

Getting the “correct” answer from survey responses: an application of regression mixture models

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Abstract

This talk addresses a problem that can arise in surveys, in which some respondents misinterpret the rating method and so assign high ratings when they intended to assign low ratings, and vice versa. We present a method, based on fitting regression mixture models, that allows these misinterpretations to be corrected with high probability, and more meaningful conclusions drawn. The method is illustrated with data from a community value survey.

Keywords

Community Value Survey, Missing data, EM algorithm, Regression mixture.