

PERFORMING LOGISTIC REGRESSION ON SURVEY DATA WITH THE NEW SURVEYLOGISTIC PROCEDURE

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ABSTRACT

Categorical outcomes such as binary, ordinal, and nominal responses occur often in survey research. Logistic regression investigates the relationship between such categorical responses variables and a set of explanatory variables. The LOGISTIC procedure can be used to perform a logistic analysis on data from a random sample. However, this approach is not valid if the data come from other sample designs, such as complex survey designs with stratification, clustering, and/or unequal weighting. In these cases, specialized techniques must be applied in order to produce the appropriate estimates and standard errors.

The SURVEYLOGISTIC procedure, experimental in Version 9, brings logistic regression for survey data to the SAS System and delivers much of the functionality of the LOGISTIC procedure. This talk describes the methodological approach and applications for this new software.

KEY WORDS: Logistic regression; Categorical analysis; Sampling; PROC SURVEYLOGISTIC; Complex survey design.

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