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On Facebook, you may be a guinea pig and not know it.

# Facebook Doesn't Understand The Fuss About Its Emotion Manipulation Study



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Tech

*Welcome to The Not-So Private Parts where technology & privacy collide*

 This article is more than 2 years old.

***\* Updated since first published.***

This weekend, the Internet discovered [a study](#) published earlier this month in [an academic journal](#) that recounted how a [Facebook](#) data scientist, along with two university researchers, turned 689,003 users' New Feeds positive or negative to se

if it would elate or depress them. The purpose was to find out if emotions are "contagious" on social networks. (They are, apparently.) The justification for subjecting unsuspecting users to the psychological mind game was that everyone who signs up for Facebook agrees to the site's ["Data Use Policy,"](#) which has a little line about how your information could be used for "research." Some people are pretty blasé about the study, their reaction along the lines of, "Dude. Facebook and advertisers manipulate us all the time. [NBD.](#)" Others, especially in [the academic environment](#), are horrified that Facebook thinks that the little clause in the 9,045-word ToS counts as ["informed consent"](#) from a user to take part in a psychological experiment, and that an ethics board [reportedly](#) gave that interpretation a thumbs up, which led most academic commentators' [jaws to hit the floor](#).

**Update (6:55 p.m.):** A source familiar with the matter says the study was approved through an internal review process at Facebook, not through a university Institutional Review Board. **Update (10:57 p.m.):** Professor Susan Fiske, the editor at the *Proceedings of the National Academy of Sciences* for the study's publication, says the data analysis was approved by a Cornell Institutional Review Board but not the data collection. "Their revision letter said they had Cornell IRB approval as a 'pre-existing dataset' presumably from Facebook, who seems to have reviewed it as well in some unspecified way," writes Fiske by email. ~~The Cornell IRB has not yet responded to a media request.~~ **(Update 6/30/14):** Cornell [released a statement](#) Monday morning saying its IRB [passed](#) on reviewing the study because the part involving actual humans was done by Facebook not by the Cornell researcher involved in the study. Though it is that researcher who did help design the study -- based on the [notes about the roles of the authors](#) in PNAS and Cornell's statement that the academics were involved in "initial discussions" about the study -- so this seems a bit disingenuous.

The larger debate is about what companies can do to their users without asking them first or telling them about it after. I asked Facebook yesterday what the review process was for conducting the study in January 2012, and its response reads a bit

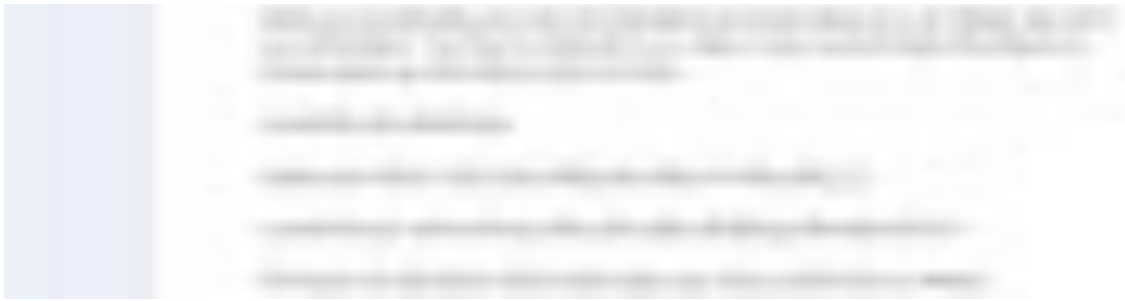
tone deaf. The focus is on whether the data use was appropriate rather than on the ethics of emotionally manipulating users to have a crappy day for science. That may be because Facebook was responding to a privacy reporter.

Today In: [Tech](#)



"This research was conducted for a single week in 2012 and none of the data used was associated with a specific person's Facebook account," says a Facebook spokesperson. "We do research to improve our services and to make the content people see on Facebook as relevant and engaging as possible. A big part of this is understanding how people respond to different types of content, whether it's positive or negative in tone, news from friends, or information from pages they follow. We carefully consider what research we do and have a strong internal review process. There is no unnecessary collection of people's data in connection with these research initiatives and all data is stored securely."





Remember reading this part of Facebook's data use policy?

It's particularly fascinating to me that Facebook puts this in the "research to improve our services" category, as opposed to "research for academic purposes" category. One usable takeaway in the study was that taking all emotional content out of a person's feed caused a "withdrawal effect." Thus Facebook now knows it should subject you to emotional steroids to keep you coming back. It makes me wonder what other kind of psychological manipulation users are subjected to that they never learn about because it isn't [published in an academic journal](#).

Mid-day on Sunday, Facebook data scientist Adam Kramer who helped run the study also commented on it through [a post on his Facebook page](#). Available in full below, Kramer says, essentially, that the reason he and his co-researchers did this study was to make Facebook better. "[W]e care about the emotional impact of Facebook and the people that use our product," he writes. "We felt that it was important to investigate the common worry that seeing friends post positive content leads to people feeling negative or left out. At the same time, we were concerned that exposure to friends' negativity might lead people to avoid visiting Facebook."

Kramer sounded a wee bit apologetic: "In hindsight, the research benefits of the paper may not have justified all of this anxiety." He said that Facebook is working on improving its internal review practices for approving experiments like this and that it will "incorporate what we've learned from the reaction to this paper."

Based on Kramer's remarks and Facebook's statement, it's evident that the company still doesn't understand the core concern of critics: that testing whether

users' emotions can be manipulated through content curation is creepy.

This gives more fodder to academic Ryan Calo [who has argued](#) that companies need to get their psychological studies of users vetted in some way that echoes what happens in the academic context. When universities conduct studies on people, they have to run them by [an ethics board](#) first to get approval — ethics boards that were mandated by the government in the 1970s because scientists were getting too creepy in their experiments, getting subjects to think they were [shocking someone to death](#) in order to study obedience, for example. ~~Interestingly, the Facebook "emotional contagion" project had funding from the government — the Army Research Office — according to a [Cornell profile](#) of one of the academic researchers involved.~~ **Update (12:58 a.m.):** Cornell has updated that profile to say [there was no Army funding](#).

Before this story broke, Betsy Haibel wrote a relevant post that linguistically elevated the stakes by calling companies' assumption of consent from users as corporate [rape culture](#). "The tech industry does not believe that the enthusiastic consent of its users is necessary," wrote Haibel. "The tech industry doesn't even believe in requiring affirmative consent."

When I signed up for 23andMe -- a genetic testing service -- it asked if I was willing to be part of "23andWe," which would allow my genetic material to be part of research studies. I had to affirmatively check a box to say I was okay with that. As I suggested when I [wrote about this yesterday](#), I think Facebook should have something similar. While many users may already expect and be willing to have their behavior studied -- and while that may be warranted with "research" being one of the 9,045 words in the data use policy -- they don't expect that Facebook will actively manipulate their environment in order to see how they react. That's a new level of experimentation, turning Facebook from a fishbowl into a petri dish, and it's why people are flipping out about this.

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## FULL STATEMENT FROM ADAM KRAMER, OF FACEBOOK

[Adam D. I. Kramer in Floyd, VA](#)

OK so. A lot of people have asked me about my and Jamie and Jeff's recent study published in PNAS, and I wanted to give a brief public explanation. The reason we did this research is because we care about the emotional impact of Facebook and the people that use our product. We felt that it was important to investigate the common worry that seeing friends post positive content leads to people feeling negative or left out. At the same time, we were concerned that exposure to friends negativity might lead people to avoid visiting Facebook. We didn't clearly state our motivations in the paper.

Regarding methodology, our research sought to investigate the above claim by verminimally deprioritizing a small percentage of content in News Feed (based on whether there was an emotional word in the post) for a group of people (about 0.04% of users, or 1 in 2500) for a short period (one week, in early 2012). Nobody posts were "hidden," they just didn't show up on some loads of Feed. Those posts were always visible on friends' timelines, and could have shown up on subsequent News Feed loads. And we found the exact opposite to what was then the conventional wisdom: Seeing a certain kind of emotion (positive) encourages it rather than suppresses is.

And at the end of the day, the actual impact on people in the experiment was the minimal amount to statistically detect it -- the result was that people produced an average of one fewer emotional word, per thousand words, over the following week.

The goal of all of our research at Facebook is to learn how to provide a better service. Having written and designed this experiment myself, I can tell you that our goal was never to upset anyone. I can understand why some people have concerns about it, and my coauthors and I are very sorry for the way the paper described th

research and any anxiety it caused. In hindsight, the research benefits of the paper may not have justified all of this anxiety.

While we've always considered what research we do carefully, we (not just me, several other researchers at Facebook) have been working on improving our internal review practices. The experiment in question was run in early 2012, and we have come a long way since then. Those review practices will also incorporate what we've learned from the reaction to this paper.



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I'm a privacy pragmatist, writing about the intersection of law, technology, social media and our personal information. If you have story ideas or tips, e-mail me at [kh...](mailto:kh...) **Read More**