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STATISTICS EDUCATION RESEARCH JOURNAL

The *Statistics Education Research Journal* (*SERJ*) is a peer-reviewed electronic journal of the International Association for Statistical Education (IASE) and the International Statistical Institute (ISI). *SERJ* is published twice a year and is free.

SERJ aims to advance research-based knowledge that can help to improve the teaching, learning, and understanding of statistics or probability at all educational levels and in both formal (classroom-based) and informal (out-of-classroom) contexts. Such research may examine, for example, cognitive, motivational, attitudinal, curricular, teaching-related, technology-related, organizational, or societal factors and processes that are related to the development and understanding of stochastic knowledge. In addition, research may focus on how people use or apply statistical and probabilistic information and ideas, broadly viewed.

The *Journal* encourages the submission of quality papers related to the above goals, such as reports of original research (both quantitative and qualitative), integrative and critical reviews of research literature, analyses of research-based theoretical and methodological models, and other types of papers described in full in the Guidelines for Authors. All papers are reviewed internally by an Associate Editor or Editor, and are blind-reviewed by at least two external referees. Contributions in English are recommended. Contributions in French and Spanish will also be considered. A submitted paper must not have been published before or be under consideration for publication elsewhere.

Further information and author guidelines are available at:
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EDITORIAL

Welcome to the second issue of *SERJ* for 2013. My editorial contains the usual overview of the articles published in this issue, followed by a report on acceptance rates and various times to decision (e.g., from submission to publication) for manuscripts submitted to *SERJ*.

The four articles published in this issue of *SERJ* collectively look at the effects of language and context on students' learning of statistics. The article by Larry Lesser, Amy Wagler, Alberto Esquinca and Guadalupe Valenzuela, "Survey of Native English Speakers and Spanish-Speaking English Language Learners in Tertiary Introductory Statistics," presents evidence of differences in learning approaches between native speakers of English and Spanish-speaking English language learners (ELLs) in the processing of information presented in an introductory statistics literacy course. The authors do an excellent job of framing the study and provide a detailed account of instrument development for the survey used in the study. Some of the results, based on statistical methods for analyzing ordinal data, indicate that ELLs have a lower likelihood of agreeing that context facilitates their understanding of statistical concepts, a higher likelihood of claiming difficulty in managing the multiple meanings of words used in both statistical and non-statistical contexts, have different interpretations of statistical terms consistent with cultural backgrounds, are more likely to indicate difficulty with understanding similar sounding words that are introduced in the same lesson, and our less likely to find real-world contexts helpful in understanding statistical terms compared to non-ELLs. The authors discuss the implications of the findings for teaching statistics to ELLs, with an emphasis on the need for increased "wait time" when working with this population of students. As a side note, this article was accepted for publication before Larry Lesser came on as Assistant Editor, and Beth Chance handled initial copyediting.

In their article titled "Exploring the Role of Context in Students' Understanding of Sampling," Jackie Wroughton, Herle McGowan, Leigh Weiss and Tara Cope look at the effects of context on students' reasoning about sampling. The article presents a thorough review of the literature on the role of context in reasoning, and the methodology illustrates the numerous decisions that need to be made when conducting a study. Assessment data was collected from four institutions with different student populations, and interviews were conducted with a small subset of students at two of the institutions. A pilot survey was administered to identify topics that invoked strong (either negative or positive), neutral or split (equal proportions of strong and neutral) opinions. These sets of topics formed the basis of an assessment to study the influence of context on students' judgments of the validity of conclusions from studies that used either a reliable or biased sampling method. While the results present some evidence that some conditions make it more likely that students will incorporate irrelevant context into their arguments, there was not consistent statistical support for the observed differences. Analyses of the interview data, however, provided additional evidence that students tend to not use statistical reasoning based on sampling in real world contexts, consistent with previous studies.

David Neumann, Michelle Hood and Michelle Neumann present the results of a qualitative study based on interviews with students in their article titled "Using Real-Life Data when Teaching Statistics: Student Perceptions of this Strategy in an Introductory Statistics Course." Interviews were conducted with students enrolled in an introductory statistics course after course completion. The interview asked students for their thoughts on the use of real-life data sets in the teaching of statistics. The authors describe six predominant themes that emerged from the interviews that indicate students see the use of real-life data sets to have both cognitive and motivational benefits in learning statistics. A notable feature of this article is the detailed descriptions of both the sample selection methodology and the analysis of the interview data.

The final article by Per Nilsson is titled "Challenges in Seeing Data as Useful Evidence in Making Predictions on the Probability of a Real-World Phenomenon." Unlike the previous articles, the reported study is based on observations made of 8 and 9 year-old children during a lesson on interpreting data and reasoning about probability that was taught outdoors in a garden. After having witnessed that not all 180 planted sunflower seeds produced a plant, the author was interested in

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whether the children would adopt a probabilistic or deterministic perspective when asked to bet on whether any single seed, planted alone, would produce a plant. The analysis illustrates how the children's reasoning tended to disregard the frequency data from the planting of the 180 seeds and take a more deterministic perspective based on arguments of sharing (e.g., the 180 seeds had to share nutrients, but a single seed would receive all of the nutrients). Nilsson puts forth an argument that even though the activity had many characteristics thought to promote statistical thinking (e.g., the presence of a driving question), other characteristics of the real-world context directed students attention away from the collected data and towards more deterministic considerations. Nilsson calls for more research on the features that need to be included to draw students' attention to data and drive the need for probabilistic reasoning when using real-world phenomenon as a context.

I enjoyed all four articles, and I hope you find they both inform and influence your teaching and research practice.

ROBERT DELMAS

ACKNOWLEDGEMENTS

Beth Chance started as Assistant Editor in 2006 and has provided eight years of exemplary service to *SERJ* in that position. The Associate Editors and my co-Editor Peter Petocz have commented often on the detailed work and professional look that Beth brings to every issue, and I wholeheartedly agree with their appraisal. Beth has set a high standard for the position of Assistant Editor, and we wish her all the best with her future scholarly pursuits (and, we hope, catching up on some well deserved rest).

Larry Lesser tried his hand at the Assistant Editor position by assisting Beth with the previous issue, and I am happy to announce that he has accepted the offer to become the new Assistant Editor of *SERJ*. This is the first issue where Larry has handled all aspects of article preparation and he has already demonstrated a good eye for detail and the ability to keep me on task (something that is needed and welcomed). We look forward to working with Larry on future issues.

ACCEPTANCE RATES, TIME TO DECISION, TIME TO PUBLICATION FOR MANUSCRIPTS SUBMITTED TO *SERJ*

This is my fourth year as co-Editor for *SERJ*. The following tables report acceptance rates, time to decision, and time to publication statistics based on manuscripts submitted during the four-year period.

1. ACCEPTANCE RATES

There are 90 manuscripts submitted between January 2010 and December 2012 for which a final decision had been made as of September 30, 2013. The four decision categories are *Not Appropriate* (e.g., the manuscript did not match the mission of *SERJ*), *Reject*, *Revise and Resubmit* or *Accept for Publication.* At least six months or more had passed since the decision date for all manuscripts in the *Revise and Resubmit* category. Table 1 presents summary information on the percent of manuscripts that fall into each final decision category from 2010 to 2012. The overall acceptance rate across the three years is 16.7%. When the decisions of *Not Appropriate* are excluded, resulting in N = 61, the overall acceptance rate is 27.9%.

Table 1. Percent of manuscripts in each final decision category

		Decision			
Year Submitted	Number of Submissions	Not Appropriate	Reject	Revise and Resubmit	Accept
2010	26	30.8%	23.1%	19.2%	26.9%
2011	25	28.0%	28.0%	24.0%	20.0%
2012	39	35.9%	25.6%	30.8%	7.7%
All Years	90	32.2%	25.6%	25.6%	16.7%

2. TIME TO DECISION

One hundred seventeen submissions to *SERJ* from 2010 to 2013 of original or revised manuscripts have complete information on submission date and decision date. Table 2 presents summary statistics on the number of months between submission and decision dates broken into five major decision categories.

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Table 2. Time (in months) from submission to decision (N= 117)

Decision	Minimum	25th Percentile	Median	75th Percentile	Maximum	Mean	Standard Deviation
Not Appropriate	0.0	0.0	0.1	1.1	4.8	0.9	1.43
Reject	0.1	5.1	7.2	8.5	10.4	6.4	3.00
Revise and Resubmit	2.0	7.9	8.9	9.7	11.0	8.2	2.44
Accept with Revision	0.7	3.6	5.5	6.4	9.0	5.1	2.34
Accept	0.0	0.2	0.2	1.5	3.7	0.9	1.12
ALL CATEGORIES	0.0	0.7	4.1	8.2	11.0	4.4	3.79

3. TIME TO PUBLICATION

There were 18 papers published in *SERJ* between 2010 and 2013 with the date of first submission recorded. Publication date is taken as the first day of the month in which an issue is published (i.e., May 1 or November 1). Table 3 presents summary statistics on the number of months between the date of first submission and the date of publication for these 18 published articles. Of the 18 published papers, five (28%) went through one revision and 13 (72%) went through two revisions before acceptance for publication.

Table 3. Time (in months) from date of first submission to date of publication (N = 18)

Minimum	25th Percentile	Median	75th Percentile	Maximum	Mean	Standard Deviation
3.7	13.8	19.8	27.3	35.2	20.7	9.05