The Stats Source: Newsworthy Notes from the Ed Stats SIG

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University of Connecticut

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University of Louisville

President's Column

Seasons Greetings!

Thanks to our hard-working Program Chair, Mark Beasley, we are putting together a stimulating program for spring 2012 in Vancouver! A special thanks to Mark for all his time and dedication to creating the program and chairing SIG committees. And thanks to those who submitted papers for the meeting and served on the reviewer panel – your efforts are what help us create the quality Ed Stat SIG sessions that we are accustomed to.

The Educational Statistician's service award for 2011 went to Dr. Michael Harwell from the University of Minnesota. Congratulations Mike for your years of service and significant contributions to the field of the Educational Statistics - we look forward to your talk at our business meeting in the spring.

The nominations committee, Jill Adelson, Bethany Bell, and Betsy McCoach, Chaired by Mark Beasley, are hard at work developing a slate of nominees for our open positions. This committee will also be selecting our next year's service award winner. So if you have ideas for this, there is still time to submit a nomination. If you have a candidate to nominate, you can email any of them and include a short paragraph giving the rationale for your choice.

As is the custom, we rotate the Quantitative SIG planning among the sponsoring quantitative SIGS.

The SEM SIG is arranging the Quantitative SIG Social in Vancouver for 2012. If you have ideas for a venue, you can contact Jaehwa Choi, jaechoi@gwu.edu or Walter Leite, walter.leite@coe.ufl.edu.

Please recruit your colleagues and students to attend our sessions in the spring. The more interest we generate, the more our organization can grow.

Have a wonderful holiday with your family and friends,

Janet

Janet Holt
Educational Statisticians
SIG President 2011-2012

A note from the Program Chair

American Educational Research Association

Friday, April 13 – Tuesday, April 17
Vancouver, British Columbia, Canada

"Non Satis Scire: To Know Is Not Enough"

I am positive that AERA 2012 will be great! Vancouver is a beautiful city. Get away from the city and see the mountains and the sea. AND ATTEND ALL THE EDUCATIONAL STATISTICIANS SIG SESSIONS!! We have 3 Paper Sessions (Alternative Methods for Data Analysis; Issues in Clustered Data Structures; and Mediation, Ordinal, and Nonlinear Modeling) and a 6 Posters and Roundtables. And of course, the Business Meeting. In addition, we are co-sponsoring one paper session with the HLM SIG.

I would like to thank the review panel: Patricia Busk; Robert Cribbie; Holmes Finch; Debbie Hahs-Vaughn; Michael Harwell; Jeff Kromrey; Betsy McCoach; Dan Morris; Stephen Sivo; and Bruno Zumbo. Their high-quality and timely reviews made this process much less painful than I thought it would be. I recognize that this was a very time-consuming task and I appreciate their commitment to the Ed-Stat SIG. The collective efforts of our submitters, reviewers, session discussants, and chairs promise to make our meeting in Vancouver a great one!

Finally, we will again join with other quantitative SIGs to host a social during the annual meeting. Look for more this in the AERA program.

If you have any questions or suggestions for making the 2012 annual meeting a successful one, please do not hesitate to contact me at mbeasley@uab.edu

Thank you!

Mark

Mark Beasley
Educational Statisticians SIG
Program Chair 2011-2012

Vancouver BC

Modern Modeling Methods Conference 2012

Modern Modeling Methods Conference

MAY 25–26, 2011

University of Connecticut
Neag School of Education

SAVE THE DATE!

Modern Modeling Methods Conference 2012

University of Connecticut
May 22-23rd, 2012

The Modern Modeling Methods (M³) conference is an interdisciplinary conference designed to showcase the latest modeling methods and to present research related to these methodologies. The second annual M³ conference will be held May 22-23rd, 2012 (with a pre-conference on May 21st and a post conference on May 24th). Keynote speakers for the 2012 conference include Donald Rubin, Peter Bentler, and Jack McArdle.

We are currently soliciting both methodological research papers and papers that illustrate methodological tech-niques in the area of modeling, broadly defined. Papers related to multi-level modeling, structural equation modeling, mixture modeling, and longitudinal modeling are especially encouraged.

Conference proposals for the Modern Modeling Methods conference may fall into one (or more) of four categories: Methodological Innovation, Methodological Application, Methodological Illustration, or Methodological Evaluation. Methodological Innovation proposals introduce a new technique. Methodological evaluation proposals present the results of empirical research evaluating a methodology. Most often, these will involve simulation studies. Methodological Application proposals present the methods and results of a real research study in which the technique was used. Methodological Illustration proposals provide a **pedagogical illustration** of when and how to use the technique; thes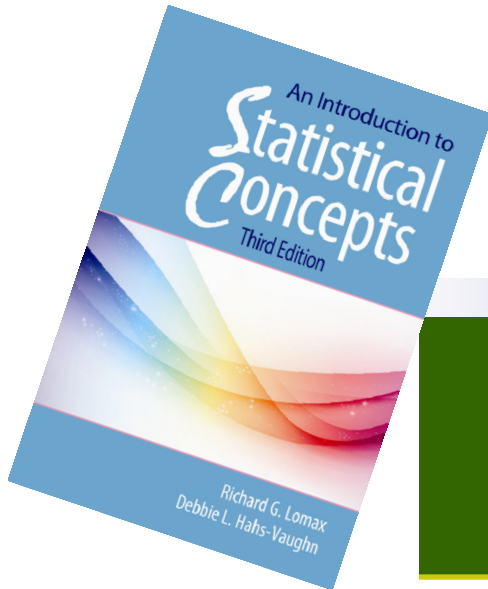e papers are designed to help the audi-ence be able to implement the technique themselves. Methodological research proposals should be no longer than 1000 words and should include purpose, background, methods, results, discussion, and significance. Methodological illustration papers should be no longer than 1000 words and should include a description of the methodology to be illustrated as well as an outline of the paper/talk. All proposals should be submitted electronically at http:// www.modeling.uconn.edu/ proposals.cfm

Proposals for the 2012 conference are due January 5, 2012. Notifications of presentation status

"The Modern Modeling Methods (M³) conference is an interdisciplinary conference designed to showcase the latest modeling methods..."

will be emailed by February 6, 2012. For more information about the modern modeling conference, see our website, www.modeling.uconn.edu . If you have any questions about the conference, please email D. Betsy McCoach (betsy.mccoach@uconn. edu).

An Introduction to Statistical Concepts

> "This comprehensive, flexible text is used in both one- and two-semester courses to review introductory through intermediate statistics."

An Introduction to Statistical Concepts (Third Edition)
By Richard G. Lomax and Debbie L. Hahs-Vaughn

This comprehensive, flexible text is used in both one- and two-semester courses to review introductory through intermediate statistics. Instructors select the topics that are most appropriate for their course. Its conceptual approach helps students more easily understand the concepts and interpret SPSS and research results. Key concepts are simply stated and occasionally reintroduced and related to one another for reinforcement. Numerous examples demonstrate their relevance. This edition features more explanation to increase understanding of the concepts. Only crucial equations are included.

In addition to updating throughout, the new edition features:

- New co-author, Debbie L. Hahs-Vaughn, the 2007 recipient of the University of Central Florida's College of Education Excellence in Graduate Teaching Award.
- A new chapter on logistic regression models for today's more complex methodologies.
- More on computing confidence intervals and conducting power analyses using G*Power.
- Many more SPSS screenshots to assist with understanding how to navigate SPSS and annotated SPSS output to assist in the interpretation of results.
- Extended sections on how to write-up statistical results in APA format.
- New learning tools including chapter-opening vignettes, outlines, and a list of key concepts, many more examples, tables, and figures, boxes, and chapter summaries.
- More tables of assumptions and the effects of their violation including how to test them in SPSS.
- 33% new conceptual, computational, and all new interpretative problems.

A website that features Power Points, answers to the even-numbered problems, and test items for instructors, and for students the chapter outlines, key concepts, and datasets that can be used in SPSS and other packages, and more.

Reviews

"Lomax and Hahs-Vaughn write clearly. … Writing statistical results in APA format is great for graduate students. … The … changes … make the book a better teaching tool. … The level is appropriate for graduate and doctoral students in psychology, sociology, and education. … The basic terms and concepts are defined and developed clearly, accurately, and in an interesting manner." - **Robert P. Conti, Sr., Mount Saint Mary College, USA**

"The sentences are simple, but they are carefully composed to deliver the message accurately and logically. … Only equations that are essential to the research question are presented and this is helpful in reducing students' statistics phobia. … SPSS is thoroughly integrated into the text. … I would seriously consider it for adoption. I use [Gravetter and Keppel's books] … but I am not satisfied with these two books." - **Feifei Ye, University of Pittsburgh, USA**

Statistical Concepts: A Second Course

Statistical Concepts: A Second Course (Fourth Edition)
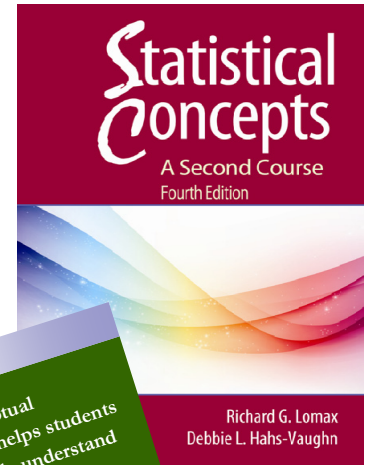*By Richard G. Lomax and Debbie L. Hahs-Vaughn*

Statistical Concepts consists of the last 9 chapters of *An Introduction to Statistical Concepts, 3rd ed.* Designed for the <u>second course</u> in statistics it is one of the few texts that focuses just on intermediate statistics. The flexible coverage allows instructors to select the topics that are most appropriate for their course. Its conceptual approach helps students more easily understand the concepts and interpret SPSS and research results. Key concepts are simply stated and reintroduced and related to one another for reinforcement. Numerous examples demonstrate their relevance. This edition features more explanation to increase understanding of the concepts. Only crucial equations are included.

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Price: $69.95

Paperback: 544 pages

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Publication! Publication!! Publication!!!

The Journal of Experimental Education (JXE) publishes methodological and applied research studies that use the range of quantitative and qualitative methodologies found in the behavioral, cognitive, and social sciences. Published studies address all levels of schooling and various educational contexts, including public and private education in the United States and abroad. The journal's audience includes research methodologists, applied researchers, and practitioners interested in advancing educational research and improving teaching, learning, and schooling.

The journal is divided into three sections: **Learning, Instruction, and Cognition** (editor-in-chief: Rayne Sperling, Penn State); **Motivation and Social Processes** (executive editor, Lynley Anderman: Ohio State University); and **Measurement, Statistics, and Research Design** (executive editor: Debbie L. Hahs-Vaughn, University of Central Florida). Recent articles published through the measurement, statistics, and research design section of the journal include:

> Leite, W. L. & Stapleton, L. M. (2011). Detecting growth shape misspecifications in latent growth models: An evaluation of fit indexes. *Journal of Experimental Education, 79* (4), 361-381.
>
> Romano, J. L., Kromrey, J. D., Owens, C. M., Scott, H.M. (2011). Confidence interval methods for coefficient alpha on the basis of discrete, ordinal response items: Which one, if any, is the best? *Journal of Experimental Education, 79* (4),382-403.
>
> French, B. F. & Finch, H. (2011).

> "The Journal of Experimental Education (JXE) publishes methodological and applied research studies."

Model misspecification and invariance testing using confirmatory factor analytic procedures. *Journal of Experimental Education, 79* (4),402-428.

JXE's Impact Factor. According to Journal Citation Reports, in 2010 JXE was ranked 26 of 184 (top 15%) of all education and educational research journals with an impact factor of 1.633. In terms of five year impact, JXE is ranked 33 of 177 (top 19%) of all education and educational research journals with an impact factor of 1.703. In relation to other statistical methodology journals, JXE is the *second ranked* educational research journal, ranking just <u>one behind</u> the *Journal of Education and Behavioral Statistics* (which was ranked 25 of 184 with a one-year impact factor of 1.644 and five-year impact factor of 2.474).

Submission of Manuscripts. To submit a manuscript, follow the directions at <u>http://mc.manuscriptcentral.com/jxe</u>. Include with your submission a statement that the manuscript has been sent only to **JXE** and that it is not under consideration for publication elsewhere.
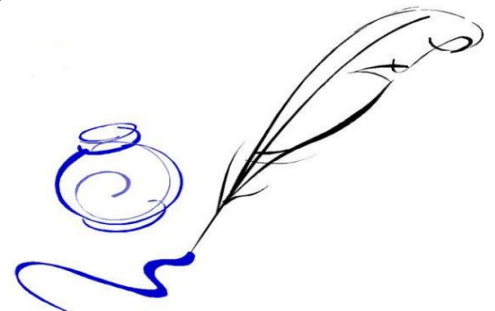
Manuscripts must be no longer than 35 pages, double-spaced, including the abstract, notes, and references. Manuscripts that do not comply with instructions specified here will be returned to the author immediately.

The Review Process. At least two consulting editors with expertise in an appropriate field blind review each manuscript. An editor reviews their recommendations and has final authority regarding acceptance and rejection. If editors suggest revisions, they outline them in a decision letter, which also contains information about submitting a revised manuscript. The review process takes approximately 3–4 months.

Additional details about the journal can be found at <u>http://www.tandf.co.uk/journals/authors/vjxeauth.asp</u>

Job Opportunities

Position	University	Program	Application Process
Charles Hicks Chair	Purdue University	Educational Assessment and Program Evaluation	All application materials and inquiries should be directed to **Professor Youli Mantzicopoulos, Search Chair, Department of Educational Studies, BRNG, 100 N. University Street, Purdue University, West Lafayette, IN** 47907-2098. Applicants should send the following materials: 1) Letter of application, 2) Curriculum vitae (including home address and preferred e-mail address) 3) Statement of research interests and professional goals relative to the College of Education strategic plan (http://www.education.purdue.edu/sp/PDF_Folders/COE_SPLAN_2009-2014_Final_09-04-09.pdf) 4) Three examples of their scholarship. 5) Three letters of recommendation.
Assistant Professor	Purdue University	Educational Measurement and Research Methods	Send letter of application, curriculum vitae, three letters of recommendation, a philosophy of teaching statement, and a statement of professional goals relative to the College of Education strategic plan (http://www.education.purdue.edu/sp/PDF Folders/COE SPLAN 2009-2010 Final 09-04-09.pdf), to Dr. Helen Patrick, Chair, Faculty Search Committee, Department of Educational Studies, BRNG, 100 N. University Street, Purdue University, West Lafayette, IN 47907-2098
Open-rank tenure-track faculty	University of Delaware	*Quantitative Methods and Experimental Design*	All applicants should first visit http://www.udel.edu/udjobs and read the "Applicant Instructions" under the "Resources for Applicants" tab. Applicants must upload a detailed letter of interest and curriculum vitae (in one document) for this position. The curriculum vitae and all application materials will be shared with University faculty. In addition, candidates must send a personal statement of research, contact information for three references, and copies of representative publications electronically to Jessica Bosick, jbosick@udel.edu. **Direct questions should be sent to Ratna Nandakumar, Search Committee Chair, nandakum@udel.edu**.
Assistant/ Associate Professor	University of Florida	Research and Evaluation Methodology (REM)	Apply to: https://jobs.ufl.edu. Please reference requisition number 0809488. If you have any questions or need any technical help please contact Human Resources at 352-392-2477. Applicants must upload (1) a cover letter addressing research and teaching interests and qualifications, (2) a current vita, (3) names, addresses, e-mail addresses, and telephone numbers of at least three references, (4) transcript of graduate courses, (5) samples of professional writing, and (6) student assessments of instruction (if available). **Send email inquiries or nominations to James Algina at remsearch@coe.ufl.edu.**
Assistant Professor	University of South Florida	Research Methods	Applications should include a letter describing qualifications for the position in each of the above areas, current vita, university transcripts, copies of one or more recent research articles (maximum of 4) presented at professional conferences or published in refereed journals, and the names, addresses, telephone numbers and e-mail addresses of four professional references. Please specify Position #4725. **Applications must be submitted electronically to https://employment.usf.edu** **Questions about the position may be directed to Dr. Robert F. Dedrick, Chair of the Search Committee, e-mail address:** dedrick@usf.edu

Have information to share?

Do you have information that you would like to share with your colleagues in the Educational Statisticians SIG via the newsletter? We are looking for the following types of news:

- Upcoming conferences and calls for proposals

- Calls for authors and other contributions

- Book reviews and other resources of interest to statisticians as well as graduate students enrolled in statistics

- Other worthy contributions that are of value to your colleagues

Contributions should be sent in a **Word** document to the newsletter co-editors:

Debbie.Hahs-Vaughn@ucf.edu

Haiyan.Bai@ucf.edu

Stephen.Sivo@ucf.edu

Lea.Witta@ucf.edu

Happy Holidays!