Chapter 7 – The Semi-Attached Figure

Pg. 76 You are reading a report that claims that prejudice is decreasing. It states, “Today, 57% of the population believe that black people have equal opportunities in the job market. Five years ago only 43% of the population believed there was equal opportunity. Equal opportunity is growing and thus prejudice must be decreasing.” Is it really safe to conclude that prejudice is decreasing? Think of two reasons that it may not be safe to believe so.

Why might it indicate that things are, in fact, getting worse?

p. 77 In an election a few years ago, a man running for governor stated that 43 police chiefs supported his candidacy. Why is this a fairly meaningless statement? [This example isn’t in the book, but we will briefly discuss it in class.]

p. 79 California has more idiots than any other state. Please comment

p. 82 Thought question: How do you think it is determined whether or not a birth is illegitimate? Remember, they are trying to determine the total number of illegitimate births in the entire state. Do you think this method is accurate? Do you think the estimate is too large or too small?

p. 83 Why was it indeed more dangerous to be in the Navy during the Spanish American War than to live in New York City?

p. 85 What is the main reason to be suspicious of the statement that Gov. Dewey managed to increase teacher’s salaries?

Chapter 8 – Post Hoc Rides Again

p. 89 What is meant by a post hoc fallacy?

p. 89 What is a co-variation?

p. 91 You’ve read the terms positive correlation and negative correlation for the first time. How do they differ?

p. 94 People who go to college make more money than people who don’t go to college. This is most certainly true. Explain why it isn’t safe to conclude that if you go to college, you’ll make more money than if you don’t. It seems so obvious.

An example not in the book: People who watch a lot of TV have lower reading skills than people who watch little TV. Explain why it isn’t safe to conclude that watching a lot of TV causes people to have poorer reading skills. It isn’t even safe to conclude that people who don’t watch TV read a lot more and this causes them to have better reading skills.
An example not in the book: There is a positive correlation between monetary damage caused by a fire and the number of firemen fighting the fire. Why isn’t it safe to conclude that in order to minimize monetary damage, we should cut back on the number of firemen.

Another example not in the book: Throughout the year, there is a positive association between ice cream sales and incidents of assault and battery. Why isn’t it safe to conclude that we could minimize cases of assault and battery by eliminating the sale of ice cream?

What do you think is meant by the term “intervening variable” [not in the text, but it relates to the above two examples].

What do you think is meant by the saying “association is not causation?”

Chapter 9 – How to Statisticulate

p. 100 Before you read a word of this chapter, what do you think the author means by statisticulate (a made-up word)?

p. 103 Explain why this graph is so misleading

p. 104 Before reading the answer on the next page, list one (I hope obvious) reason that the average income of $5,004 seems to be too high.

p. 106 If the Russell Sage Foundation had divided the total personal income of the American people by the total number of American families instead of the total number of Americans, would the statistic have been any better. Think about it. Don’t jump to any conclusions.

p. 112 So what’s wrong with the “proof” that children don’t go to school? Why doesn’t it work?

p. 121 Can people have unconscious bias when doing statistical work?

Chapter 10 – How to Talk Back to a Statistic

p. 123 What is the difference between unconscious bias and conscious bias? Which types of people are going to make which types of bias?

p. 126 When reading the section How Does He Know? which chapters are you recalling in your mind?

p. 137 When reading the section Did Somebody Change the Subject? which chapters are you recalling in your mind?

p. 137 Have you ever used the Flesch formula for readability. Even though it is rather old, some word processors still include it (although the one I am currently using, doesn’t have it). Admittedly it was pretty useless, but do you think it was totally meaningless? Do you think it measured something? Perhaps it was measuring something real, and Flesch thought it was readability, but was in fact something else (a semi-attached figure?) What do you think?