THE ANNALS of MATHEMATICAL STATISTICS

(FOUNDED BY H. C. CARVER)

THE OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

VOLUME XI

1940

CONTENTS OF VOLUME XI

ARTICLES

Brown, George W. Reduction of a Certain Class of Statistical Hypotheses	254
COCHRAN, W. G. The Analysis of Variance when Experimental Errors	
follow the Poisson or Binomial Laws	225
Cox, Gerrrude M. Enumeration and Construction of Balanced In-	000
complete Block Configurations	72
Craig, Cecil C. The Product Seminvariants of the Mean and a Central	12
	1 77
Moment in Samples	177
Daly, Joseph F. On the Unbiased Character of Likelihood-Ratio Tests	
for Independence in Normal Systems.	1
Dantzig, George B. On the Non-Existence of Tests of "Student's"	
Hypothesis having Power Functions Independent of σ	186
DEMING, W. EDWARDS AND STEPHAN, FREDERICK F. On a Least Squares	
Adjustment of a Sampled Frequency Table when the Expected Mar-	
ginal Totals are Known	427
Dodd, Edward L. The Substitutive Mean and Certain Subclasses of	
this General Mean	163
DRESSEL, PAUL L. Statistical Seminvariants and their Estimates with	
Particular Emphasis on their Relation to Algebraic Invariants	33
DWYER, P. S. The Cumulative Numbers and their Polynomials	66
FRIEDMAN, MILTON. A Comparison of Alternative Tests of Significance	
for the Problem of m Rankings	86
GEIRINGER, HILDA. A Generalization of the Law of Large Numbers	393
HOEL, PAUL G. The Errors Involved in Evaluating Correlation Deter-	
minants	58
HOTELLING, HAROLD. The Selection of Variates for Use in Prediction	
with some Comments on the Problem of Nuisance Parameters	271
HOTELLING, HAROLD. The Teaching of Statistics	
Hsu, C. T. On Samples from a Normal Bivariate Population	
Johnson, N. L. Parabolic Test for Linkage	
Kendall, M. G. Conditions for Uniqueness in the Problem of Moments.	
	102
MADOW, WILLIAM G. Limiting Distributions of Quadratic and Bilinear	195
Forms The Distribution Theory of Puns	
Mood, A. M. The Distribution Theory of Runs	901
PIERCE, JOSEPH A. A Study of a Universe of n Finite Populations with	011
Application to Moment-Function Adjustments for Grouped Data	311

Reiersøl, Olav. A Method for Recurrent Computation of all of the Principal Minors of a Determinant and its Application in Confluence	
Analysis	193
SINGLETON, ROBERT R. A Method for Minimizing the Sum of Absolute	
Values of Deviations	301
STEPHAN, FREDERICK F. AND DEMING, W. EDWARDS. On a Least Squares	
Adjustment of a Sampled Frequency Table when the Expected Mar-	
ginal Totals are Known	427
WALD, ABRAHAM. The Fitting of Straight Lines if Both Variables are	
Subject to Error	284
Wald, A. and Wolfowitz, J. On a Test Whether Two Samples are from	
the same Population	147
WOLFOWITZ, J. AND WALD, A. On a Test Whether Two Samples are from	
the Same Population	147
Notes	
BAKER, G. A. Comparison of Pearsonian Approximations with Exact	
Sampling Distributions of Means and Variances in Samples from	
Populations Composed of the Sums of Normal Populations	219
Brown, A. W. A Note on the Use of a Pearson Type III Function in	110
Renewal Theory	
BLEICK, W. E. A Least Squares Accumulation Theorem	220
COHEN, A. C., JR. The Numerical Computation of the Product of Con-	912
jugate Imaginary Gamma Functions	210
COCHRAN, W. G. Note on an Approximate Formula for Significance Levels of z	93
DEMING, W. EDWARDS. Discussion of Professor Hotelling's paper on the Teaching of Statistics	470
Dixon, W. J. A Criterion for Testing the Hypothesis that Two Samples	410
are from the same Population	100
	199
DWYER, P. S. Combinatorial Formulas for the rth Standard Moment	252
of the Sample Sum, of the Sample Mean, and of the Normal Curve	108
Evans, W. D. Note on the Moments of a Binomially Distributed Variate.	100
FRANKEL, A. AND KULLBACK, S. A Simple Sampling Experiment on	200
Confidence Intervals	
JOHNSON, EVAN, JR. Estimates of Parameters by Means of Least Squares.	400
KIMBALL, BRADFORD F. Orthogonal Polynomials Applied to Least	348
Square Fitting of Weighted Observations	
KULLBACK, S. AND FRANKEL, A. A Simple Sampling Experiment on	
Communication and the contract of the contract	209
MADOW, WILLIAM G. The Distribution of Quadratic Forms in Non-	100
Central Normal Random Variables	100
Mauchly, John W. Significance Test for Sphericity of a Normal n-variate	204
Distribution	204

NORRIS, NILAN. The Standard Errors of the Geometric Means and
their Application to Index Numbers 445
OLDS, E. G. On a Method of Sampling
OLMSTEAD, P. S. Note on Theoretical and Observed Distributions of
Repetitive Occurrences
Wald, Abraham. A Note on the Analysis of Variance with Unequal
Class Frequencies96
WOODBURY, MAX A. Rank Correlation when there are Equal Variates 358
Miscellaneous
Abstracts of Papers
Constitution and By-Laws of the Institute
Directory of the Institute
Report of the Philadelphia Meeting of the Institute
Report of the Hanover Meeting of the Institute 473
Report of the War Preparedness Committee of the Institute 479
Resolutions of the Institute on the Teaching of Statistics 472