

STAT 200 Exercise 1

1. Read the following material and discuss the major implications of misleading data and answer the questions that follow.

A 20/20 View of Survey Results: Fact or Fiction?

Did you ever notice that, no matter where you stand on a popular issue of the day, you can always find statistics to back up your point of view - whether to take vitamins, whether day care harms kids, or what foods can hurt you or save you? There is an endless flow of information to help you make decisions, but is this information accurate, unbiased? John Stossel decided to check that out, and you might be surprised to learn if the picture you're getting doesn't seem quite right, maybe it isn't.

Barbara Walters gave this introduction to a March 31, 1995 segment of the popular prime time ABC television program, "20/20." The story is titled, "Facts or Fiction? - Exposés of So-Called Surveys." One of the surveys investigated by ABC correspondent John Stossel compared the discipline problems experienced by teachers in the 1940s and those experienced today. The results: In the 1940s, teachers worried most about students talking in class, chewing gum, and running in the halls. Today they worry most about being assaulted! This information was highly publicized in the print media - daily newspapers, weekly magazines, Ann Landers column, The Congressional Quarterly,

and the Wall Street Journal, among others - and referenced in speeches by a variety of public figures, including the former first lady Barbara Bush and former Education Secretary William Bennett.

"Hearing this made me yearn for the old days when life was so much simpler and gentler, but was that life that simple then?" asks Stossel. "Wasn't there juvenile delinquency [in the 1940s]? Is the survey true?" With the help of a Yale School of Management Professor, Stossel found the original source of the teacher survey - Texas oilman T. Colin Davis - and discovered it wasn't a survey at all. Davis had simply identified certain disciplinary problems encountered by teachers and published his list in a conservative newsletter - a list he admitted was not obtained from a statistical survey, but from Davis' personal knowledge of the problems in the 1940s ("I was in school then") and his understanding of the problems today ("I read the papers").

Stossel's commonsense questions of the teacher survey is a clear example of the critical thinking process in action. Several more misleading surveys were presented on the ABC

program. Listed here, most of these surveys were conducted by businesses or special interest groups with specific objectives in mind.

The 20/20 segment ended with an interview of Cynthia Crossen, author of "Tainted Truth," an exposé of misleading and biased surveys. Crossen warns:

If everybody is misusing numbers and scaring us with numbers to get us to do something, however good [that something] is, we've lost the power of numbers. Now, we know certain things from research. For example, we know that smoking cigarettes is hard on your lungs and heart, and because we know that, many people's lives have been extended or saved. We don't want to lose the power of information to help us make decisions, and that's what I worry about.

- a. How do you feel about surveys and statistics from research? Do you trust them? Do you answer surveys?

