Pollsters Enlist Psychologists In Quest for Unbiased Results

By DANIEL GOLEMAN

Should laws be passed to eliminate all possibilities of special interests giving huge sums of money to candidates? Or do groups have a right to contribute to the candidate they support?

The first question comes from a survey by Ross Perot last March; the second is part of a more neutral rephrasing of that question as asked by an independent polling concern. When Mr. Perot put the question his way, 99 percent of those responding answered "yes." But in the alternate form, 40 percent favored limits on contributions.

The Perot poll has become a textbook case of how readily results of a survey can be manipulated by the polster, a point too easily forgotten in a day when polls have become a fixture of the information landscape as a quick pulse reading of the body politic.

But survey researchers, seeking to minimize such biases in their results, are continuing to raise questions about the way they ask questions. In pursuit of greater methodological sophistication and accuracy in surveys, one of the main tools of social science, they have formed a research alliance with cognitive psychologists.

Those at the forefront of the science of polling confront long-standing challenges in asking questions that are free of bias:

- Words can mean different things to the people who devise a survey and to those who answer it. For instance, in a 1981 poll about television, respondents said the meaning of the question was clear to them. Yet when 51 respondents were queried further about one phrase, "over the last few years," 7 said "few" meant "no more than 2 years," 19 said it meant "the same," and 10 took it to mean "10 years or more."
- Respondents can offer opinions on issues they know nothing about. In a 1981 study in which respondents were asked their views of a fictitious law, 30 percent said they opposed or favored it. And in a classic study done in the 1940's, college students willingly gave their opinions when surveyed about three nationalities that do not exist: Danireans, Pirenians and Waldonians.

The options presented as answers can strongly affect the response. In one survey, for example, people were asked if they felt "the courts deal too harshly or not harshly enough with criminals." When offered just the two options, 6 percent said "too harshly" and 78 percent answered "not harshly enough." But when a third alternative was added — "don't have enough information about the courts to say" — 28 percent took that option, and 67 percent answered "not harshly enough."

One question can influence the next. In a classic example, during the height of the Red scare in the 1950's, only 36 percent of respondents answered "yes" to the question "Do you think the United States should let Communist reporters from other countries come in here and send back to their papers the news as they see it?" But "yes" answers jumped to 73 percent when the question was preceded by one asking if Russia

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Psychologists Offer Aid on Bias in Polls

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should let American reporters in. Much of the current interest by survey researchers in cognitive science stemmed from the wish among government agencies for greater accuracy in several Federal surveys that are used to guide policy, like the Current Population Survey, done monthly to estimate the national unemployment rate.

"I'm hopeful that the cognitive scientists can help solve many of the perennial problems of survey research," said Dr. Judith Tanur, a sociologist at the State University of New York at Stony Brook and editor of the book "Questions About Questions: Inquiries Into the Cognitive Bases of Surveys" (Russell Sage Foundation).

In 1986, the first of a series of meetings intended to address these problems brought together two professions that had rarely talked: survey researchers and cognitive scientists, whose expertise is in perception, memory and the nuances of comprehension.

In recent years that collaboration has begun to bear fruit in suggesting new ways to design surveys to get more accurate answers. One innovative method, for example, is a "think-aloud" protocol in which pollsters have people tell them what they are thinking as they answer questions.

"The think-aloud method allows you to see if a question is too difficult to understand or answer, and if you are getting at the concepts you want to," Dr. Tanur said.

A similar method, in which a group of people talk over the questions in a survey, has recently led to a change in a standard question in the Current Population Survey. The question, asked of those who say they are currently not working, has been, "Is there a job from which you are on lay off?"

To those at the Department of Labor who composed the survey, "lay off" has a specific meaning: being temporarily suspended from a job to which a person expects to be called back. Such people are tallied differently than those out of work but not laid off from a specific job.

But the research showed that many people took "lay off" to be a euphemism for having been fired. A new version of the question adding the phrase "and expect to be called back" is now being used.

"During the past 12 months, about how many times did you see or talk to a medical doctor?" is one of the questions posed to the 50,000 people queried in the National Health Survey, the results of which are used to formulate government health programs.

But research by Dr. Elizabeth Loftus, a psychologist at the University of Washington, found that people's health records were checked, their answer to this question was highly inaccurate: people failed to remember 80 percent of these doctors visits in the preceding 12 months.

Drawing on other studies of memory, Dr. Loftus found that asking a question in a way that offered more cues for recall improved the accuracy.

One method asks people to recall specific visits, starting with the most recent ones. This improved the accuracy of the responses by about 15 percent, Dr. Loftus said.

One problem that has defied cognitive psychologists is that people give incorrect answers to pollsters. For example, experts on surveys say that when people are asked if they voted in the last election, about 10 to 15 percent of all adults will say they did
The Question of Questions: An Experiment in Polling

Results of H. Ross Perot’s mail-in survey in the 1992 Presidential campaign are compared with those from the same question given to a national sample by Yankelovich & Partners, a more neutrally worded version of the question submitted to a national sample and still another version given to another national sample by the Gordon Black Corporation.

### Question 1
**Perot question / Yankelovich sample: Same wording.**
- **Perot:** 97% in favor of spending cuts with the savings earmarked for deficit and debt reduction.
- **Yankelovich:** 67% in favor of spending cuts with the savings earmarked for deficit and debt reduction.

### Question 2
**Perot question / Yankelovich sample: Same wording.**
- **Perot:** 99% in favor of laws to eliminate all possibilities of special interests giving huge sums of money to candidates.
- **Yankelovich:** 80% in favor of laws to eliminate all possibilities of special interests giving huge sums of money to candidates.

### Black’s redo of Perot question / Black Sample:
**Which of the following deficit reduction approaches would you prefer?**
- a) A program that relies entirely on tax increases, with no spending cuts.
- b) A program that requires $1 of spending cuts for every $1 of tax increases.
- c) A program that requires at least $3 of more spending cuts for every $1 of tax increases.

### Yankelovich question / Yankelovich sample: Would you favor or oppose a proposal to cut spending by $2 for every dollar in new taxes, with the savings earmarked for deficit reduction, even if that meant cuts in domestic programs like Medicare and education?
- **Yankelovich:** 33% in favor of cutting spending by $2 for every dollar in new taxes, with the savings earmarked for deficit reduction, even if that meant cuts in domestic programs like Medicare and education.

### Black’s redo of Perot question / Black sample:
**Please tell me whether you favor or oppose the proposal: The passage of new laws that would eliminate all possibility of special interests giving large sums of money to candidates.**
- **Black:** 70% in favor of eliminating all possibility of special interests giving large sums of money to candidates.

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The cognitive psychologist did discover, however, that part of the problem was a tendency to overgeneralize from past events to current ones. For example, people who usually vote were more likely to say they had voted in the most recent election, even when voting records showed they had not. And those who did not vote were more likely to make the opposite error, saying they had not voted in the recent election, even when records showed that they had.

As members of the survey profession struggle to solve such problems, they also face a battle against shoddy polling methods by special-interest groups trying to advance their causes. There are about 1,500 members of the American Association for Public Opinion Research, about half academics and half independent polling companies.

"Our members agree to abide by an ethical code that requires that you disclose details of how you did a survey," said Dr. Stanley Presser, a sociologist at the University of Maryland who is president of the association.

"But there's less agreement on how you should ask questions, so the code is largely silent on particulars of how to conduct a survey.

Still, said Dr. Tom Smith, director of the General Social Survey at the University of Chicago and a past chairman of the ethics committee, "there is an elaborate procedure for bringing charges of violating ethics like biasing your survey to support a vested interest."

The profession polices itself through peer review and open critiques of surveys, Dr. Smith said. The main journal in the field, Public Opinion Quarterly, features a column called "Poll Reviews" pointing out defects in methodology, especially those that have received wide publicity.

One critique was of a poll conducted on the night of Jan. 9, 1991, which seemed to show that 39 percent of Americans favored going to war against Iraq immediately. Because that poll was conducted overnight, no effort was made to reach people who did not answer their phones the first time. Such a poll, survey experts say, may include disproportionate numbers of retired people and fewer young men, who are less often home than other groups.

Another poll, on the same topic, was conducted over a four-day period and thus had more time to reach more people, found that 30 percent of the respondents favored going to war immediately.

The Perot poll was the topic of a similar critique in the June issue of The Public Perspective. Professional pollsters said the Perot poll had two major flaws: a skewed sample and biased questions. The questionnaire was published in TV Guide and asked the magazine's readers to reply. Thus, the poll was not a random sample of Americans. Critics also said the Perot poll consisted of questions that were apparently composed by Mr. Perot's own political organization rather than by an independent survey researcher.

"A lot of us in the survey profession were bothered by the Perot poll," Dr. Presser said. "But the practice is getting more and more common, with special-interest groups wording questions their way and letting anyone respond who wants, rather than gathering a random sample."
Experts Advise a Healthy Skepticism About Polls

By DANIEL GOLEMAN

Those who conduct opinion surveys say that too many people have become overly trusting of polls and that a guarded caution is warranted in interpreting them, especially as more groups with vested interests use their polling results to argue for their points of view.

"People should question the methods and meanings of polls," said Dr. Kathleen Frankovic, a political scientist and director of surveys at CBS News. "People should always, for example, find out who conducted the survey and who's publicizing it. You'd read results of a poll on gun control differently if it was conducted by the National Rifle Association or by a truly independent organization."

Dr. Stanley Presser, a sociologist at the University of Maryland, said, "The numbers by themselves are meaningless unless you tell me things like what questions were asked and who you asked."

A sample of 1,200 people can be statistically representative of the American population if it is drawn at random. One method for doing this, said Dr. Michael Kagay, news surveys editor of The New York Times, is to get a list of all the telephone prefixes, and then have a computer randomly choose the phone numbers to be called by generating the last four numbers of those prefixes. That way, "theoretically every active phone number in the country has an equal chance of being selected," Mr. Kagay said.

In general, the more people who are polled the more dependable the results. But the National Council on Public Polls cautions that other factors make a difference, like what group the sample represents (registered voters or likely voters, for instance, are a better indicator of the outcome of an election than are all adults) and whether the people chosen were picked at random. If not, the results are biased.

Better-conducted surveys make an effort to reach people who do not answer the first call by calling back several times on other days; surveys done overnight do not have time to call back, and so may not be as representative of the population.

Polls are intended to be an approximation of the answers that would be given if the total population were surveyed. The variations in this approximation is called the "sampling error," which is not so much an "error" as an indication of how many percentage points the results might naturally be expected to fluctuate if another poll were done using a different sample of the same size.

If the margin of error is three percentage points in a pre-election poll, that means the number of people who support a given candidate might be three percentage points higher or lower than the result in the poll. That also means that a candidate would have to lead by six percentage points before one could say with confidence that he or she was ahead.

Knowing the exact wording of the questions in a poll helps tell if a survey is fair. If a question seems biased, pollsters say, it probably is.