Corrigendum: Characterizing a joint probability distribution by conditionals

Andrew Gelman and T. P. Speed

University of California, Berkeley, USA


With regard to the theorem in the paper, the second part is, in general, false, and the proof, given in Section 4.2, is in error. Dr K. W. Ng and Professor A. P. Dawid have pointed out the following simple counter-example for two binary random variables $x_1, x_2$: $P(0, 0) = 0.3$, $P(0, 1) = 0.2$, $P(1, 0) = 0.2$ and $P(1, 1) = 0.3$. This joint density is uniquely specified by $P(x_1|x_2)$ and $P(x_1)$, in contradiction to the second part of the stated theorem.

Address for correspondence: Andrew Gelman, Department of Statistics, Box 10 Mathematics, Columbia University, New York, NY 10027, USA.
E-mail: gelman@stat.columbia.edu

© 1999 Royal Statistical Society