Errata for Stated Preference Methods Using R

19 May 2017

Page 25: Equation (2.9) should be

$$P^y(t) = \frac{1}{1 + \exp(-\alpha + \beta t)}.$$

Page 25: Equation (2.12) should be

$$P^y(t) = \frac{1}{1 + \exp(-\alpha + \beta \ln(t))}.$$

Page 25: Equation (2.14) should be

$$\ln L = \sum_{n=1}^{N} \left[d_n \ln \left\{ \frac{1}{1 + \exp(-\alpha + \beta t_n)} \right\} + (1 - d_n) \ln \left\{ 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n)} \right\} \right].$$

Page 27: Median of Weibull in Table 2.1 should be

$$\frac{\exp(\frac{\alpha}{\beta})}{(\ln(2))^{\frac{1}{\beta}}}.$$

Page 29: Equations from (2.33) to (2.36) should be as follows:

$$\begin{aligned}
P^{yy}(t_n, t_n^U) &= 1 - F(t_n^U) \\
&= 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n^U)} \\
&= \frac{\exp(-\alpha + \beta t_n^U)}{1 + \exp(-\alpha + \beta t_n^U)} \\
P^{nn}(t_n, t_n^L) &= F(t_n^L) \\
&= \frac{1}{1 + \exp(-\alpha + \beta t_n^L)} \\
P^{yn}(t_n, t_n^U) &= F(t_n^U) - F(t_n) \\
&= \left\{ 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n^U)} \right\} - \left\{ 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n)} \right\} \\
&= \frac{1}{1 + \exp(-\alpha + \beta t_n)} - \frac{1}{1 + \exp(-\alpha + \beta t_n^U)} \\
P^{ny}(t_n, t_n^L) &= F(t_n) - F(t_n^L) \\
&= \left\{ 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n)} \right\} - \left\{ 1 - \frac{1}{1 + \exp(-\alpha + \beta t_n^L)} \right\} \\
&= \frac{1}{1 + \exp(-\alpha + \beta t_n^L)} - \frac{1}{1 + \exp(-\alpha + \beta t_n)}.
\end{aligned}$$

Page 29: Equation (2.37) should be

$$\begin{aligned}\ln L = \sum_{n=1}^{N} \Bigg[& d_n^{yy} \ln \left\{ \frac{\exp(-\alpha + \beta t_n^U)}{1 + \exp(-\alpha + \beta t_n^U)} \right\} + d_n^{nn} \ln \left\{ \frac{1}{1 + \exp(-\alpha + \beta t_n^L)} \right\} \\ & + d_n^{yn} \ln \left\{ \frac{1}{1 + \exp(-\alpha + \beta t_n)} - \frac{1}{1 + \exp(-\alpha + \beta t_n^U)} \right\} \\ & + d_n^{ny} \ln \left\{ \frac{1}{1 + \exp(-\alpha + \beta t_n^L)} - \frac{1}{1 + \exp(-\alpha + \beta t_n)} \right\} \Bigg].\end{aligned}$$