Maternal instincts don't explain the gender gap on GM foods

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Credit: Pam Corey

Studies have found that women are more skeptical of genetically modified (GM) foods than men, but little research has been done on what's responsible for that gender gap. Conventional wisdom has been that maternal instincts may explain the difference, but research shows that this isn't the case.

A recent study, published in the *Social Science Journal*, evaluated data from more than 1,500 people – part of a 2014 Pew Research Center survey – in an attempt to tease out the factors behind the GM foods gender gap. The paper, "The gender gap on public opinion towards genetically modified foods," found a surprising driver that may account for women's attitudes toward GM food.

We recently had a chance to talk with Steve Greene about the findings. Greene, a professor of political science at NC State, co-authored the paper with Laurel Elder of Hartwick College and Mary-Kate Lizotte of Augusta University.

The Abstract: What made you and your collaborators decide to dig into the gender gap on GM foods?

Steve Greene: I've always found the issue of GM foods particularly interesting, due to my scholarly interest in public opinion and personal interest in science. In most matters of GM foods, there's a clear disjunction between what the science tells us (they are generally safe), and what the public at large actually believes (they are not safe). GM foods is just one of many issues with a gender gap, but since Laurel Elder and I have long been studying how parenthood shapes political attitudes, we thought it was an interesting case to see whether motherhood, in particular, could explain women's greater skepticism towards GM foods.

TA: So how big is the gender gap?

Greene: As gender gaps go, this really is quite a big one. Where about 49 percent of the men in the Pew data agreed that GM food was "generally safe" only 30 percent of women agreed with that. On related questions about checking labels for GM ingredients and on scientists understanding risks of GM foods, there were also sizable gaps.

TA: I've heard people say that maternal protectiveness and concern are responsible for women's skepticism regarding GM foods. Did the data bear that out?

Greene: One of the fun things about our research on public opinion and gender gaps, and on parenthood, is that ordinary people understand and have very clear hypotheses as to what might explain various gaps between men and women or mothers and fathers. Most of the people I talked to in the early stages of research expressed this very idea. Similarly, a study of GM food attitudes in Europe hypothesized this as well, though without directly testing it.

What we found, though, is that, yes, parenthood is really important for explaining more skeptical attitudes towards GM foods. But that applies just as much to men as to women. In short, moms are

skeptical, but so are dads, so this did not explain the gender gap at all.

TA: So, what is responsible for the gender gap?

Greene: General orientations toward science and knowledge of science are largely responsible for the gender gap. Men have more confidence in science and scientists and are much less inclined to focus on the risks in various science fields. This seemed to explain most of the gender gap. Interestingly, though, our combination of science variables, political variables and demographic variables could not fully account for this gender gap, meaning there is still something unique to the role of gender in explaining GM foods that we were not able to uncover.

TA: Is that finding consistent with other research on women's attitudes towards science?

Greene: Maybe not so much science, but what we might call "potentially risky science." There's a significant body of research suggesting that men and women assess risk differently, so whether this is pollution, or nuclear power or GM foods, we can expect to see women as more attuned to potential risks.

More information: Laurel Elder et al. The gender gap on public opinion towards genetically modified foods, *The Social Science Journal* (2018). DOI: 10.1016/j.soscij.2018.02.015