

Study that said hate cuts 12 years off gay lives fails to replicate

A highly cited paper has received a major correction as a result of the ongoing battle over attitudes towards gay people, when a prominent — and polarizing — critic showed it could not be replicated.

In December 2017, researchers led by Mark Hatzenbuehler of Columbia University corrected the paper, originally published in *Social Science & Medicine* in February 2014, which showed that gay people who live in areas where people were highly prejudiced against them had a significantly shorter life expectancy. The corrigendum came more than a year after a researcher who has testified against same-sex marriage was unable to replicate the original study.

“Structural stigma and all-cause mortality in sexual minority populations,” has been cited 102 times, according to Clarivate Analytics’ Web of Science, and attracted media coverage when it was published, from outlets such as Reuters and U.S. News & World Report.



In November 2016, polarizing researcher Mark Regnerus at the University of Texas at Austin published the results of his (failed) attempt to replicate the study. After Regnerus’s study, Hatzenbuehler hired a colleague at Columbia, Katherine Keyes, to try to replicate the findings as well. She found a variable coding error. Hatzenbuehler requested a correction — although it’s not clear when [See update below]— in September 2017, despite the fact that the error nullified the main findings. The journal agreed to simply correct (not retract) the paper, and issued the notice Dec. 11, 2017.

We asked *Social Science & Medicine* why it agreed to a correction, given that the paper’s main finding was no longer valid. The journal’s Editors-in-Chief Ichiro Kawachi and S.V. Subramanian, both of Harvard University, told Retraction Watch the authors claim they can support their original findings with additional data, which they are preparing as a new submission:

If the findings do not stand up to peer review, we will proceed to retract the original paper. But in the meantime, we asked the authors to issue the Correction.

When we contacted Hatzenbuehler, we received a response from a spokesperson for Columbia, who confirmed the authors are preparing a re-analysis of the paper that will be submitted “in the coming months.”

Needless to say, the notice has a lot of backstory.

Regnerus has been accused of harboring anti-gay bias. What’s more, several researchers have said they’ve identified problems in Regnerus’s own research results. In 2012, 200 researchers wrote a letter to the editor of *Social Science Research* criticizing a paper Regnerus had published that year. In addition to questioning the review process that led to that paper, the critics wrote:

The methodologies used in this paper and the interpretation of the findings are inappropriate.

Despite the fact that Regnerus's critique of the 2014 paper was ultimately proven correct, Nathaniel Frank, a ~~lawyer~~ public policy scholar who runs the What We Know project, a catalog of research related to LGBT issues housed at Columbia Law School, told Retraction Watch:

...Mark Regnerus destroyed his scholarly credibility when, as revealed in federal court proceedings, he allowed his ideological beliefs to drive his conclusions and sought to obscure the truth about how he conducted his own work. There's an enormous body of research showing the harms of minority stress, and Regnerus is simply not a trustworthy critic of this research.

In September 2017, a year after Regnerus published the results of his failed replication study, he mentioned the debate over the Hatzenbuehler paper in a brief to the U.S. Supreme Court, submitted in support of a Colorado baker who refused to make a wedding cake for a gay couple. The brief said:

Ironically, both the Hatzenbuehler study and the study documenting its inability to be replicated are published in the same academic journal—even though both cannot be correct. This reinforces impressions of disarray in this new and politicized field of research.

Regnerus denied that his replication study was an attempt to influence the battle over attitudes towards gay people. He told Retraction Watch:

There are parties I've worked with who think ahead down the line, but I do not. I'm a social scientist who loves to mess with data.

Regnerus said he didn't come across the Hatzenbuehler study until the summer of 2015, more than a year after it first appeared in February 2014. He said replicating studies is "not usually something I do," however, he said he also tried to replicate a different study from Hatzenbuehler published a month prior, in January 2014, that used the same dataset. Regnerus claims he found a coding mistake in that paper as well, which his research assistant communicated to Hatzenbuehler.

Regnerus told us the February 2014 study caught his eye because:

I just didn't believe there could be a 12 year loss of lifespan because of the attitudes of one's neighbors... It didn't seem valid in my mind. If smoking knocks a decade off your life, how could anti-gay attitudes of people you don't know be more harmful than something you would do to yourself?

Regnerus's 2016 replication paper itself was picked up by the New York Post and by conservative publications, including the National Review.

Regnerus said that he never zeroed in on the particular coding error discovered by the second replication attempt:

It was always in my head that someone made a coding mistake...

Stanford University Professor John Ioannidis, who has studied reproducibility but was not involved in either replication attempt — and who Regnerus cited in his Supreme Court brief — told us:

I suspect [coding errors are] a common problem, but it is rare for authors to go back and recheck what they did. A failed replication may be an incentive to go back and recheck the data and the analysis code, so this is one extra benefit from replication attempts.

Update, UTC 21:00, 2/1/2018: A spokesperson for the journal told us that on Sept. 28, 2017:

Hatzenbuehler contacted us to say he had hired a research group to replicate his 2014 findings and as a result of their findings wanted to publish a corrigendum.