CORRECTION

ORDER RESTRICTED STATISTICAL TESTS ON MULTINOMIAL AND POISSON PARAMETERS: THE STARSHAPED RESTRICTION

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Theorem 3.1 on page 1250 is incorrectly stated and there are errors in the paragraph preceding the statement of the theorem. We thank Rob Kelly for bringing these errors to our attention.

In order to correct the result, replace the theorem and the four lines preceding it by

$$(3.5) \qquad \bar{\theta}_i = \hat{\theta}_i \vee \{i/(i+1)\}, \qquad i = 1, 2, \ldots, k-1,$$

where $\hat{\theta}_i = [\sum_{j=1}^{i} \bar{x}_j / \sum_{j=1}^{i+1} \bar{x}_j]$. Using the invariance property of maximum likelihood estimation, the estimates of $\phi_1, \phi_2, \ldots, \phi_k$ are given by

$$\bar{\phi}_i = \left(1 - \bar{\theta}_{i-1}\right) \prod_{j=i}^{k-1} \bar{\theta}_j, \qquad i = 1, 2, \ldots, k-1,$$

with $\bar{\theta}_0 = 0$ and $\bar{\phi}_k = \sum_{j=1}^{k} \bar{x}_j$, and the estimates of $\lambda_1, \lambda_2, \ldots, \lambda_k$ are given by the following theorem.

Theorem 3.1 (Shaked, 1979). *The maximum likelihood estimates of* $\lambda_1, \lambda_2, \ldots, \lambda_k$, *subject to the restriction* H_1, *are given by*

$$\bar{\lambda}_i = \left[\left(1 - \bar{\theta}_{i-1}\right) \prod_{j=i}^{k-1} \bar{\theta}_j\right] \sum_{j=1}^{k} \bar{x}_j, \qquad i = 1, 2, \ldots, k-1,$$

$$\bar{\lambda}_k = \left[1 - \bar{\theta}_{k-1}\right] \sum_{j=1}^{k} \bar{x}_j,$$

with $\bar{\theta}_0 = 0$, *and*

$$\bar{\theta}_i = \frac{\sum_{j=1}^{i} \bar{x}_j}{\sum_{j=1}^{i+1} \bar{x}_j} \vee \frac{i}{i+1}, \qquad i = 1, 2, \ldots, k-1.$$

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