
Exercise (1)

Sex bias in salaries? The dataset **salary** is a subsample of a large data set (from the early 1980s) from a study investigating potential sex effects (biases?) in determination of professional salary differentials. The individuals come from several large corporations. The variables are

- (a) Number of individual
- (b) M = Management Level: 1=Lower, 2=Upper,
- (c) S = Sex: 1=Male, 2=Female
- (d) E = Education level: 1=High School, 2=1st Degree, 3=Graduate Degree
- (e) Y = Years in job
- (f) Salary = Annual Salary

Use this data to develop a model to address the question of whether there is a sexual bias in salaries. Some of the variables may be viewed as confounding variables, and thus it is important to adjust for them and any potential interactions between them. Write up a summary of your analysis and include an explanation of all parameters in your model. Provide a summary and important figures that could be used to explain your results to jury. Try to construct one figure that clearly makes your point- Exhibit A.

Exercise (2)

Work on modifying the rats example to fit a random effects model for the fish data in WinBugs.