Investigating How University Students in the United States Encounter and Deal With Misinformation in Private WhatsApp Chats During COVID-19

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Overview

- Misinformation on WhatsApp is a unique sociotechnical challenge
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• Misinformation on WhatsApp is a unique sociotechnical challenge

• Studied how US university students responded to COVID-19 related misinformation in private WhatsApp chats
Pandemic
Infodemic

“Overabundance of information, both online and offline. It includes deliberate attempts to disseminate wrong information to undermine the public health response and advance alternative agendas of groups or individuals.”

— World Health Organization (WHO)
Growing share of Americans say they use YouTube; Facebook remains one of the most widely used online platforms among U.S. adults

% of U.S. adults who say they ever use ...

- YouTube: 81
- Facebook: 69
- Instagram: 40
- Pinterest: 31
- LinkedIn: 28
- Snapchat: 25
- Twitter: 23
- WhatsApp: 23
- TikTok: 21
- Reddit: 18
- Nextdoor: 13

Note: Respondents who did not give an answer are not shown. Pre-2018 telephone poll data is not available for YouTube, Snapchat and WhatsApp; pre-2019 telephone poll data is not available for Reddit. Pre-2021 telephone poll data is not available for TikTok. Trend data is not available for Nextdoor.


“Social Media Use in 2021.”

PEW RESEARCH CENTER
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“Social Media Use in 2021.”

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For Millions of Immigrants, a Common Language: WhatsApp

More than a billion people regularly use WhatsApp, which lets users send text messages and make phone calls free over the internet.

By Farhad Manjoo
Dec. 31, 2016
For migrants who leave their homes out of desperation, WhatsApp offers another advantage that many other networks lack: **it’s secure. The app is encrypted, making it safe from government snoops.** The company has also long been adamant about its policies, standing against requests for data from governments around the world.
WhatsApp Monitor: A Fact-Checking System for WhatsApp

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Countering Misinformation Via WhatsApp: Evidence from the COVID-19 Pandemic in Zimbabwe

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WhatsApp and Nigeria’s 2019 Elections: Mobilising the People, Protecting the Vote

A study of misinformation in WhatsApp groups with a focus on the Brazilian Presidential Elections.

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WhatsApp as a verification tool for fake news. The case of ‘B de Bulo’

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Analyzing Textual (Mis)Information Shared in WhatsApp Groups

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What can we learn from qualitative explorations of misinformation in private WhatsApp chats during the COVID-19 pandemic?
Study Overview
Study Overview

Tailoring Our Focus

- Different experiences can come from different user demographics
- Focus on WhatsApp users in the US
- Focus on younger users (undergrad + graduate students)
  - Unreciprocated concern directed towards older family members, especially for COVID misinformation [Tandoc Jr. and Lee 2020]
Study Overview

Interviews to Understand Misinformation Encounters

- Semi-structured, virtual interviews with 16 university students in the US:
  - Age 18-34
  - 9 female, 7 male
  - Regularly use WhatsApp (multiple times a week)
- 3 topic categories:
  - General WhatsApp usage
  - Misinformation encounters
  - Fact-checking strategies + design recommendations
Findings
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- Misinformation in private family/friends group chats is often spread from good intentions
- Intimacy in these group chats complicates users’ willingness and ability to deal with misinformation
- Users see privacy and stringent content moderation as trade-offs on WhatsApp
Findings

Misinformation Spreads From Good Intentions

Very easy to forward messages to many people / groups

“almost too easy [by tapping the forward button]” — P6
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Forwarded content meant to be helpful

“[Our family believed] that we should rinse our noses with saline solution to prevent COVID” — P10
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Mindset differences in senders & receivers

“She was more of the mindset that we should do whatever we can even if it’s not true [...] but she also didn’t consider it misinformation.” — P3
Findings

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Findings

Social Relationships in Groups Hinders Correction

Intimacy is attached to misinformation

Users tend to trust those close to them, but also receive misinformation from the same people

"I know [many] have their families in WhatsApp, and people tend to trust things that come from people close to you. So, I feel like it adds almost a level of genuineness to this misinformation, and then it causes people to panic, which I think is the biggest con [of using WhatsApp]." — P6"
Findings

Social Relationships in Groups Hinders Correction

Correcting older relatives is often seen as disrespectful

Older relatives are also ones who typically send misinformation

“Just because they are not as able to filter out fake news from real news. I mean, obviously it’s presented in a more and more realistic way every single day and they just lap it up and believe in it, and also, they are not as tech savvy to be able to go and Google immediately and do a quick check on what’s actually happening” — P2
Findings

Social Relationships in Groups Hinders Correction

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Misinformation is typically ignored rather than disputed

Active disputes sometimes happened with those of a similar age range (e.g. siblings), or parents

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Trade-off With Privacy and Security

Stricter content moderation would infringe upon privacy

Many participants preferred if WhatsApp did not explicitly censor or flag content
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Privacy-focused messaging should be clear

Otherwise, can collect already-known misinformation or unreliable sources
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We are writing to request that Facebook does not proceed with its plan to implement end-to-end encryption across its messaging services without ensuring that there is no reduction to user safety and without including a means for lawful access to the content of communications to protect our citizens.
Design Implications
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- Helping users deal with misinformation in ways that mitigate social power dynamics
- Empower the user to better fact-check or flag misinformation for themselves
Design Implications—Mitigating Social Power Dynamics

Selective Application of Fact Checker Icon

Source: WhatsApp blog
Design Implications

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Design Implications—Empowering the User

Add Friction When Sharing Unopened Links
Summary

- Misinformation in private WhatsApp groups can look very different than open social media platforms
- Social relationships and privacy commitments brings about challenges to misinformation management
- User empowerment and mitigating social power dynamics can be future design considerations
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