

Cheryl Olson and co-author Lawrence Kutner found their research results misrepresented by media coverage.



Through the Looking Glass

What happens when media coverage distorts science?

BY CHERYL OLSON

WHEN I STARTED RESEARCHING HOW video games affect adolescents, I didn't realize how polarized opinions were about the issue, or how our results would be distorted in the media. The experience has taught me something about our media culture—and what we can do to improve coverage of scientific research.

For example, on the day that the notoriously violent videogame *Grand Theft Auto IV* was released, two Boston television stations interviewed me. I said pretty much the same things to both stations: Our study of 1,200 junior-high students *did* link violent games to greater risk for common childhood problems, such as fighting and poor grades, but many children play these games, and most of them *do not* have serious problems.

But one station led its report with “critics are doing everything they can to keep the violent game away from children,” and then quoted me. The other began with the opposite premise—experts say that parents have nothing to worry about—and then used essentially the same quote from me.

My experience is not unique: Many researchers have seen their results distorted beyond recognition as they filtered through mass media. A decade ago, three medical researchers (Ian J. Deary, Martha C. Whiteman, and F.G.R. Fowkes) published a study about the link between personality and heart disease, finding that “men and women

with more submissiveness were less likely to have a myocardial infarction.”

The first few stories, in major newspapers, were fairly accurate. But the researchers watched in horror as their results were recast as an anti-feminist message, with headlines such as, “Do what hubby says and you'll live longer; Professors' shock advice to women,” and “Put down that rolling pin, darling, it's bad for your heart.”

The British medical journal *The Lancet* reported on the media's distortion of this research, quoting one newspaper editor who lauded the “rolling pin” phrase: “How many readers, I wonder, were able to pass that headline without the flicker of a smile?” he said. “For this is what the game is about: stopping readers in their tracks long enough to read the story.”

In the 10 years since, the rise of voracious 24-hour news channels and countless bloggers has intensified competition in this “game.” One study found that the majority of local news stories on health or social issues are less than a minute long. If your work doesn't neatly fit a simple pro or con position, you may find yourself forced into one—which happened to me many times as I discussed our research with reporters.

Why is this cause for concern?

When data are distorted, there are real-world consequences. For example, worries about violent video games may draw

attention and funds away from less-glamorous programs proven to reduce juvenile delinquency. Media-generated myths about medical symptoms or dangers (“No crushing chest pain? It's not a heart attack”) can be fatal.

Moreover, the media's focus on contrarian information can provoke a general distrust of scientific research. “First, the scientists say that eggs are bad for me; now they say that they're good. Why should I believe anything they say?”

Fortunately, I believe there are ways researchers and the general public can counter these ill effects.

First of all, researchers must become savvy about shaping messages to the public. They can start by providing perspective to journalists: How does new data add to (or fit with) what we already know? What can be done with this information? What is still unknown, and where might we go from here?

They should also look for ways to add accurate information to the media mix, such as developing their own websites or holding Q&As with friendly bloggers. After that, deciding which distortions to follow-up on and correct is a matter of triage. Researchers have to focus on those most likely to be read or heard, to affect public health or policy, or to damage their reputations or ability to work.

For the rest of us media consumers, we have to remember that new, surprising, or scary reports are designed to attract (and often get) our increasingly fragmented attention. We have to weigh these reports, and put them into context, through a combination of scientific and media literacy: Who conducted the study, why, and with what funding? How many people were studied, for how long, and who and where were they? If the research posits dangers in your coffee or toothpaste, how big are these risks compared to other health risks, or compared to potential benefits of that habit or product?

In the end, all we can do is minimize distortion, not eliminate it. But if we turn off the sensationalist news and reward accurate reporting, we might win better coverage.

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