

# Maximum Likelihood Estimation of Link Function Parameters

by

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## ABSTRACT

Maximum likelihood estimation of link function parameters in generalized linear models may be accomplished with little more effort than needed for fixed link models. I show that such estimation may be conducted using direct update of estimates for all parameters of the systematic model component in an modified scoring algorithm similar to the type often used in standard models. Full maximum likelihood estimation has the benefit of providing an indication of the true level of uncertainty and correlation in all estimates, rather than fixing link parameters and making use of a profile. Two examples of familiar data sets are used to illustrate estimation, and a caution is given about a dangerous practice in approximate estimation of link parameters.