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## Complementary log - log with random effect model using malaysian graduate employability data (Article)

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### Abstract

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The objective of this research is to investigate the relationship between hazard ratio or survival function of graduate employability and 8 explanatory variables. The 8 explanatory variables are as follows: Gender, CGPA, geographic region, English language proficiency, area of study, curriculum satisfaction, carrier guidance services satisfaction and monthly family income. In order to study a survival function of graduate employability, we have developed a sequence of binary numbers (employed (1) or unemployed (0)) at a particular time of being employed among first degree graduate students (N=2228). The data is based on a survival study data, which traces the survival function of graduate students within 12 months of window opportunity. We have used the complementary log - log model in various forms. For the simple complementary log - log model, the results showed that the hazard risk with baseline hazard ratio relate to graduates' gender, CGPA, satisfaction with career guidance, the geographic region from which they came from, their English performance, their area of study and their family income. As for subject-specific (random effects), the hazard ratio also relates to the abovementioned variables. © BEIESP.

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References (20)

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- 1 Hamid, M.S.A., Islam, R., Hazilah, A.M.N.  
Malaysian graduates' employability skills enhancement: An application of the importance performance analysis

(2014) *Journal for Global Business Advancement*, 7 (3), pp. 181-197. Cited 6 times.  
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- 2 Ramli, A., Nawawi, R., Chun, M.P.P.  
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(2010) *Procedia - Social and Behavioral Sciences*, 7, pp. 455-463. Cited 10 times.  
<http://www.sciencedirect.com/science/journal/18770428/1>  
doi: 10.1016/j.sbspro.2010.10.062

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- 3 Berridge, D., Crouchley, R.  
(2011) *Multivariate Generalized Linear Mixed Models Using R*. Cited 40 times.  
Boca Raton: CRC Press

- 4 Bryla, P.  
The impact of international student mobility on subsequent employment and professional career: A large-scale survey among Polish former Erasmus students  
(2015) *Procedia Social and Behavioral Sciences*, 176, pp. 633-641. Cited 11 times.

- 5 Congdon, P.  
(2001) *Bayesian Statistical Modelling*. Cited 538 times.  
Chichester: Wiley

- 6 Ganjali, M., Baghfalaki, T.  
Bayesian analysis of unemployment duration data in the presence of right and interval censoring  
(2012) *Journal of Reliability and Statistical Studies*, 5 (1), pp. 17-32. Cited 5 times.

- 7 Kalbfleisch, J., Prentice, R.  
(2002) *The Statistical Analysis of Failure Time Data*. Cited 9999 times.  
New York: Wiley

- 8 Lim, H.  
The determinants of individual unemployment duration: The case of Malaysian graduates  
(2011) *Journal of Global Management*, 2 (1), pp. 184-202. Cited 8 times.

- 9 Little, R.J.A., Rubin, D.B.  
(2002) *Statistical Analysis with Missing Data: Wiley Series in Probability and Mathematical Statistics*. Cited 14863 times.  
New York: John Wiley & Sons