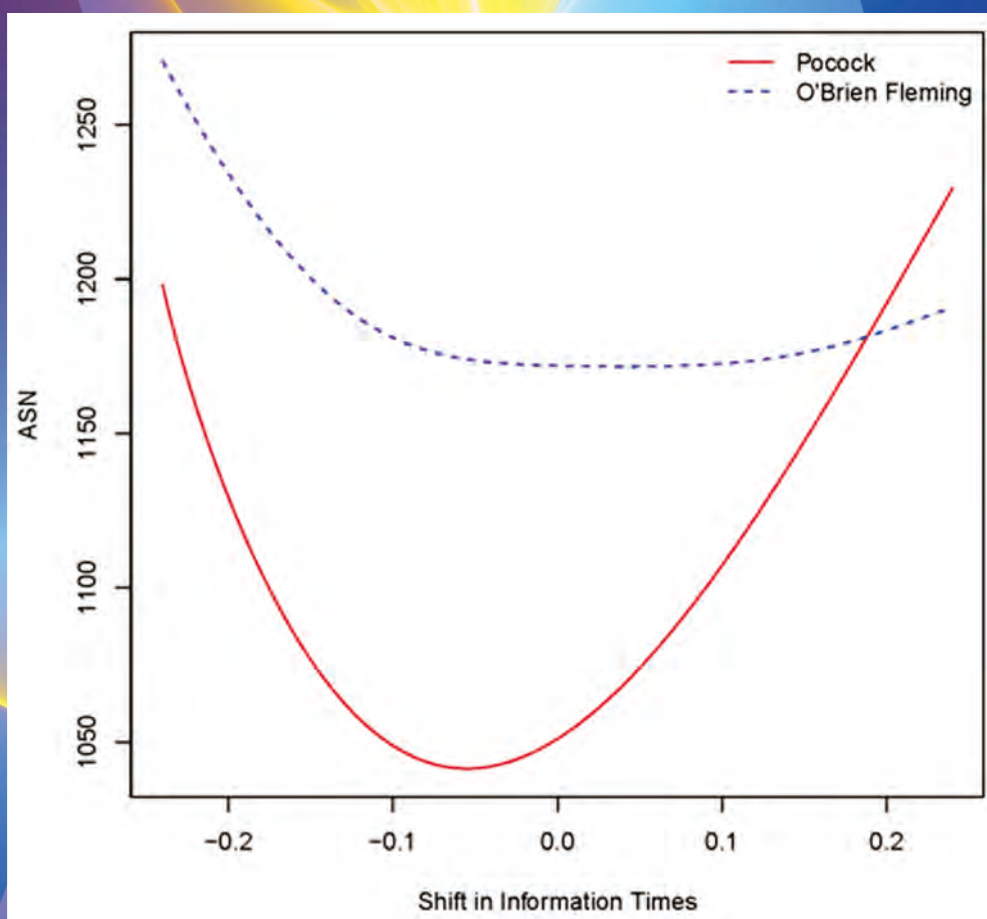
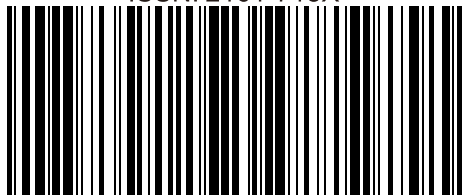


Open Journal of Statistics

Special Issue on Medical Studies in Statistics



ISSN: 2161-718X



9 772161 718X0304A

Journal Editorial Board

ISSN 2161-718X (Print) ISSN 2161-7198 (Online)

<http://www.scirp.org/journal/ojs>

Editor-in-Chief

Prof. Qihua Wang

Chinese Academy of Sciences, China

Editorial Board

Prof. Ana M. Aguilera

University of Granada, Spain

Prof. Essam K. Al-Hussaini

Alexandria University, Egypt

Prof. Erniel B. Barrios

University of the Philippines, Philippines

Prof. Alexander V. Bulinski

Lomonosov Moscow State University, Russia

Prof. Kambiz Farahmand

University of Ulster, UK

Prof. Junsoo Lee

University of Alabama, USA

Prof. Tae-Hwy Lee

University of California, Riverside, USA

Dr. Qizhai Li

Chinese Academy of Sciences, China

Dr. Xuewen Lu

University of Calgary, Canada

Prof. Thu Pham-Gia

University of Moncton, Canada

Dr. Gengsheng Qin

Georgia State University, USA

Prof. Kalyan Raman

Northwestern University, USA

Prof. Mohammad Z. Raqab

University of Jordan, Jordan

Dr. Jose Antonio Roldán-Nofuentes

University of Granada, Spain

Prof. Andrew Rosalsky

University of Florida, USA

Prof. Sunil K. Sapra

California State University, Los Angeles, USA

Prof. Siva Sivaganesan

University of Cincinnati, USA

Dr. Xinyuan Song

Chinese University of Hong Kong, China

Dr. Zheng Su

Genentech Inc., USA

Prof. Jianguo Sun

University of Missouri, USA

Prof. Aida Toma

Academy of Economic Studies, Romania

Prof. Vladimir V. Ulyanov

Moscow State University, Russia

Dr. Florin Vaida

University of California, San Diego, USA

Dr. Haiyan Wang

Kansas State University, USA

Prof. Augustine Chi Mou Wong

York University, Canada

Dr. Liqing Yan

University of Florida, USA

Dr. Peng Zeng

Auburn University, USA

Dr. Hongmei Zhang

University of South Carolina, Columbia, USA

Dr. Jin-Ting Zhang

National University of Singapore, Singapore

Dr. Yichuan Zhao

Georgia State University, USA

Dr. Wang Zhou

National University of Singapore, Singapore

Prof. Xiao-Hua Zhou

University of Washington, USA

Guest Reviewers

Subhadip Bandyopadhyay

Anwar H. Joarder

Serguei Pergamenchtchikov

Abdelouahab Bibi

Darsh Joshi

Raghu Nandan Sengupta

Huaihou Chen

Alexander de Leon

Abderrahim Taamouti

Michael Davis

Xinmin Li

Nian-Sheng Tang

Jianjun Gan

Nengxiang Ling

Antony Gautier

Yu Miao

TABLE OF CONTENTS

Volume 3 Number 4A

August 2013

A Comparison of Statistical Methods for Analyzing Discrete Hierarchical Data: A Case Study of Family Data on Alcohol Abuse

Y. Y. Liang, K. C. Carriere.....1

A Simple Method of Measuring Vaccine Effects on Infectiousness and Contagion

Y. Chiba.....7

Log-Link Regression Models for Ordinal Responses

C. L. Blizzard, S. J. Quinn, J. D. Canary, D. W. Hosmer.....16

Copy Mean: A New Method to Impute Intermittent Missing Values in Longitudinal Studies

C. Genolini, R. Écochard, H. Jacqmin-Gadda.....26

On the Use of Local Assessments for Monitoring Centrally Reviewed Endpoints with Missing Data in Clinical Trials

S. S. Brummel, D. L. Gillen.....41

The figure on the front cover is from the article published in Open Journal of Statistics, 2012, Vol. 3, No. 4A, pp. 41-54 by Sean S. Brummel and Daniel L. Gillen.

Open Journal of Statistics (OJS)

Journal Information

SUBSCRIPTIONS

The *Open Journal of Statistics* (Online at Scientific Research Publishing, www.SciRP.org) is published bimonthly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$59 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2013 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ojs@scirp.org



Call for Papers

Open Journal of Statistics

ISSN 2161-718X (Print) ISSN 2161-7198 (Online)

<http://www.scirp.org/journal/ojs>

Open Journal of Statistics (OJS) is an international journal dedicated to the latest advancement of statistics. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of statistics.

Editor-in-Chief

Prof. Qihua Wang

Chinese Academy of Sciences, China

Editorial Board

Prof. Ana M. Aguilera
Prof. Essam K. Al-Hussaini
Prof. Erniel B. Barrios
Prof. Alexander V. Bulinski
Prof. Kambiz Farahmand
Prof. Junsoo Lee
Prof. Tae-Hwy Lee
Dr. Qizhai Li
Dr. Xuewen Lu
Prof. Thu Pham-Gia
Dr. Gengsheng Qin

Prof. Kalyan Raman
Prof. Mohammad Z. Raqab
Dr. Jose Antonio Roldán-Nofuentes
Prof. Andrew Rosalsky
Prof. Sunil K. Sapra
Prof. Siva Sivaganesan
Dr. Xinyuan Song
Dr. Zheng Su
Prof. Jianguo Sun
Prof. Aida Toma
Prof. Vladimir V. Ulyanov

Dr. Florin Vaida
Dr. Haiyan Wang
Prof. Augustine Chi Mou Wong
Dr. Liqing Yan
Dr. Peng Zeng
Dr. Hongmei Zhang
Dr. Jin-Ting Zhang
Dr. Yichuan Zhao
Dr. Wang Zhou
Prof. Xiao-Hua Zhou

Subject Coverage

This journal invites original research and review papers that address the following issues in statistics. Topics of interest include, but are not limited to:

- ◆ Actuarial science
- ◆ Applied information economics
- ◆ Asymptotic statistics
- ◆ Bayesian statistics
- ◆ Biostatistics
- ◆ Business statistics
- ◆ Causal inference
- ◆ Chemometrics
- ◆ Computational statistics
- ◆ Data mining
- ◆ Decision theory
- ◆ Demography
- ◆ Descriptive statistics
- ◆ Design of experiments
- ◆ Econometrics
- ◆ Energy statistics
- ◆ Engineering statistics
- ◆ Epidemiology
- ◆ Estimation theory
- ◆ Geographic information systems
- ◆ Graphic models and related theory
- ◆ High dimensional data analysis
- ◆ Image processing
- ◆ Multivariate analysis
- ◆ Non-parametric statistics
- ◆ Parametric statistics
- ◆ Psychological statistics
- ◆ Regression analysis
- ◆ Reliability
- ◆ Reliability engineering
- ◆ Sample survey
- ◆ Sampling theory
- ◆ Semiparametric statistics
- ◆ Social statistics
- ◆ Statistical analysis with complex data
- ◆ Statistical computing
- ◆ Statistical inference
- ◆ Statistical methods
- ◆ Survival analysis
- ◆ Time series analysis

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the OJS.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/ojs>

Email: ojs@scirp.org