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Seminar

A FAMILY OF MIXTURE MODELS FOR MULTIVARIATE RATING SCALE DATA

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In responding to a rating question, an individual may give answers either according to his/her knowledge/awareness or to his/her level of indecision/uncertainty, typically driven by a response style. As ignoring this dual behavior may lead to misleading results, we define a multivariate mixture model for ordinal rating responses, by introducing, for every item and every respondent, a binary latent variable that discriminates aware from uncertain responses. A marginal parameterization allows a simple and direct interpretation of the parameters in terms of association among responses and their dependence on explanatory factors. Finally, we discuss testing procedures, for comparing competitive models, avoiding the assumption of correct specification.