An alternative explanation of the context effect in choice set via random regret minimization

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In marketing research area, there are several papers have developed to incorporate context effect into the discrete choice model. Rooderkerk at al. (2011) introduced the context dependent model which could directly capture compromise, similarity, and attraction effects, but not depends on error correlation. However, this model has a limitation that the variable measures only can work on scalable dimension, in other words, alignable attributes, but not on non-alignable attributes. This paper compares this model with Chorus at al. (2010, 2014 –RRM, Random Regret Minimization, which is counterpart of RUM; Random Utility Maximization) and shows that the behavioral intuition of RRM could alternate the context effect in choice situation and the RRM model has more flexible and beneficial explain power than the exist RUM models.

Keywords : Context effect, discrete choice model, RRM, Hierarchical Bayesian model, MCMC, mixed MNL.