EM9601: The Globe and Mail, January 1, 1996, page A3

Dubious Data awards highlight statistical follies

Research group pokes fun at the way gullible journalists interpret scientific – and not-so-scientific – findings

BY STEPHEN STRAUSS
The Globe and Mail

There are lies, damn lies and the worst statistical follies, goofs and misstatements of 1995.

The Statistical Assessment Service, a research group based in Washington and dedicated to improving the public's understanding of scientific and statistical information, has just conferred its Dubious Data for 1995 prizes.

"These statsoids are selected based on a rigorous grading system that factored for newsworthiness, portentousness of pronouncement, and fundamental absurdity," the group said. "Bonus points were awarded for shamelessness and gratuitous interpretation."

The Too Bad To Be True Award went to a number of U.S. columnists who quoted a study that compared the top 10 problems in schools in the 1940s with the same problems today. A 1940s list that started with talking, chewing gum, making noise and running in the halls was set against a 1990s list that began with drugs, alcohol, pregnancy and guns.

When a Yale University researcher went back to find the original study, however, he discovered that the lists had been made up by a born-again Christian in Fort Worth, Tex.

"They weren't done from a scientific survey," the man told the Yale researcher. "How did I know what the offences were in the 1940s? I was there. How do I know what they are now? I read the newspapers."

The Globe and Mail was singled out for the International Mountains-from-Molehills Prize for a story it ran last January about a study commissioned by the Ontario Addiction Research Foundation. The study suggested that more than half the women attending Alcoholics Anonymous sessions in one Ontario city were not in fact alcoholics.

This finding was used by commentators to raise important questions about how available mental-health services were for women. But as it turned out, the study did not have any statistical teeth because it was based on personal interviews with just 25 women at AA meetings whom the researcher thought had interesting stories to tell.

"It's almost enough to drive one to drink," STATS quipped in response to how the finding had been blown up.

The U.S. Centers for Disease Control were given the Thank You, Professor Award for Outstanding Statement of the Obvious for a commentary on teen-age birth statistics. It warned, "if teen birth rates do not continue to decline, there will be a rise in the number of teen births over the next few years."

The Weatherman's Friend Award went, as it does every year, to "Killer Weather," the group said. Terrifying winter storms claim lives, as do summer heat waves. "Obviously the bigger the number, the bigger the story, so all manner of tangentially and tortuously related deaths get lumped in with those few poor souls who actually are killed in weather-related accidents," the statisticians wrote.

They advise meteorologists to take as their New Year's resolution the pledge to "stop criminalizing the weather."

The Serious Topics Undermined by Preposterous Numerical Claims was an announcement by the U.S. Justice Deparment that an FBI study showed that a woman was beaten up every 12 seconds. This turned out to be more often than another FBI estimate of how often a violent crime of any kind took place.

And the Thank You For Sharing Award – an award for misstatement as much as portentiousness – went to a University of Arizona scientist who developed a Commode-A-Graph that can identify the unique bacterial pattern left when someone sits on a toilet seat.

"If there is ever a crime committed in a toilet, I can tell you who did it," said Professor Charles Gerba of the University of Arizona, who invented the Commode-A-Graph.

And finally the group took the Associated Press to task for a December report that seemed to show that women on welfare in the United States were "just like everyone else." The data not only were different from what the story reported but, in fact, were the exact opposite, STATS said. "What the numbers revealed was that, statistically, welfare mothers most closely resembled the stereotypical portrait of ..... welfare mothers."

The article EM9601 reprinted above is used in Statistical Highlight #91 and in Chapter 4 of the STAT 231 Course Materials.

1996-04-20