عنوان مقاله:

FUZZY LOGISTIC REGRESSION BASED ON LEAST SQUARE APPROACH AND TRAPEZOIDAL MEMBERSHIP FUNCTION

نویسندگان:

Saima Mustafa - *Department of Mathematics and Statistics, Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan*

Sobia Asghar - *Department of Mathematics and Statistics, Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan*

Muhammad Hanif - *Department of Mathematics and Statistics, Pir Mehr Ali Shah Arid Agriculture University, Rawalpindi, Pakistan*

خلاصه مقاله:

Logistic regression is a non-linear modification of the linearregression. The purpose of the logistic regression analysis is tomeasure the effects of multiple explanatory variables which can becontinuous and response variable is categorical. In real life there aresituations which we deal with information that is vague innature and there are cases that are not explainedprecisely. In this regard, we have used the concept of possiblisticodds and fuzzy approach. Fuzzy logic deals with linguisticuncertainties and extracting valuable information from linguisticterms. In our study, we have developed fuzzy possiblistic logisticmodel with trapezoidal membership function and fuzzy possiblisticlogistic model is a tool that help us to deal with impreciseobservations. Comparison fuzzy logistic regression model with classicallogistic regression has been done by goodness of fit criteria on real life as an example.

کلمات کلیدی:

Logistic Regression, Odd ratio, Goodness of fit, Fuzzy logic, Trapezoidal number

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