STAT 101 Project 2

Due: Wednesday, 4/23/14 at 1:25pm

Project 2 will be done in your lab groups – one project per group.

The Data: Sleep Study on College Students

A recent study\(^1\) examines the relationship between class start times, sleep, circadian preference, alcohol use, academic performance, and other variables in college students. The data were obtained from a sample of students who did skills tests to measure cognitive function, completed a survey that asked many questions about attitudes and habits, and kept a sleep diary to record time and quality of sleep over a two-week period. The paper is available here.

Some data from this study are available in SleepStudy from our textbook. You can access the data in RStudio by typing data(SleepStudy), and can learn about the variables with ?SleepStudy. Clicking on SleepStudy in the top right pane in RStudio will bring up a spreadsheet of the data, from which you can copy and paste variables into StatKey.

Your Task: A Paper

Choose one quantitative variable of interest to you to be your primary response variable, and the focus of your paper. Although the data was collected to focus on sleep behavior, you can choose to focus on any variable you wish. You have 10 pages to use the data available to answer questions regarding this variable and how it relates to the other variables measured in the study. All projects must include multiple regression, but do not limit yourselves to just multiple regression; methods from earlier in the course (summary statistics, data visualization, confidence intervals, hypothesis tests) can also be utilized.

The maximum length is 10 double-spaced pages. This includes figures and relevant R output, but not your R script (code). The project is due Wednesday 4/23/15, at 1:25pm. For every additional day the project is late, 5 points (out of 50) will be deducted. A hard copy is due in class on 4/23, and an electronic copy and R script is due on Sakai by the due date. You may discuss amongst yourselves, but each group must have their own questions and analysis.

Grading

The overall project grade will be 50 points. 40 points will be a group grade based on the quality of your paper, and 10 points will be an individual grade assigned by your group mates based on the extent of your individual contribution to the project.

---