# M-ESTIMATION OF THE MIXED-TYPE GENERALIZED LINEAR MODEL

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*Abstract:* To investigate the features of the individual from the mixed-type model, a novel model, named the mixed-type generalized linear model, is proposed firstly in this work, which is verified to be realistic and useful. We consider the robustness of M-estimation to estimate the unknown parameters of the mixed-type generalized linear model. By applying the law of large numbers and the central limit theorem, the consistency and asymptotic normality of the M-estimation for the mixed-type generalized linear model are proved with regularity assumptions. At last, in order to evaluate the finite sample performance of the estimator for the new model, several applied instances are presented, which show the good performance of the estimator.

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