SUMMARY

This work is aimed to utilize a mathematical technique to construct the bivariate quasi-likelihood equation through integrating factor methods to satisfy integrability condition. In general the derivative matrix of quasi-score is not integrable.

In this work two different integrating-factor methods are used, under which the quasi-likelihood equation is integrable. By using different parameter structures, it has provided unique solution. The derived integrable function is expected to provide some grounds for further development of bivariate generalized linear models.