

ACADEMIC YEAR 2024/2025
Università degli Studi di Milano
Network for the Advancement of Social and Political studies
APPLIED MULTIVARIATE ANALYSIS
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SECOND ASSIGNMENT

Using the dataset “caschool”

A) Develop one model to explain “testscr” using: “meal_pct”, “computer”, and “teachers”. Given that observations can be nested in counties, check if a hierarchical model is needed or if the OLS can be enough. In case you need to account for the hierarchical nature of the data, test whether fixed or random effects are more suitable. Describe and comment the results (very briefly).

Using the dataset “Nes 2004”

B) Develop one model to explain “early_voter”, using at least three independent variables (one of these should be a categorical and another one a continuous variable). Now add to the previous model an additional independent variable. Compare the two models in terms of goodness of fit and say which model has the best fit and should be preferred. Then, in a third model, add a quadratic term or an interaction and comment (briefly) the results of this model (only!).

Send by e-mail a single file (rename it as “Assignment2 NAME SURNAME”). The file should include the answers, the tables/images with the results of the regressions and the diagnostic and the marginal effects of the interaction/quadratic model, and the STATA command that you have used to perform the two tasks (copy-pasted inside the word doc).