

Class 21: Facebook Files

Matthew J. Salganik

Sociology 204: Social Networks
Princeton University



Social media:

- ▶ Lecture 17: Social media and individuals
- ▶ Lecture 18: Social media and society
- ▶ Lecture 19: Social ads in social media
- ▶ [Lecture 20: Fixing social media](#)
- ▶ Lecture 21: Facebook Files

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- ▶ [Lecture 21: Facebook Files](#)

Community Minute

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To what extend does tech money impact regulation and oversight? Several senators mentioned this issue.

More information is available from my CV:

<http://www.princeton.edu/~mjs3/salganik-cv.pdf>

Background:

- ▶ Leaked documents vs. whistleblower documents

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Background:

- ▶ Leaked documents vs. whistleblower documents
- ▶ We don't have access to most of the primary documents because the *Wall Street Journal* is different from WikiLeaks
- ▶ How should we think about the beliefs and actions of a company made up of many people?

Three chunks of today's lecture match the material we've done for the past two weeks

- ▶ Social media and individuals ("Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show")
- ▶ Social media and society ("Facebook Tried to Make Its Platform a Healthier Place. It Got Angrier Instead")
- ▶ Social ads and social media & Fixing social media (Frances Haugen testimony)

the facebook files □

Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show

Its own in-depth research shows a significant teen mental-health issue that Facebook plays down in public

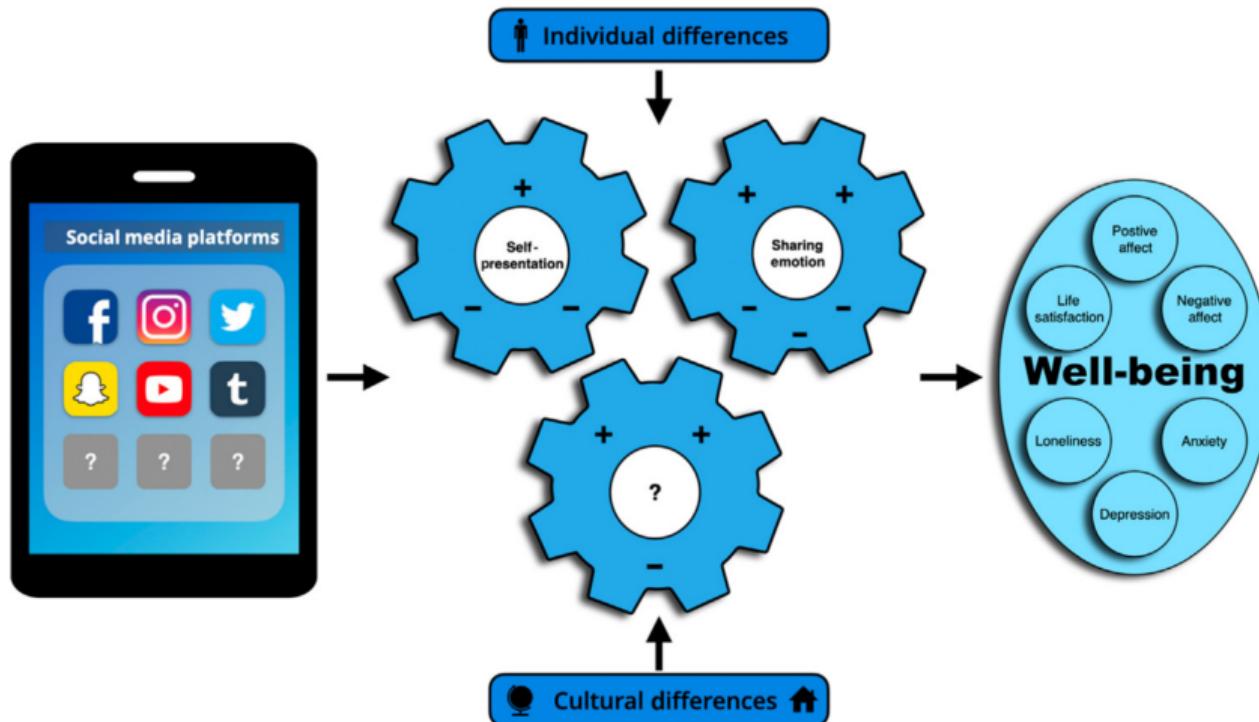


Review

Social Media and Well-Being: Pitfalls, Progress, and Next Steps

Ethan Kross,^{1,2,*} Philippe Verduyn,³ Gal Sheppes,⁴ Cory K. Costello,¹ John Jonides,¹ and Oscar Ybarra^{1,2}

How Does Social Media Impact Well-Being?



the facebook files □

Facebook Knows Instagram Is Toxic for Teen Girls, Company Documents Show

Its own in-depth research shows a significant teen mental-health issue that Facebook plays down in public



Quotes from the *Wall Street Journal*

- ▶ “Thirty-two percent of teen girls said that when they felt bad about their bodies, Instagram made them feel worse,” the researchers said in a March 2020 slide presentation posted to Facebook’s internal message board, reviewed by The Wall Street Journal. “Comparisons on Instagram can change how young women view and describe themselves.”
- ▶ “We make body image issues worse for one in three teen girls,” said one slide from 2019, summarizing research about teen girls who experience the issues.
- ▶ “Teens blame Instagram for increases in the rate of anxiety and depression,” said another slide. “This reaction was unprompted and consistent across all groups.”
- ▶ Among teens who reported suicidal thoughts, 13% of British users and 6% of American users traced the desire to kill themselves to Instagram, one presentation showed.

Quotes from Facebook

- ▶ Contrary to The Wall Street Journal's characterization, Instagram's research shows that on 11 of 12 well-being issues, teenage girls who said they struggled with those difficult issues also said that Instagram made them better rather than worse.
- ▶ This research, like external research on these issues, found teens report having both positive and negative experiences with social media.
- ▶ We do internal research to find out how we can best improve the experience for teens, and our research has informed product changes as well as new resources.

<https://about.fb.com/news/2021/09/research-teen-well-being-and-instagram/>

How can we reconcile these apparently contradictory claims? They might all be true.



Teen Mental Health Deep Dive

REDACTED

ORIGINAL RESEARCH

Objectives

Instagram is coming under increasing scrutiny with relation to mental health problems. Both popular and academic press point to social media in general, and Instagram specifically, as having a negative effect on teens' mental health. These effects have included body dissatisfaction, self-esteem, negative mood, anxiety, depression, loneliness, self-harm, and suicide. Other research suggests that the effects of social media is more nuanced, influenced by previous dispositions or the experiences teens have on the apps they use.

Existing research, however, does not explore the perceptions that teens have about their own mental health, the role that social media and Instagram play in it, or how Instagram can help teens.

WE CONDUCTED MARKET RESEARCH TO:

- understand how teens talk about mental health
- get a nuanced understanding of teens' perceptions of how Instagram effects their mental health

IN ORDER TO:

- Inform outreach teams how we might build meaningful and impactful campaigns in this space
- Inform product teams how to best support teens in this space

ORIGINAL RESEARCH

- ▶ Is this FB being responsive to criticism?
- ▶ FB says: “Although framed as a response, this research is Instagram being proactive on these issues.”

Methodology

	In-person qualitative	Follow-up video call	Online survey
Sample size	40	8	2,503
Markets	London, UK Los Angeles, USA	UK, US	US 1,221 UK 1,282
Recruitment	Regionally representative third-party panels	Participants from in-person qualitative groups	Instagram users
Tasks	2-hour in-person focus groups (4 per gendered group)	1-hour VC conversation	Online survey
Qualifications	Monthly Instagram user Age 13-17 Fit into one of themes		Monthly Instagram user Teens
Recruited around themes*	Body image, self-esteem Negative mood, depression Lonely, isolated		
Baseline group	Did not code into any theme		

* Themes identified based off review of academic literature on the topic of social media and teen mental health.

ORIGINAL RESEARCH

- ▶ non-experimental survey data from US and UK, in-person focus groups (with follow-up video call)
- ▶ FB says: “The research methods employed in this report are not appropriate for studying causality.”



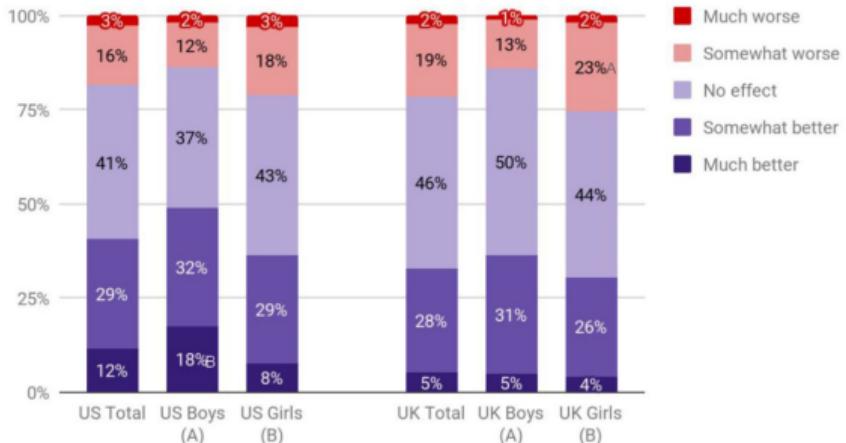
The effect of Instagram depends on teens' subjective well-being

ORIGINAL RESEARCH

- ▶ FB says “The word “effect” here is inappropriately used. The study was not designed to identify the “effect” of Instagram on well-being in a causal sense, but is rather perception-based by asking those who took the study to self-report.”

One in five teens say that Instagram makes them feel worse about themselves, with UK girls the most negative

Stated effect of Instagram



Q: In general, how has Instagram affected [the way you feel about yourself/your mental health]?

There were no statistically significant differences among those who answered for "the way you feel about yourself" and those who answered for "your mental health"

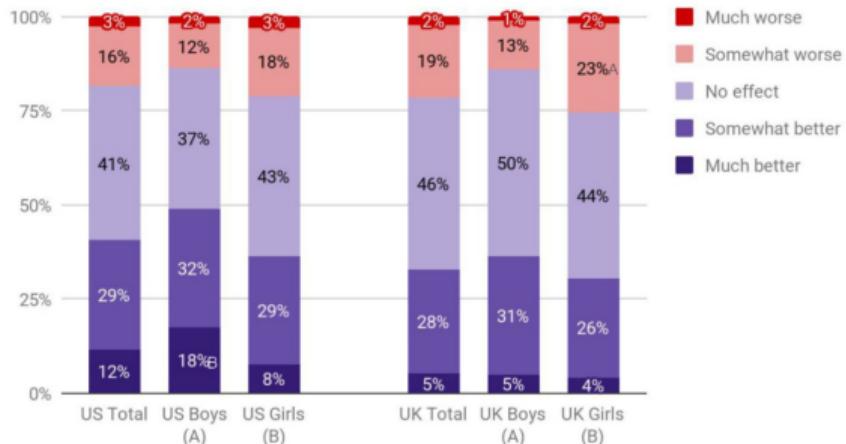
US n = 1296; UK n = 1306

ORIGINAL RESEARCH

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ORIGINAL RESEARCH

- ▶ 1 in 5 teens say that Instagram makes them feel worse about themselves. It seems that more than 1 in 5 teens also say that Instagram makes them feel better about themselves.

Teens blame Instagram for increases in the rates of anxiety and depression among teens

- This reaction was unprompted and consistent across all groups
- Constant comparison on Instagram is “the reason” why there are higher levels of anxiety and depression in young people
- Social comparison and perfectionism are nothing new, but young people are dealing with this on an unprecedented scale.
- The proliferation of new and different ways to compare themselves to others, combined with constant access to means that there is no way to escape social comparison on IG.
- For both boys and girls, this was called out as being the number one reason why IG is worse than other platforms for mental health. And, young people openly attribute their increased level of anxiety and depression to Instagram.

“The reason why our generation is so messed up and has higher anxiety and depression than our parents is because we have to deal with social media. Everyone feels like they have to be perfect.”

- UK Female

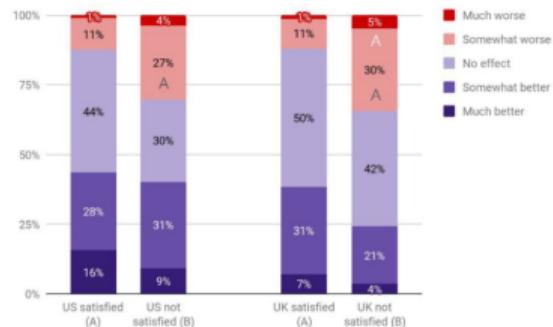
ORIGINAL RESEARCH

- ▶ How much does it matter what teens themselves think?

Teens who struggle with mental health say Instagram makes it worse

- Young people are acutely aware that Instagram can be bad for their mental health, yet are compelled to spend time on the app for fear of missing out on cultural and social trends.
- Teens specifically call out the following as ways that Instagram harms their mental health:
 - pressure to conform to social stereotypes
 - pressure to match the money and body shapes of influencers
 - the need for validation -- views, likes, followers
 - friendship conflicts, bullying, and hate speech
 - over-sexualization of girls
 - inappropriate advertisements targeted to vulnerable groups

Stated effect of Instagram



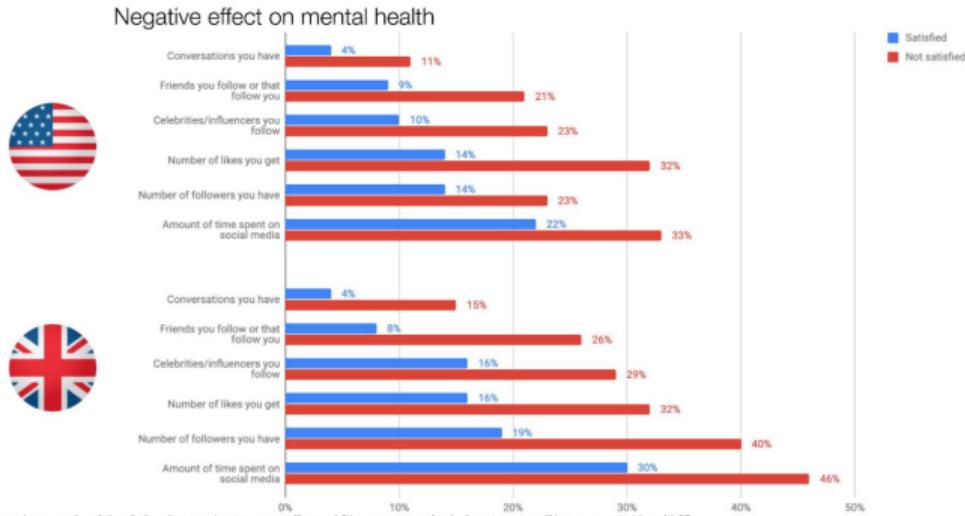
Q: In general, how has Instagram affected [the way you feel about yourself/your mental health]?

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US n = 1296; UK n = 1308

ORIGINAL RESEARCH

- ▶ Heterogeneity of perceived impact

Teens not satisfied with their lives are more likely to say IG makes them feel worse than those who are satisfied



Q: How has each of the following on Instagram affected [the way you feel about yourself/your mental health]?
There were no statistically significant differences among those who answered for "the way you feel about yourself" and those who answered for "your mental health"
US n = 1296; UK n = 1308

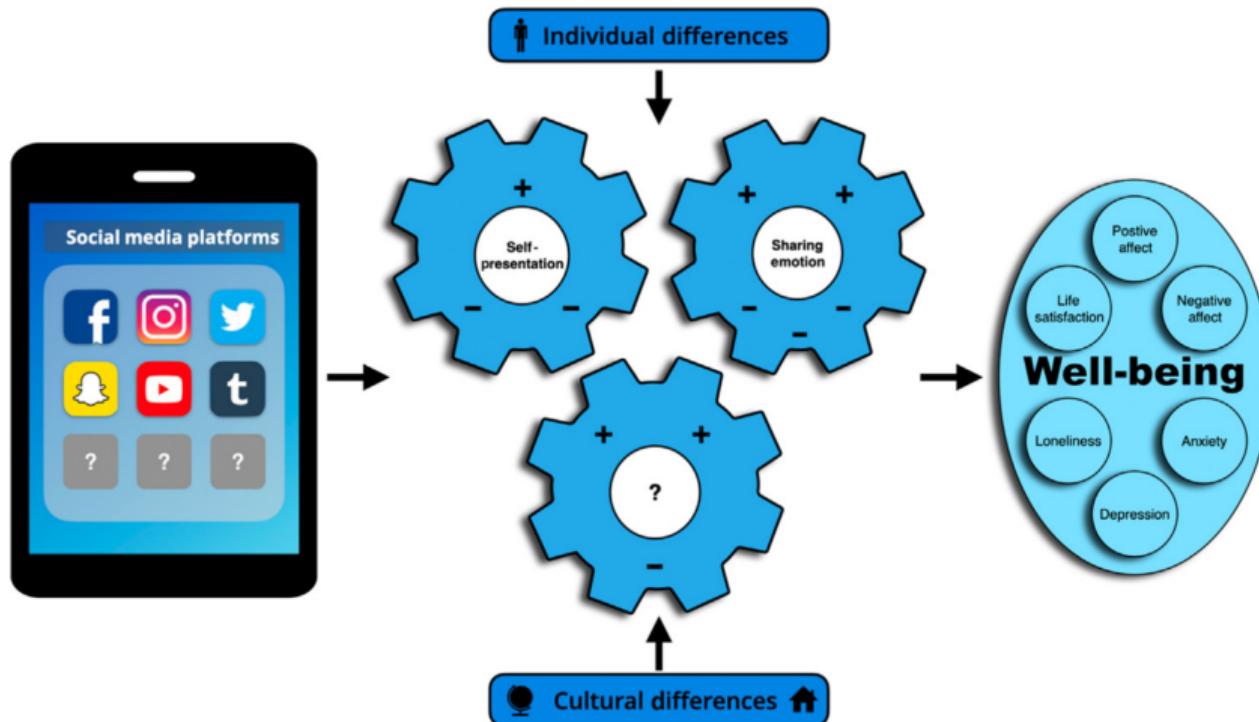
ORIGINAL RESEARCH

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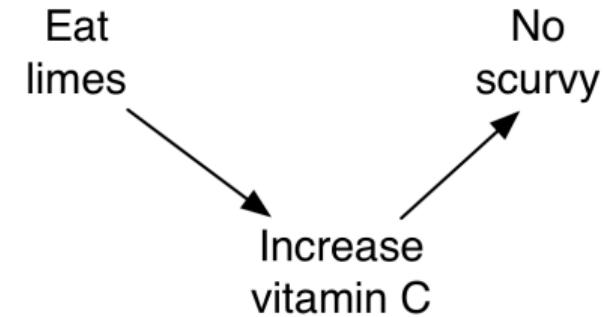
Three categories of harm on Instagram

How Does Social Media Impact Well-Being?





Causal effect
without mechanism



Causal effect
with mechanism



Three categories of harm on Instagram

Harm on Instagram falls into three categories

Impact from comparisons to others

- Feeling like you have to look a certain way or comparing yourself to others
- Comparisons of followers and like counts
- Having to match influencers
- Popularity competitions
- Perception and understanding of being constantly judged

Impact from pressure of looks/ behaviors

- Pressure to always be happy and not show weaknesses
- Taking inspiration from posts as motivation to be “better self”
- Pressure to be public about everything
- Intense scrutiny and pressure to post relevant content

Impact from others’ behavior

- Bullying, friendship drama
- People calling you names, being rude, disrespecting
- FOMO and feeling left out
- Unfollowers
- Not enough likes
- Public judgment and criticism
- Indirecting and doxing
- Gossip, spreading drama

Self-esteem, anxiety and insecurity

Isolation, adopt unhealthy habits

Isolation, loneliness, depression



Product suggestions: Personal and custom

To promote more positive use of Instagram, the company has partnered with nonprofits to promote what it calls “emotional resilience,” according to the documents. Videos produced as part of that effort include recommending that teens consider daily affirmations to remind themselves that “I am in control of my experience on Instagram.”

- ▶ Think back to Tristan Harris video. He might say Instagram is creating “pollution” and profit, and other people have to clean up the mess.

Does Instagram Harm Girls? No One Actually Knows.

Oct. 10, 2021



Shoshana Schultz/The New York Times; photographs by Yasser Chalid, Thomas Barwick, Beaga, Nick David, Yuanyuan Yan via Getty Images



By Laurence Steinberg

Dr. Steinberg is a professor of psychology who has written nearly 800 articles and essays on development during the teenage years.

Amid the pillorying of Facebook that has dominated the latest news cycle there is an inconvenient fact that critics have overlooked: No research — by Facebook or anyone else — has demonstrated that exposure to Instagram, a Facebook app, harms teenage girls' psychological well-being.

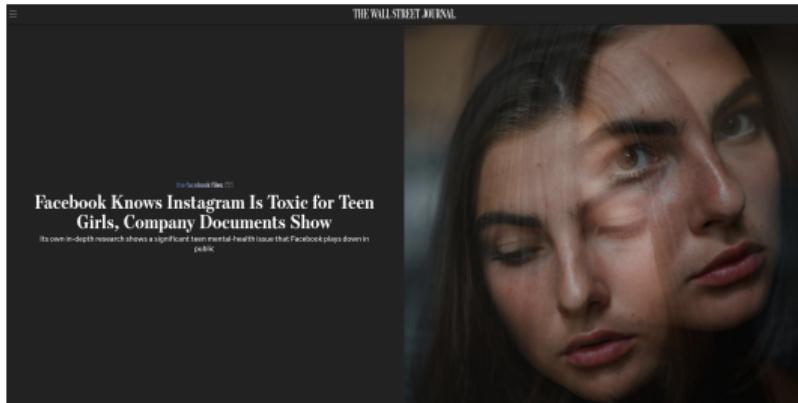
- ▶ not an experiment

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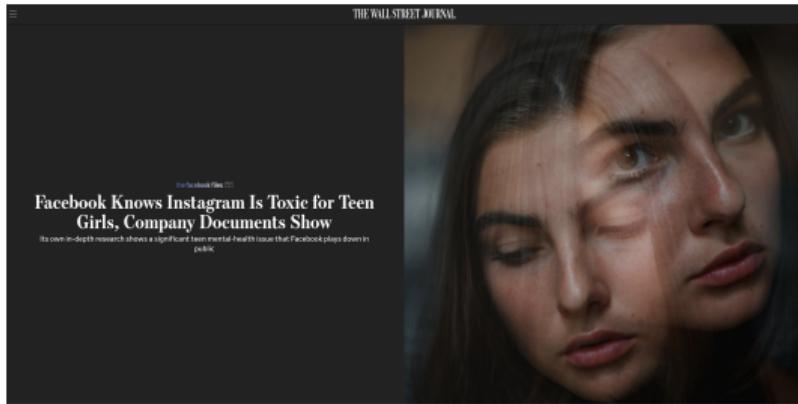
- ▶ not an experiment
- ▶ we are “Strangers to ourselves” (Wilson 2004) (think about your self-experimentation)

What's the harm, you might ask, in assuming without concrete evidence that Instagram use causes adolescents to become depressed? Isn't it plausible enough at face value? Wouldn't more regulation of Instagram and other social media platforms used by young people prevent at least some teenagers from feeling bad about themselves?

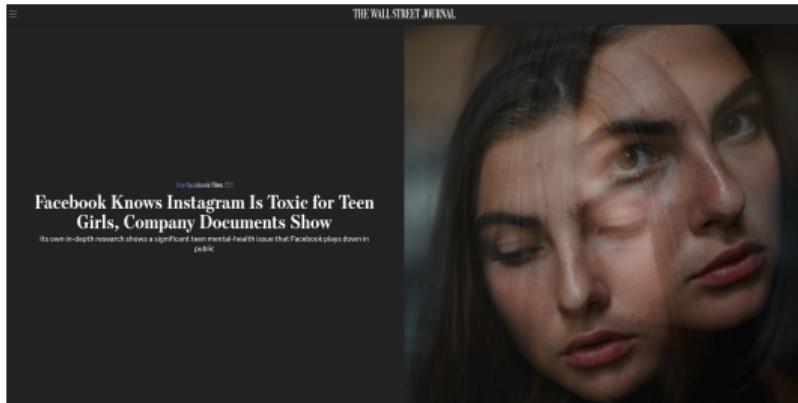
This way of thinking presents its own dangers. If other factors that have contributed to the rise in adolescent depression are being overlooked in the rush to point the finger at Facebook, we may be contributing to the very problem we hope to solve. Parents who believe that they can treat a teenager's depression simply by restricting her Instagram use may end up ignoring the true causes of her suffering. Blaming Facebook for a teenager's malaise can become a convenient way of avoiding other, more uncomfortable but equally plausible explanations, such as familial dysfunction, substance abuse and school-related stress.



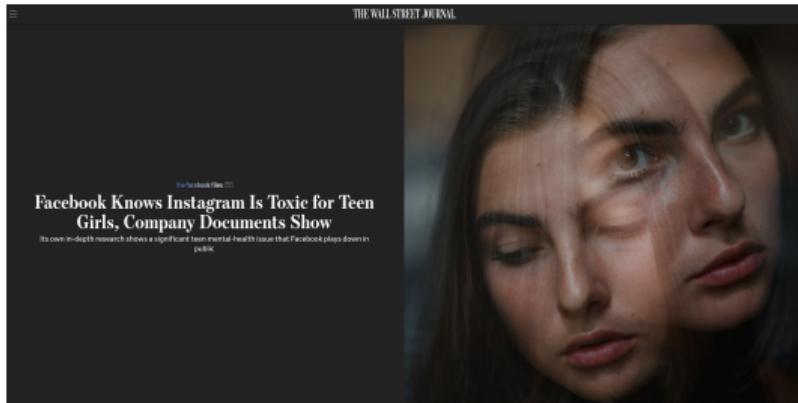
- ▶ Instagram is probably good for some people at some times in their life and bad for other people at some times in their life



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- ▶ It is hard to anticipate the effects of tweaks by Instagram, and it would be even hard to anticipate structural changes

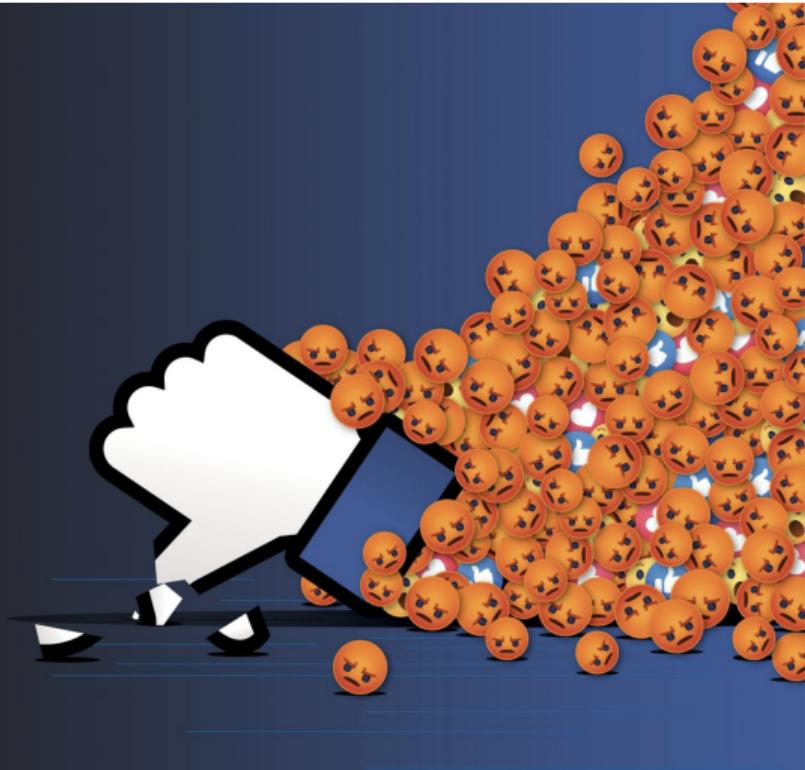


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- ▶ This is very hard to study
- ▶ It is hard to anticipate the effects of tweaks by Instagram, and it would be even hard to anticipate structural changes
- ▶ Would you want your teenage son or daughter on Instagram?

[the facebook files](#) ▾

Facebook Tried to Make Its Platform a Healthier Place. It Got Angrier Instead.

Internal memos show how a big 2018 change rewarded outrage and that CEO Mark Zuckerberg resisted proposed fixes



SOCIAL SCIENCES

How social learning amplifies moral outrage expression in online social networks

William J. Brady¹*, Killian McLoughlin¹, Tuan N. Doan², Molly J. Crockett¹*

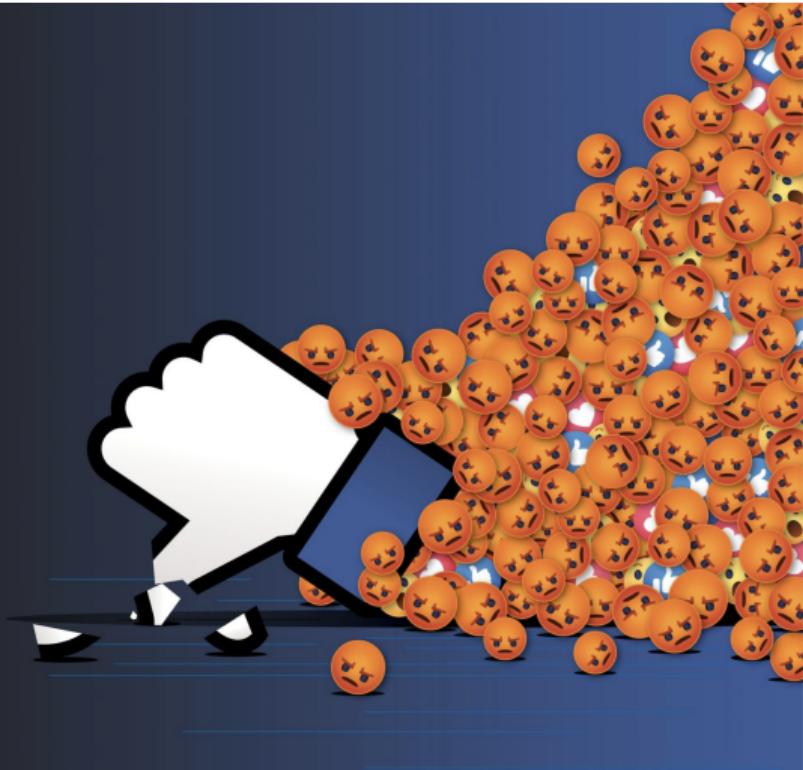
Exposure to ideologically diverse news and opinion on Facebook

Eytan Bakshy,^{1*}† Solomon Messing,¹† Lada A. Adamic^{1,2}

[the facebook files](#) ▾

Facebook Tried to Make Its Platform a Healthier Place. It Got Angrier Instead.

Internal memos show how a big 2018 change rewarded outrage and that CEO Mark Zuckerberg resisted proposed fixes



Facebook News Feed algorithm change

- ▶ Frontstage
- ▶ Backstage

facebook

Closer Together





Mark Zuckerberg

January 11, 2018 · Menlo Park, CA ·

...

One of our big focus areas for 2018 is making sure the time we all spend on Facebook is time well spent.

We built Facebook to help people stay connected and bring us closer together with the people that matter to us. That's why we've always put friends and family at the core of the experience. Research shows that strengthening our relationships improves our well-being and happiness.

But recently we've gotten feedback from our community that public content -- posts from businesses, brands and media -- is crowding out the personal moments that lead us to connect more with each other.

Full post: <https://www.facebook.com/zuck/posts/>

[one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/](https://www.facebook.com/zuck/posts/10104413015393571/)

We feel a responsibility to make sure our services aren't just fun to use, but also good for people's well-being. So we've studied this trend carefully by looking at the academic research and doing our own research with leading experts at universities.

The research shows that when we use social media to connect with people we care about, it can be good for our well-being. We can feel more connected and less lonely, and that correlates with long term measures of happiness and health. On the other hand, passively reading articles or watching videos -- even if they're entertaining or informative -- may not be as good.

Full post: <https://www.facebook.com/zuck/posts/one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/>

Based on this, we're making a major change to how we build Facebook. I'm changing the goal I give our product teams from focusing on helping you find relevant content to helping you have more meaningful social interactions.

We started making changes in this direction last year, but it will take months for this new focus to make its way through all our products. The first changes you'll see will be in News Feed, where you can expect to see more from your friends, family and groups.

Full post: [https://www.facebook.com/zuck/posts/](https://www.facebook.com/zuck/posts/one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/)

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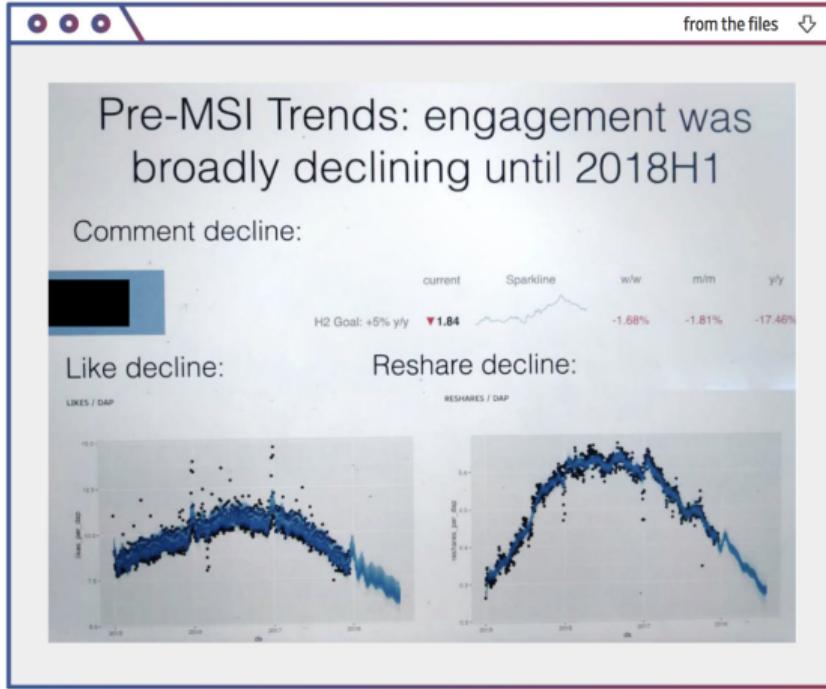
Now, I want to be clear: by making these changes, I expect the time people spend on Facebook and some measures of engagement will go down. But I also expect the time you do spend on Facebook will be more valuable. And if we do the right thing, I believe that will be good for our community and our business over the long term too.

Full post: [https://www.facebook.com/zuck/posts/](https://www.facebook.com/zuck/posts/one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/)

[one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/](https://www.facebook.com/zuck/posts/one-of-our-big-focus-areas-for-2018-is-making-sure-the-time-we-all-spend-on-face/10104413015393571/)

Facebook News Feed algorithm change

- ▶ Frontstage
- ▶ Backstage



Source: Slide used in a training presentation titled 'Key FAST Goal Metrics'

- ▶ News Feed change was to reverse this decline
- ▶ To avoid turning users into zombies

Facebook's solution was to create a formula that measured how much "meaningful" interaction a post sparked, then organize the News Feed to encourage as much of that as possible. Under an internal point system used to measure its success, a "like" was worth one point; a reaction, reshare without text or reply to an invite was worth five points; and a significant comment, message, reshare or RSVP, 30 points. Additional multipliers were added depending on whether the interaction was between members of a group, friends or strangers.

Weight Decision 12/15/2017

Component	Final Weight for 2018Q1
Like	1
Reaction, Reshare without Text	5
Non-sig Comment, Non-sig Reshare Non-sig Message, Rsvp	15
Significant Comment, Significant Reshare, Significant Message	30
Groups Multiplier (Non-friends)	0.5
Strangers Multiplier (non-friend-of-friend, small pages)	0.3

What happened?

- ▶ in surveys, users report lower quality feed
- ▶ publishers and political parties feel pressure to put out more negative content

Later, Facebook data scientists zeroed in on an aspect of the revamped algorithm called “downstream MSI,” which made a post more likely to appear in a user’s News Feed if the algorithm calculated people were likely to share or comment on it as it passed down the chain of reshares.

Can cascades be predicted?

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To me it seems hard to argue that including downstream MSI is somehow good for individual users

Early tests showed how reducing that aspect of the algorithm for civic and health information helped reduce the proliferation of false content. Facebook made the change for those categories in the spring of 2020.

When Ms. Stepanov presented Mr. Zuckerberg with the integrity team's proposal to expand that change beyond civic and health content—and a few countries such as Ethiopia and Myanmar where changes were already being made—Mr. Zuckerberg said he didn't want to pursue it if it reduced user engagement, according to the documents.

This might be an example of what Frances Haugen means when she talks about putting profit over people.



- ▶ Changes that we think might make sense (increasing meaningful social interaction) can work in unexpected ways



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- ▶ Building systems that maximize metrics without constraints can lead to bad outcomes



- ▶ Changes that we think might make sense (increasing meaningful social interaction) can work in unexpected ways
- ▶ Building systems that maximize metrics without constraints can lead to bad outcomes
- ▶ Running a social media platform with billions of users involves lots of hard choices



Frances Haugen testified at a Senate Commerce Subcommittee on Consumer Protection. October 5, 2021.

<https://www.c-span.org/video/?515042-1/whistleblower-frances-haugen-calls-congress-regulate-facebook>

In the questions and testimony we heard many of the possible changes we talked about last class

- ▶ creating online privacy regulations, end surveillance capitalism (e.g., subscription model)

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- ▶ breaking up monopolies

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- ▶ creating online privacy regulations, end surveillance capitalism (e.g., subscription model)
- ▶ breaking up monopolies
- ▶ changing Section 230 of the Communications Decency Act (“No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider”)

<https://www.youtube.com/watch?v=G0npVQnv5Cw&t=2160s>

Frances Haugen wants more transparency

<https://www.youtube.com/watch?v=G0npVQnv5Cw&t=8580s>

Non-content based approaches

- ▶ avoids picking winners and losers
- ▶ helps around the world

Make Facebook #OneClickSafer

Frictionless sharing is dangerous. Changing the reshare button is a proven solution. Join us in taking action.

<https://www.humanetech.com/oneclicksafer>

There's a solution: Change the reshare button.

"Stop at two hops." Facebook's Integrity Team researchers found that removing the reshare button after two levels of sharing is more effective than the *billions* of dollars spent trying to find and remove harmful content.

<https://www.humanetech.com/oneclicksafer>

Big tobacco moment

Big tobacco moment

- ▶ Similarities
 - ▶ importance of internal documents

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 - ▶ importance of internal documents
 - ▶ focus on kids

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Big tobacco moment

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- ▶ harder for outside researchers
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<https://www.wsj.com/video/series/joanna-stern-personal-technology/>

facebook-and-big-tobacco-why-social-media-is-and-isnt-like-cigarettes/62FA8A1C-C17E-4F9D-98E2-BB79587E9626

Stepping back

- ▶ Facebook Files give us a glimpse into the complex world of social media's impact on individuals and society

Stepping back

- ▶ Facebook Files give us a glimpse into the complex world of social media's impact on individuals and society
- ▶ It will be up to people like you to figure what to do next

Feedback: <http://bit.ly/soc204-2021>

- ▶ Lecture 17: Social media and individuals
- ▶ Lecture 18: Social media and society
- ▶ Lecture 19: Social ads in social media
- ▶ Lecture 20: Fixing social media
- ▶ Lecture 21: Facebook Files

Looking ahead

- ▶ No class on Wednesday
- ▶ No quiz, assignment or precept this week
- ▶ Happy Thanksgiving!