

Bayesian Regression

Notes

Output Created		21-SEP-2015 15:28:42
Comments		
Input	Data	c: \spss23\samples\english\employee data.sav
	Active Dataset	emp
	File Label	05.00.00
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	474
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.24

Bayes Regression Summary

Summary

Summary	
Dependent Variable	salary
Comparison Model	Intercept only
Number of Cases	474
Number of Valid Cases	474
Prior Scale on Standardized Slopes	medium
Posterior Model Index	5
Posterior Iterations	1000
Workspace Action	clear
Output Model File	--NA--
Computations done by R package BayesFactor, version: 0.9.11.1	

Bayes Factors

Bayes Factors

Equation	Model Number	Bayes Factor	Error (+-%)	Rank
jobtime	1.000	0.519	0.000	15.000
prevexp	2.000	0.910	0.000	13.000
educ	3.000	1.115E+57	0.009	3.000
minority	4.000	157.162	0.000	10.000
jobtime + prevexp	5.000	0.713	0.001	14.000
jobtime + educ	6.000	2.174E+56	0.003	7.000
jobtime + minority	7.000	172.407	0.001	9.000
prevexp + educ	8.000	5.735E+56	0.003	6.000
prevexp + minority	9.000	77.449	0.001	12.000
educ + minority	10.000	2.057E+57	0.003	2.000
jobtime + prevexp + educ	11.000	1.353E+56	0.000	8.000
jobtime + prevexp + minority	12.000	102.884	0.000	11.000
jobtime + educ + minority	13.000	6.495E+56	0.000	5.000
prevexp + educ + minority	14.000	2.792E+57	0.000	1.000
jobtime + prevexp + educ + minority	15.000	1.002E+57	0.004	4.000

Bayes Factors

Equation	Posterior Probabilities (Equal Prior)
jobtime	0.000
prevexp	0.000
educ	0.131
minority	0.000
jobtime + prevexp	0.000
jobtime + educ	0.025
jobtime + minority	0.000
prevexp + educ	0.067
prevexp + minority	0.000
educ + minority	0.241
jobtime + prevexp + educ	0.016
jobtime + prevexp + minority	0.000
jobtime + educ + minority	0.076
prevexp + educ + minority	0.327
jobtime + prevexp + educ + minority	0.117

All single variable models

Posterior Summary Statistics

Posterior Summary Statistics for Model 5

Variables	Mean	SD	Naive SE
jobtime	136.922	75.852	2.399
prevexp	-14.962	7.505	0.237
*Sigma2	288601860.1	18295872.84	578,566.300
*g	0.125	0.225	0.007

Posterior Quantiles

Posterior Quantiles for Model 5

Variables	2.5%	25%	50%	75%	97.5%
jobtime	-15.570	85.338	136.060	188.884	282.350
prevexp	-29.569	-19.755	-15.067	-9.980	-0.079
*Sigma2	254810040.3	276059473.2	288126411.9	300336723.9	325128467.0
*g	0.015	0.035	0.062	0.118	0.617