Case-based Social Statistics I
CSSS 321
Professor: Mark S. Handcock

Homework 2
Due Friday, January 21, 2005

Problems to be handed in:

1) Exercise 2.68 from page 53 of Chapter 2: “Turning Data Into Information” of MOS.

2) Exercise 2.83 from page 55 of Chapter 2: “Turning Data Into Information” of MOS.

3) Exercise 2.90 from page 55 of Chapter 2: “Turning Data Into Information” of MOS.

4) Submit electronically exercises 22, 64, and 66 from Unit A5 of CyberStats.

5) Submit electronically exercises 21 and 22 from Unit A6 of CyberStats.

6) In this question we will analyze the “Study: ‘Cutting TV, video game use can make kids less aggressive’”.

   The article is a Associated Press report of a study about the effects of TV and video game use on violence among children.

   The article is at:

   You should read the article and answer the questions posed below.

   The original study being reported on is available on-line from the UW library. Search for the the title “Archives of Pediatrics and Adolescent Medicine”. It will give you a link to the online version where you find the article in the January 2001 edition.

   Here are the questions:

   a) Answer each of the 6 questions on Lecture 1-4 with respect to the article

   1. What are the claims made in the article?

   2. Are the claims supported in the article? If so, how?

   3. Is there data in the article used to support the claims?

   4. Is there data in the references for the claims?

   5. Can you think of alternative explanations for the data in the article? Is there data in the article to support these alternatives?
6. Does the data presented support the claims?

   b) Briefly describe each of the components of the study given in Lecture 1-5 with respect to the study.

Component 1: The individuals or objects studied and how they were selected
Component 2: The exact nature of the measurements made and the questions asked
Component 3: The setting or context in which the measurement were made
Component 4: The extraneous differences between groups being compared
Component 5: The magnitude of any claimed effects of differences
Component 6: The source of the research and the funding
Component 7: The researchers who had contact with the participants

c) Briefly answer these questions about the study itself.
   i) What were the two treatments in the study?
   ii) Who were the subjects? How many subjects were there?
   iii) What pre-treatment characteristics were recorded?
   iv) What were the main outcome measurements?

d) Describe the method of treatment assignment. Why do you think they assigned the treatments randomly?

e) Was the treatment assignment “blind” to the subjects? The researcher (i.e. “double blind”)

f) Given the information in the report, do you think the article title, “Cutting TV, video game use can make kids less aggressive” is a reasonable claim?

g) If you could add one paragraph to the newspaper article to give more information from the study, what would you say?

Feel free to ask me questions in class about the material, or on the discussion board. You can discuss it amongst yourselves, but please submit separate work.