

# Bayesian Model Averaging for Simulated Impression Change Equations

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## Introduction

## Simulating Data

Figure 1: Plot of simulation model coefficients

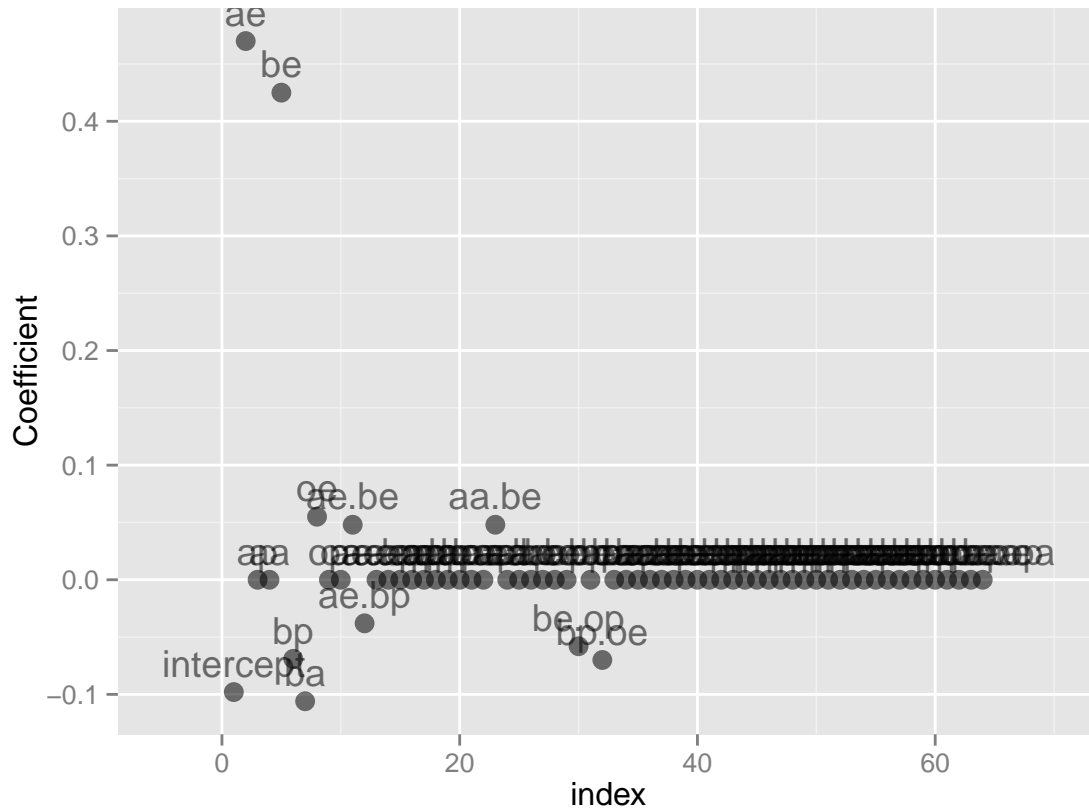
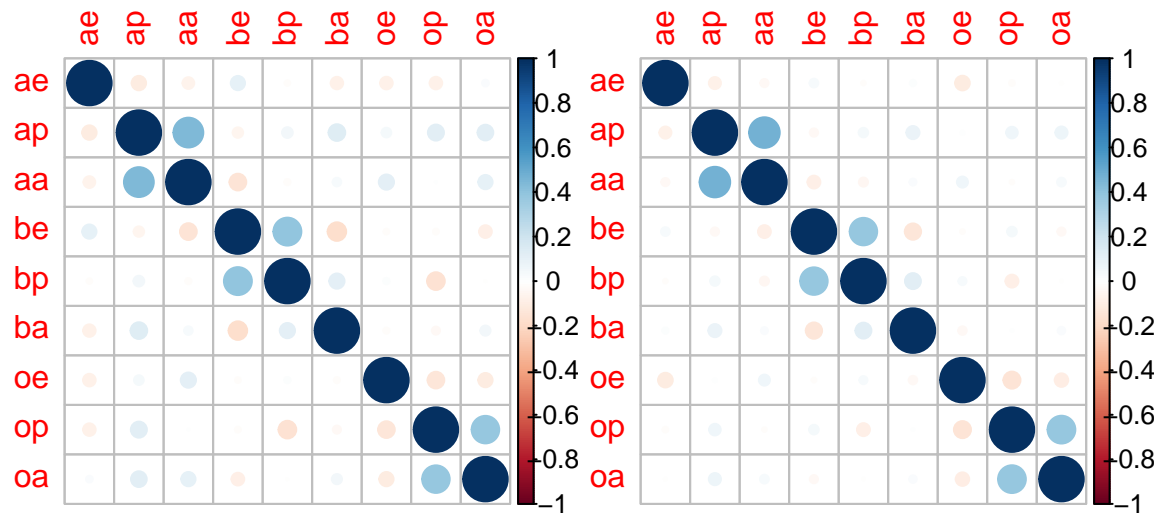


Figure 2: Correlation plots *Simulated data (left) and Duke '10 (right)*



## Results

**Table 1: Variables identified from training set, by procedure**

*Where the simulation model has 10 true predictors, out of 63 total*

Procedures	True positives	False positives	True negatives	False negatives	Sensitivity	Specificity
stepwise	9	15	38	1	0.9	0.72
BMA	6	2	51	4	0.6	0.96
ANOVA	4	1	52	6	0.4	0.98

**Table 2: Mean square prediction error on test set (n=500)**

Procedures	MSE
stepwise	0.532
BMA median model	0.509
dichotomized ANOVA	0.509