Session B9

Teaching Statistics to Students in the Social Sciences

Organiser:

Flavia Jolliffe (Surrey, England)

Invited Speakers:

James Brewer (Tallahassee, Florida, USA) Shir-Ming Shen and Shirley Yue (Hong Kong)

Contributed Papers:

Nick Garnham, Peter Jones and Brian Phillips

(Melbourne, Australia)

Gilberte Schuyten (Gent, Belgium) Martina Stallmann (Berlin, Germany)

Abstracts and

Peter Dunn-Rankin (Honolulu, Hawaii, USA)

Short Presentations:

Chester McCall, Farzin Madjidi (Los Angeles, California, USA)

and Gabriella Belli (Blacksburg, Virginia, USA) Bert Nijdam (Maarssen, The Netherlands) and Hans van Buuren (Heerlen, The Netherlands)

Fay Sharples (Hamilton, New Zealand)

Introduction

Although this session is concerned with teaching students in the social sciences, several speakers come from departments of education or described experiences in teaching statistics to education students. Education is not usually part of a social science faculty, but the statistical needs of education students are similar to those of social scientists. There was in fact no session on the topic of teaching statistics to education students. On the other hand, economics students, who are often thought to belong in social sciences, were considered with business students in a separate session.

The papers by James Brewer, by Nick Garnham and colleagues, and by Chester McCall and colleagues, are about teaching mature students and touch on some of the special difficulties such students have - a fear of statistics, a poor background in mathematics, little knowledge of computers, and the pressures of following a course while in employment. The recommendations in these papers for successful teaching of statistics courses to groups of students like this are very helpful.

Two papers are concerned with social surveys. That by Shir-Ming Shen and Shirley Yue describes students' participation as fieldworkers in household surveys in

Session B9 469

Hong Kong. It discusses students' motivation and performance, and suggests how field-work can usefully supplement material learnt in the classroom. Fay Sharples (whose paper is here in abstract only) told us about some of her experiences in teaching a statistics course based on a survey undertaken jointly by the students.

Two papers are concerned more with the processes of learning statistics, related particularly to the teaching of research methods. Gilberte Schuyten discusses some of the difficulties students have and makes some comments about the use of computers. Martina Stallman gives some interesting results of a study investigating students' attitudes. Peter Dunn-Rankin's main message (here in abstract only) was that students need time to understand the concept of "sums of squares". Bert Nijdam and Hans van Buuren, in a short presentation arising from their Workshop, described their experiences in teaching social science students with the aid of different statistical computing packages.

Speakers in the session came from many different parts of the world, from a variety of institutions, and talked about a variety of courses. Yet their experiences of and thinking about teaching were very similar. Noticeably lacking from this session are papers on whether statistics courses for social scientists should be taught by social scientists or by statisticians, and papers given by speakers with a social science background. This leaves a slight imbalance.

Session B9 470