Erratum to: Bayesian estimation based on vague lifetime data

R. Zarei · M. Amini · S. M. Taheri ·
 A. H. Rezaei

Published online: 30 June 2011
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Erratum to: Soft Comput
DOI 10.1007/s00500-011-0731-2

Unfortunately, there are some errors in the online published article.

1. Equations 25 and 32 have been published wrongly in the original article. The correct equations are:

$$\pi(\theta) = \frac{\theta_2^{\theta_1}}{\Gamma(\theta_1)} \left(\frac{1}{\theta}\right)^{\theta_1+1} e^{-\frac{\theta_2}{\theta}}, \quad \theta_1, \theta_2, \theta > 0. \quad (25)$$

$$\hat{\theta} = \frac{\theta_2 + \sum_{j=1}^r T_{(j)} + (n-r)T_{(r)}}{r + \theta_1 - 1}. \quad (32)$$

Finally, under vague environment from above equation, the vague Bayes estimates for $\tilde{\theta}_{\alpha_i}^L, \tilde{\theta}_{\alpha_i}^U, \tilde{\theta}_{\alpha_f}^L, \tilde{\theta}_{\alpha_f}^U$ for all $\alpha_i, \alpha_f \in [0, 1]$ respectively are given by:

$$\widehat{\tilde{\theta}}_{\alpha_i}^L = \frac{(\tilde{\theta}_2)_{\alpha_i}^L + \sum_{j=1}^r (\tilde{T}_{(j)})_{\alpha_i}^L + (n-r)(\tilde{T}_{(r)})_{\alpha_i}^L}{(\tilde{\theta}_1)_{\alpha_i}^L + r - 1},$$

$$\widehat{\tilde{\theta}}_{\alpha_i}^U = \frac{(\tilde{\theta}_2)_{\alpha_i}^U + \sum_{j=1}^r (\tilde{T}_{(j)})_{\alpha_i}^U + (n-r)(\tilde{T}_{(r)})_{\alpha_i}^U}{(\tilde{\theta}_1)_{\alpha_i}^U + r - 1},$$

$$\widehat{\tilde{\theta}}_{\alpha_f}^L = \frac{(\tilde{\theta}_2)_{\alpha_f}^L + \sum_{j=1}^r (\tilde{T}_{(j)})_{\alpha_f}^L + (n-r)(\tilde{T}_{(r)})_{\alpha_f}^L}{(\tilde{\theta}_1)_{\alpha_f}^L + r - 1},$$

$$\widehat{\tilde{\theta}}_{\alpha_f}^U = \frac{(\tilde{\theta}_2)_{\alpha_f}^U + \sum_{j=1}^r (\tilde{T}_{(j)})_{\alpha_f}^U + (n-r)(\tilde{T}_{(r)})_{\alpha_f}^U}{(\tilde{\theta}_1)_{\alpha_f}^U + r - 1}.$$

2. Under Example 1, third paragraph, $\theta_1 = 10$ must be $\theta_1 = 11$.

3. Under Example 2, line 7, $\tilde{\theta}_1 = 200\tilde{0}00$ should read as $\tilde{\theta}_2 = 200\tilde{0}00$.

The online version of the original article can be found under doi:10.1007/s00500-011-0731-2.

R. Zarei · M. Amini (✉) · A. H. Rezaei
 Department of Statistics, School of Mathematical Sciences,
 Ferdowsi University of Mashhad, 91775-1159 Mashhad, Iran
 e-mail: m-amini@um.ac.ir

R. Zarei
 e-mail: rezazareirz@yahoo.com

A. H. Rezaei
 e-mail: rezaei494@gmail.com

S. M. Taheri
 Department of Mathematical Sciences,
 Isfahan University of Technology,
 84156-83111 Isfahan, Iran
 e-mail: Taheri@cc.iut.ac.ir