Warning Users about Online Disinformation

Ben Kaiser INTERFACE 2/24/2020

Outline

- Background
- Ways of countering disinformation
- Labels, fact checks, and warnings
- Security-style warnings
- Ethical considerations



Online Disinformation

- Disinformation preys on cognitive shortcuts we take when evaluating info
 - Preference for familiarity
 - Reliance on endorsements
 - Self-confirmation + motivated reasoning
- The internet has made it easy, cheap, and effective to spread disinformation
 - Traditional markers of credibility / legitimacy are gone
 - Popularity + repetition can be manufactured
 - Algorithmic feeds encourage selective exposure
- Political operatives and profiteers are taking advantage
 - Foreign influence
 - Domestic political influence
 - Clickbait news and ad fraud

Types and Terminology

- **Disinformation**: sometimes a catchall; also specifically refers to false information distributed with the intent to harm
- Misinformation: false information distributed without harmful intent
- Malinformation: true information distributed with harmful intent
- Fake news: sometimes a catchall; politically loaded; let's avoid this
- Junk news: information that presents itself like news but does not follow journalistic norms like transparency, objectivity, and veracity
- Clickbait: sensationalized, insubstantial information

FIRSTDRAFT

7 COMMON FORMS OF INFORMATION DISORDER



Countering Disinformation

- 1. Automated detection
 - a. Claim verification
 - b. Credibility assessment
- 2. Deplatforming + cutting off revenue
- 3. Improving recommendation and ranking algorithms
 - a. Easy: deprioritizing known disinformation
 - b. Hard: creating platforms that encourage thoughtfulness
- 4. Fact-checking + real journalism
- 5. Warnings + labels

Labels and Warnings - Fact Checks

••••• ?	3:21 PM					
1	Q Search					
	Smith shared a link					
-	Possibly false headline about aliens coming to Earth False News Site					
	uted by Fact Checker A cker B	and Fact				
08 18		2 Comments				
	Comment	C> Share				

rick scott critical condition							
Web	Images	Videos	Maps	News		My saves	
Also try:	critical condi	tion					

4,990,000 RESULTS Any time -

News about Rick Scott Critical Condition



Florida Governor Rick Scott Critically Injured During Hurricane Irma Cleanup?

snopes.com · 11 hours ago

On 11 September 2017, the "satirical" website Last Line of Defense falsely reported that Florida Governor Rick Scot...

Fact checked by Snopes: False



Forty percent of the guns in this country are sold without any background checks. We have to end the absurdity of the gun show loophole.

Harmfully Misleading

Twitter Community reports have identified this tweet as violating the Community Policy on Harmfully Misleading Information. This tweet's visibility will be reduced.

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💈 Jamison Hong 🌒

Q

This claim overstates the number of guns sold without background checks by 2x. The actual estimate based on recent survey data is 22%. See nytimes.com/backgro...

🚳 Sidney Oberhaus 🧃

Bernie Sanders is citing an outdated and flawed 1997 study that surveyed only 200 people. The real % of guns sold without background checks is half this. While still concerning, it's important people know the real estimates. Full study: annals.org/aim...

🚳 Alan Ewing 📀 Washington Post

Bernie Sanders often cites this debunked study. About 20% of guns are estimated to be



Oh my god. Indian scientists have just found HIV (AIDS) virus-like insertions in the 2019-nCov virus that are not found in any other coronavirus. They hint at the possibility that this Chinese virus was designed ["not fortuitous"]. Scary if true. biorxiv.org/content/10.110...



Harmfully Misleading

Top

Twitter Community reports have identified this tweet as violating the Community Policy on Harmfully Misleading Information. This tweet's visibility will be reduced.

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🚯 Sumita Thiagarajan 👘

While it is true that the Coronavirus has some similarities to the HIV virus, so do many other viruses, and there's absolutely no indication it was man-made. See analysis here: mass/vesci.com/note...



Whistleblowers were required to provide direct, first-hand knowledge of allegations...but just days before the Ukraine whistleblower came forward, the IC secretly removed that requirement from the complaint form.

We won't rest until we have answers.



Intel Community Secretly Nixed Whistleblower Demand Of First-Hand Info Federal records show the intel community secretly re_ $\beta^{\rm 2}$ thefederalist.com

Harmfully Misleading

Twitter Community reports have identified this tweet as violating the Community Policy on Harmfully Misleading Information. This tweet's visibility will be reduced.

Top Reports

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Labels and Warnings - Other Types

Related Information



CONSERVATIVE



Source Information (stance or credibility)



 dailymail.co.uk

 ¬NewsGuard

 Proceed with caution: This website generally fails to maintain basic standards of accuracy and accountability.

 The website of the Daily Mail, a British tabloid newspaper, its sister publication, the Mail on Sunday, and MailOnline, the Daily Mail's online newsroom. The site repeatedly publishes false information and has been forced to pay damages in numerous high-profile cases.

See the full Nutrition Label ->



Security-style Warnings

- In infosec, security warnings are a huge field of research
- After dozens of studies and field tests, they have become very effective
 - The first study in 2003 found that about 70% of people ignored warnings
 - The latest studies show that only 10-25% click through
 - Interstitial warnings are much better than passive contextual warnings
- They have clean design, clear messages, and actionable choices



Our Study

- We adapted these warnings for disinformation and tested them in two studies.
- Subjects searched for answers to questions on Google, and we tested if warnings made them more likely to double check information
- They are **extremely effective**: 86% double checked in treatment rounds versus 19% in control rounds





False or Misleading Content Warning

This website presents itself as news, but it contains information that experts have identified to be false or misleading

This website spreads disinformation: lies, half-truths, and non-rational arguments intended to manipulate public opinion.

It can be difficult to tell the difference between real news and disinformation, but it poses a serious threat to national security, election integrity, and democracy.

Go back

Dismiss and continue

Ethical Questions

- Is it OK to adapt security warnings for disinformation?
 - Malware and disinformation are very different threats. Is it coercive to make people think they're in danger?
 - Could we accidentally habituate people and therefore make security warnings less effective?
- Should a tool that can make people disbelieve information be built?
 - Could it be abused for censorship?
 - Even if it's not misused, is it inherently restricting freedom of choice?
- How strong of a warning is too strong? How do we decide where the line is?

How much control should platforms exercise over what information users

see?

Agent

Actor Type: Level of Organisation: Type of Motivation: Level of Automation: Intended Audience: Intent to Harm: Intent to Mislead: Official / Unofficial None / Loose / Tight / Networked Financial / Political / Social / Psychological Human / Cyborg / Bot Members / Social Groups / Entire Societies Yes / No Yes / No

Duration: Accuracy: Legality: Imposter Type: Message Target:

Long term / Short-term / Event-based Misleading/ Manipulated / Fabricated Legal / Illegal No / Brand / Individual Individual / Organisation / Social Group / Entire Society

Interpreter

Message

Message reading: Action taken: Hegemonic / Oppositional / Negotiated Ignored / Shared in support / Shared in opposition