Bayesian Ridge Regression - Second Report

Dominik Strache, Nicolai Bäuerle & Joel Beck

Introduction

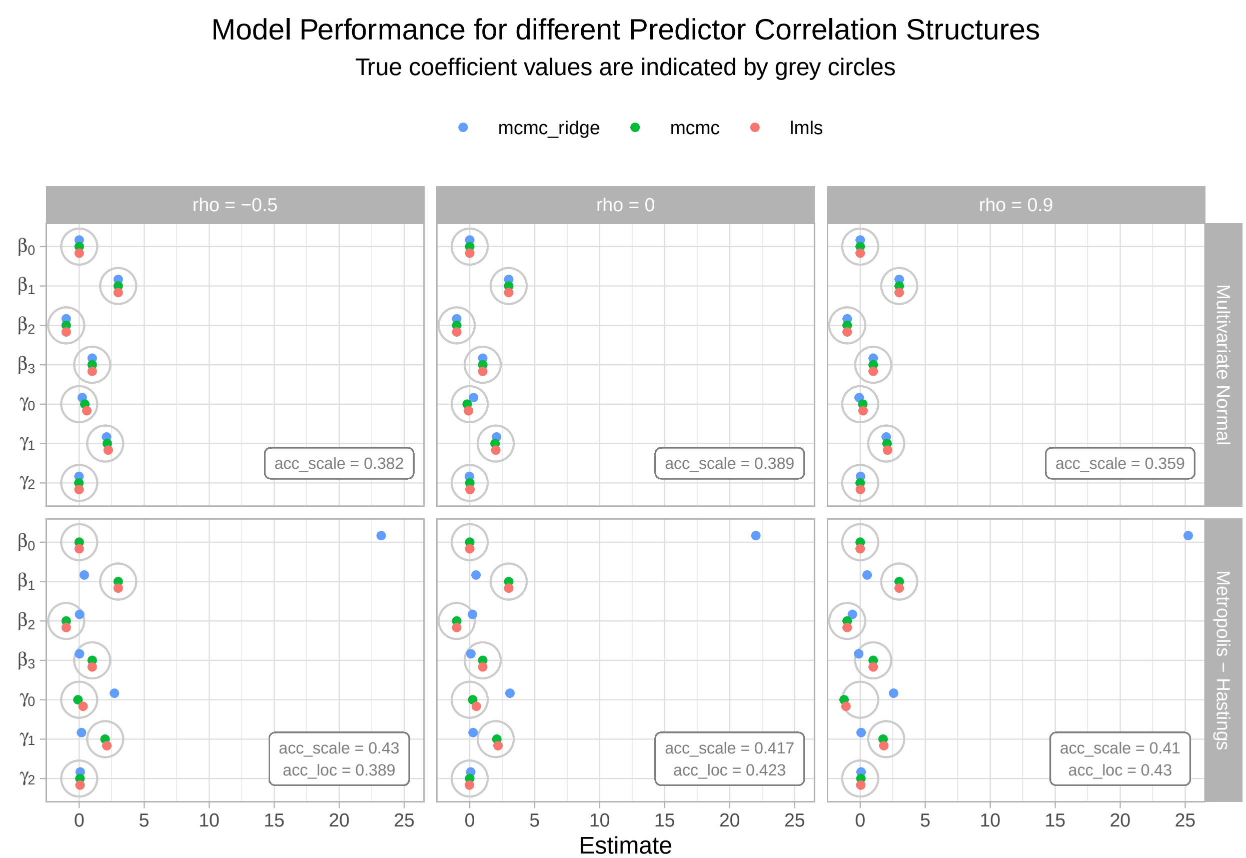
The value of `x` is 0.05.

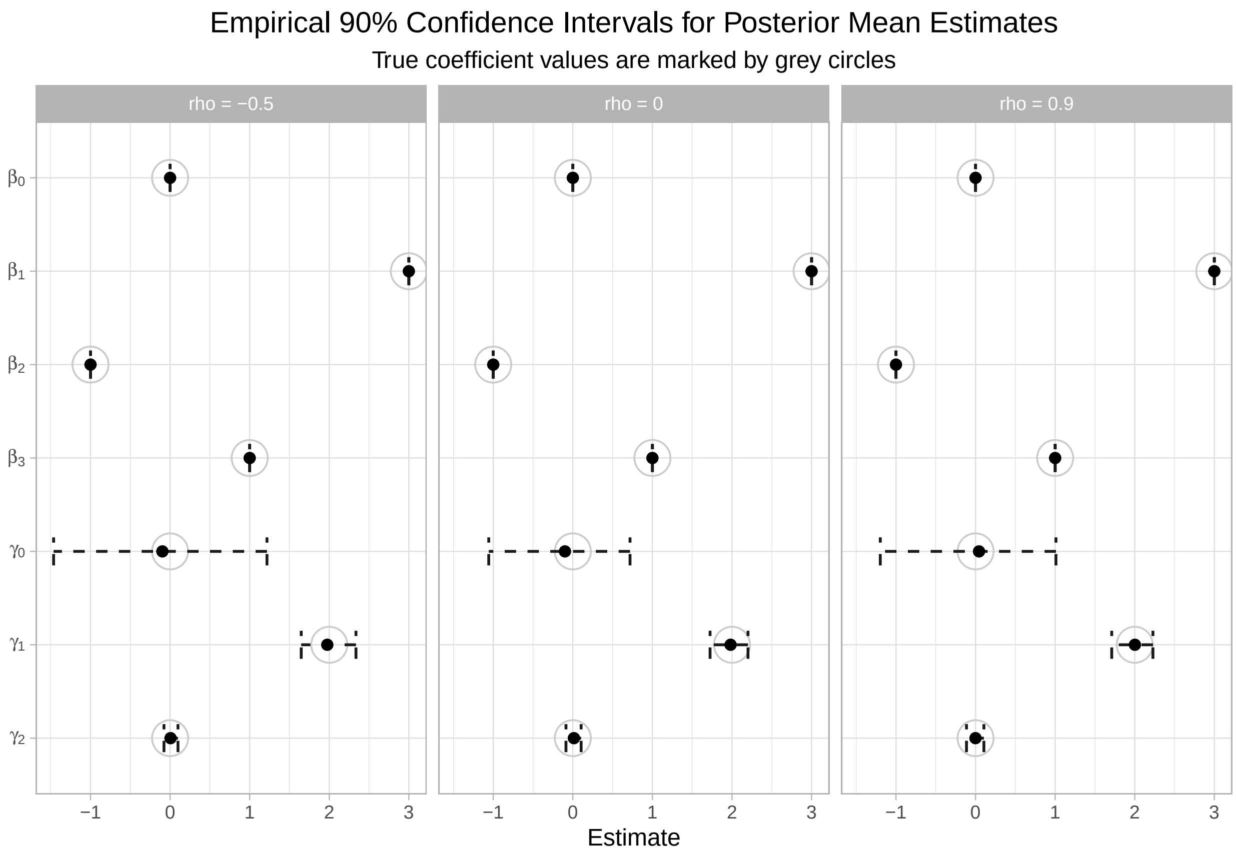
```
## [1] -0.1237196
```

```r
# eval = FALSE
z <- mean(rnorm(100))
z
```

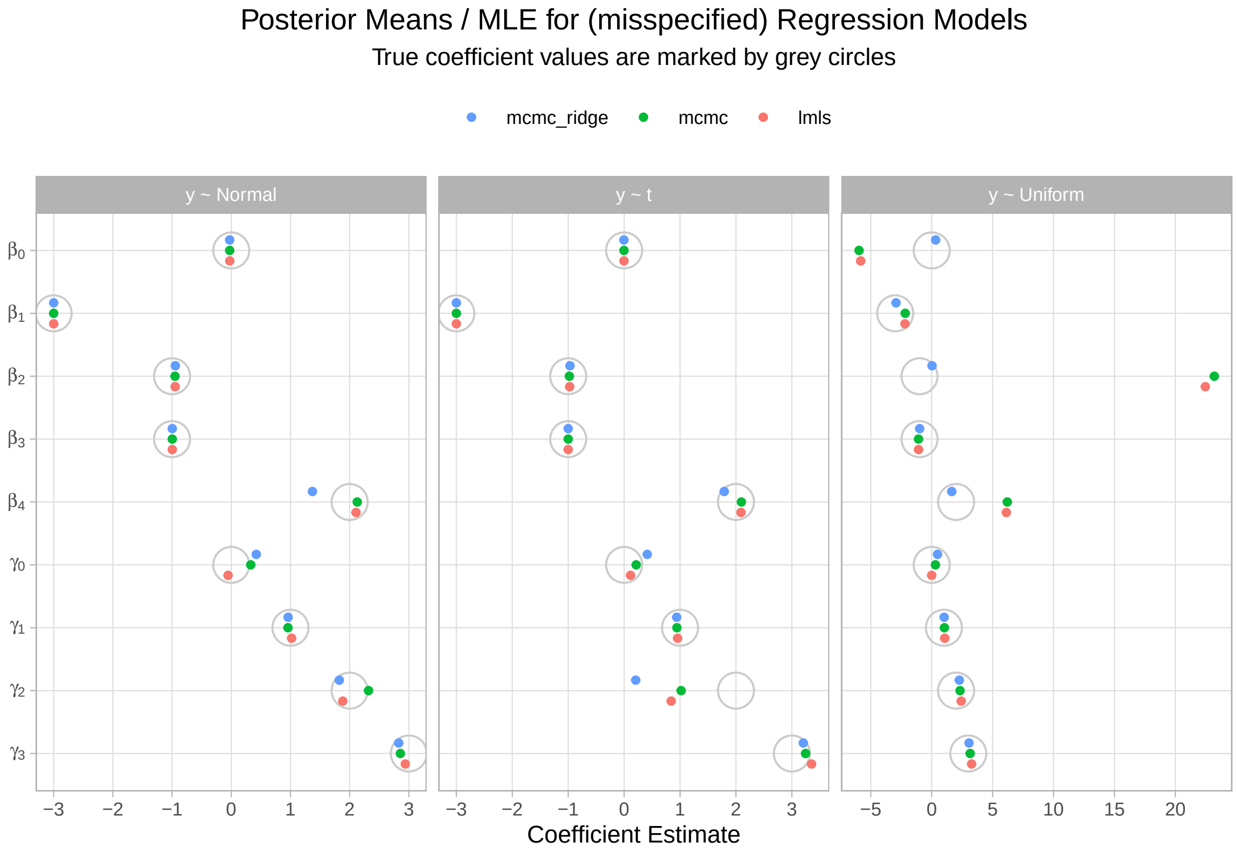
1 Simulation Studies

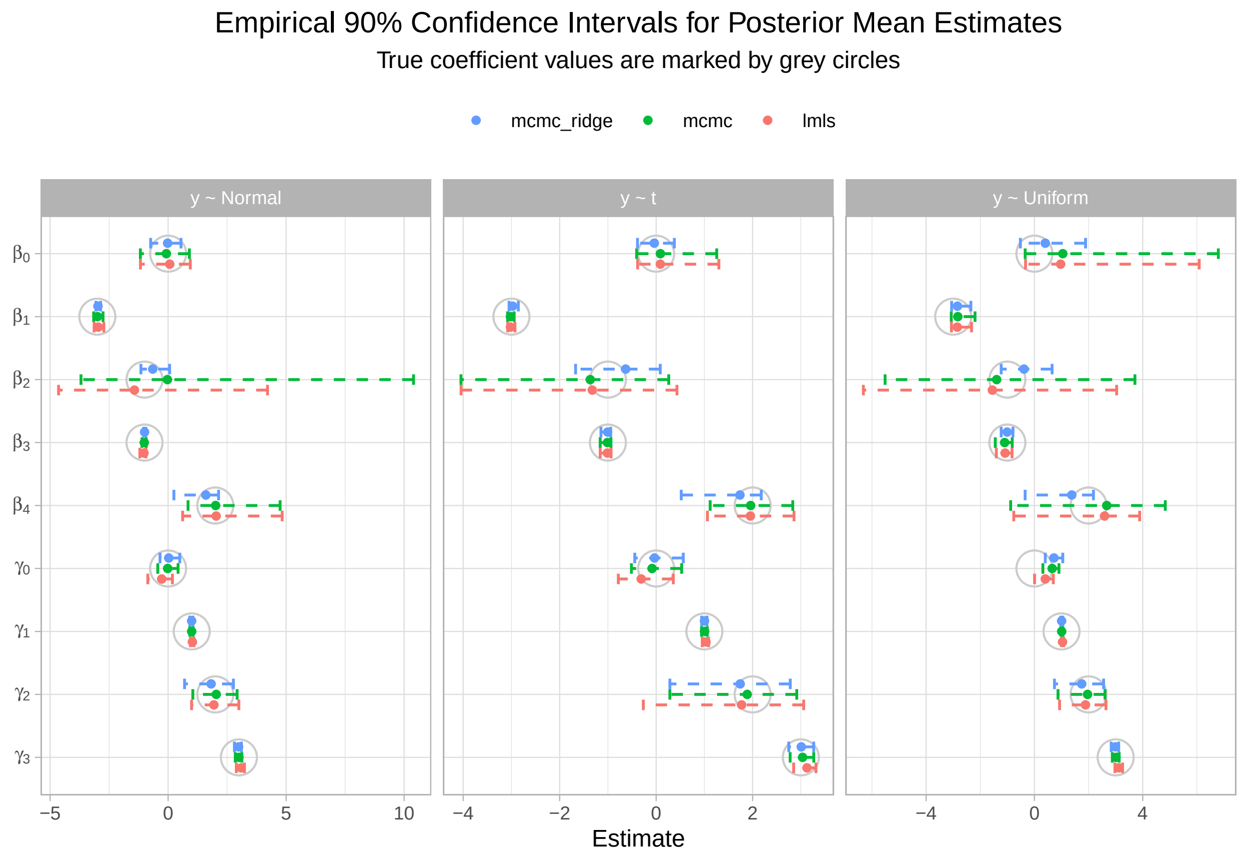
1.1 Correlated Predictor Variables




Empirical 90% Confidence Intervals for Posterior Mean Estimates
True coefficient values are marked by grey circles
rho = −0.5
rho = 0
rho = 0.9
β0
β1
β2
β3
γ0
γ1
γ2
−1
0
1
2
3
Estimate

1.2 Challenging the Model Assumptions





1.3 Sample Size

1.4 Number of Simulations

1.5 Hyperparameters

Next Steps