76	E. Scott Maynes.....	2
W. John Carr.....	93	Dennis McElrath.....	137
Robert S. Cochran.....	16	Trienah Meyers.....	289
Joseph D. Coker.....	282	Albert Mindlin.....	124
Philip E. Converse.....	229	John Neter.....	2
W. Edwards Deming.....	40a	Peter Orleans.....	131
Jack Elinson.....	9	Robert B. Pearl.....	217
Paul J. Feldstein.....	93	R. Platek.....	54
I. P. Fellegi.....	54	Paul Rackow.....	238
Robert Ferber.....	210	R. Ramanathan.....	2
Abraham Frankel.....	20	Joseph Romm.....	272
Howard E. Freeman.....	192	Gerald Rosenthal.....	84
Marvin Friedman.....	187	Jerome Rothenberg.....	109
Stephen F. Gibbens.....	253	T. Donald Rucker.....	25
G. B. Gray.....	54	Donald T. Searls.....	234
Howard F. Hjelm.....	120	Harry B. Sheftel.....	293
Albert L. Johnson.....	248	Clarence C. Sherwood.....	199
David B. Johnson.....	166	James L. Stern.....	166
John F. Kain.....	260	Seymour Sudman.....	41
Henry F. Kaiser.....	117	Frederick W. Suffa.....	150
Nathan Keyfitz.....	70	Martin Taitel.....	25
Leslie Kish.....	63	James A. Tonascia.....	253
Herbert E. Klarman.....	106	Joseph Waksberg.....	217
Richard A. Lester.....	189	Patricia Wright.....	20
Marion J. Levy, Jr.	80		

TABLE OF CONTENTS—1964

PROCEEDINGS of the SOCIAL STATISTICS SECTION

I

CONTRIBUTED PAPERS - I

Chairman, Om Aggarwal, Iowa State University

The Effect of Mismatching on the Measurement of Response Errors - John Neter, University of Minnesota, E. Scott Maynes, U. S. Bureau of the Census and University of Minnesota and R. Ramanathan, University of Minnesota.....	2
Sampling Variation of Age-Adjusted Rates - Regina Loewenstein and Jack Elinson, Columbia University.....	9
Multiple Frame Sample Surveys - Robert S. Cochran, University of Wyoming.....	16
The Alphabetic Array Sampling Technique - Abraham Frankel and Patricia Wright, U. S. Office of Education.....	20
Methodological Procedures in a Very Large National Survey of Physicians - T. Donald Rucker, National Association of Blue Shield Plans and Martin Taitel, Chicago, Illinois.....	25

II

SAMPLING PROBLEMS IN SOCIAL SURVEYS - I: COMPARATIVE COST ANALYSIS OF SURVEY OPERATIONS

Chairman, Frederick F. Stephan, Princeton University

An Experimental Attempt to Reduce Field Costs by Limiting Callbacks and Increasing Cluster Size - Morris Axelrod, Combined Jewish Philanthropies.....	32
Remarks on Dr. Axelrod's Paper - W. Edwards Deming.....	40a
Time Allocation of Survey Interviewers and Other Field Occupations - Seymour Sudman, National Opinion Research Center.....	41

III

SAMPLING PROBLEMS IN SOCIAL SURVEYS - II: FURTHER DEVELOPMENTS IN PROBABILITY SAMPLING SURVEYS

Chairman, Frederick F. Stephan, Princeton University

The Redesign of the Canadian Labour Force Survey - I. P. Fellegi, G. B. Gray and R. Platek, Dominion Bureau of Statistics.....	54
Generalizations for Complex Probability Sampling - Leslie Kish, University of Michigan.....	63

IV

MODELS OF POPULATION DYNAMICS

Chairman, Paul Demeny, Princeton University

Models of Population Dynamics - Nathan Keyfitz, University of Chicago.....	70
Fertility Models with Social Parameters - James M. Beshers, Massachusetts Institute of Technology..	76
A Strategy of Analysis of Variations in Family Structure: Actual Convergence and Ideal Patterns - Marion J. Levy, Jr., Princeton University.....	80

V

STATISTICAL STUDIES OF THE DEMAND FOR MEDICAL CARE

Chairman, Monroe Lerner, Blue Cross Association

The Demand for General Hospital Facilities: A Principal Components Analysis - Gerald Rosenthal, Harvard University.....	84
The Effect of Income on Medical Care Spending - Paul J. Feldstein, University of Michigan and W. John Carr, American Hospital Association.....	93
Discussion - Herbert E. Klarman, Johns Hopkins University.....	106
Discussion - Jerome Rothenberg, Northwestern University.....	109

VI

STATISTICAL DEVELOPMENTS IN EDUCATION RESEARCH

Chairman, Herbert Solomon, Stanford University

Development of a Data System for Longitudinal Research - Robert W. Marker, University of Iowa.....	114
Statistics, Measurement, and Educational Research - Henry F. Kaiser, University of Wisconsin.....	117
The Office of Education Cooperative Research Program and the Statistician - Howard F. Hjelm, U. S. Office of Education.....	120

VII

THE USE OF SOCIAL STATISTICS IN URBAN POLICY RESEARCH

Chairman, Scott Greer, Northwestern University

Statistics and the Urban Revolution - Albert Mindlin, Government of the District of Columbia.....	124
Problems and Prospects of Enumerative Data in Urban Political Analysis - Peter Orleans, University of California, Los Angeles.....	131
Social Areas: A Case Study in the Methodology of Mass Data Analysis - Dennis McElrath, North- western University.....	137

VIII

RETRAINING AND RESEARCH FOR AMERICA'S MANPOWER NEEDS

Chairman, Margaret E. Martin, U. S. Office
of Statistical Standards

Congressional Expectations for Manpower Research Under the Manpower Development and Training Act - Curtis Aller, San Francisco State College.....	144
Administrative Statistics on Retraining - Frederick W. Suffa, Office of Manpower, Auto- mation and Training.....	150
Blue to White Collar Job Mobility: A Preliminary Report - James L. Stern and David B. Johnson, University of Wisconsin.....	166
Discussion - Marvin Friedman, AFL-CIO.....	187
Discussion - Richard A. Lester, Princeton University.....	189

IX

MEASURING THE IMPACT OF THE WAR ON POVERTY

Chairman, Genevieve Carter,
U. S. Welfare Administration

Conceptual Approaches to Assessing Impacts of Large-Scale Intervention Programs - Howard E. Freeman, Brandeis University.....	192
Methodological, Measurement and Social Action Considerations Related to the Assessment of Large-Scale Demonstration Programs - Clarence C. Sherwood, Action for Boston Community Develop- ment, Inc.	199

X

EVALUATION OF PANEL OPERATIONS

Chairman, Leon Pritzker, U. S. Bureau of the Census

Does a Panel Operation Increase the Reliability of Survey Data: The Case of Consumer Savings - Robert Ferber, University of Illinois.....	210
The Current Population Survey: A Case History in Panel Operations - Joseph Waksberg and Robert B. Pearl, U. S. Bureau of the Census.....	217
Discussion - Philip E. Converse, University of Michigan.....	229

XI

CONTRIBUTED PAPERS - II

Some Alternative Estimators for a Population Mean - Donald T. Searls, Westat Research Analysts, Inc.	234
The Use of Diverse Sampling Plans for the Collection of Transportation Data - Paul Rackow, Tri-State Transportation Committee.....	238
Incorrect Inferences Commonly Drawn from Tradi- tionally Designed Surveys - Albert L. Johnson, University of Miami.....	248
The Problem of Geographic Contiguity - A Monte Carlo Approach - Stephen F. Gibbens and James A. Tonascia, California State Department of Public Health.....	253
The Effect of the Ghetto on the Distribution and Level of Nonwhite Employment in Urban Areas - John F. Kain, U. S. Air Force Academy and The RAND Corporation.....	260

XII

STATISTICS AND CIVIL DEFENSE

Chairman, Louis Schwalb, U. S. Office of Civil Defense

Civil Defense Statistical Programs - Joseph Romm, U. S. Office of Civil Defense.....	272
The Application of Statistics to the Resource Management Program - Joseph D. Coker, National Resource Evaluation Center.....	282
USDA Surveys for Emergency Preparedness - Trienah Meyers, U. S. Department of Agriculture.	289
Discussion - Harry B. Sheftel, U. S. Office of Statistical Standards.....	293

MINUTES OF ANNUAL MEETING OF THE SOCIAL STATISTICS SECTION, CHICAGO, ILLINOIS, DECEMBER 29, 1964....	296
---------------------------------------------------------------------------------------------------------	-----