EM9108: Kitchener-Waterloo Record, May 21, 1991, page A7

Opinion sampling is part science, part alchemy

In the mysterious realm of pollsters, no one cares how many angels can dance on the head of a pin.

They're more concerned that the use of clusters in random digit dialing might be producing unacceptable sampling variance.

It all sounds very scientific, but there's a bit of the alchemist in the people who can interview a few hunderd people and then boldly assert what an entire country is thinking.

"Polling is a black art," says Gary Mauser, a former pollster who now teaches and writes about polls. "The sampling is the science part. The mystical black art is the questioning and the interpretation" of the answers.

Even the most credible poll requires a leap of faith for those who wish to know what Canada thinks. Polls tend to be a snapshot of what people are thinking at the time. They don't necessarily reflect a person's true beliefs or predict what they will do in the future.

Which is, of course, why politicians can routinely do poorly in polls between elections and yet manage to get re-elected.

In the end, the public will be asked to believe something such as: This poll is considered accurate within four percentage points 19 times out of 20.

Of course, no one actually conducts the same poll 20 times. The well-worn phrase is merely a statistical way of saying that, if the poll were done 20 times, one set of results would be far off base and the rest would be fairly close together.

Close, but not exactly the same.

For example, consider two polls – both considered accurate within four percentage points – that ask Canadians to evaluate the performance of Prime Minister Brian Mulroney.

If the first poll found 29 per cent thought Mulroney was doing a good or very good job and the second, later poll found a 35 per cent approval rating, you might think the PM's political stock was on the rise.

But the margin of error means that Mulroney's actual approval rating might have been 33 per cent when the first poll was done and 31 per cent when the second was conducted – in other words, the prime minister's popularity actually would be falling, not rising.

Mauser and other experts say it's easy to cook poll results to suit a particular purpose. It all depends on the question, he says.

"In abortion, you can get numbers running from 20 to 90 per cent for Canadians supporting abortion," says Mauser, a professor of business administration at British Columbia's Simon Fraser University.

A poll which asks people if they support abortion on demand would find most people opposed to abortion, says Mauser.

But most people would say yes if asked if they believe a woman should be able to have an abortion if her doctor determines her psychological or physical health is at risk.

"You can mislead people with the questions you ask; polls are used for political purposes all the time," says Alan Frizzell, a professor of journalism and director of Carleton University Survey Centre in Ottawa.

"If they don't tell you the question," he says, "then don't believe the results."

The article EM9108 reprinted above is used, together with EM9107, in Figure 8.13a of the STAT 220 Course Materials and in Figure 2.6a of the STAT 332 Course Materials.

1995-04-20