# 'It is true, I received on WhatsApp': The Effects of WhatsApp on Misinformation Beliefs and Polarization

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# WhatsApp 101

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WhatsApp

Usage in Brazil

WhatsApp is a worldwide popular end-to-end encrypted messaging app allowing both direct and ingroup communications with close to 2 billion around the world

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Usage in Brazil

- 66% of the Brazilian eligible voters has a social media account, and 65% have an WhatsApp account (Datafolha 2018) 150 million people in 2022.
- Most used app for all purposes: talk to family & friends, do business & pay bills, consume news, talk politics, among others (Reuters Institute, 2021).
- Used by 48% of population to read news, despite having no "news feed" (Reuters Institute, 2021)
- Across the world, Brazilians are the most concerned about misinformation.
- And WhatsApp is the main social media application where users report to see more misinformation.

### **Motivation**

#### Disinformation Spreads on WhatsApp Ahead of Brazilian Election



# Fake News Is Poisoning Brazilian Politics. WhatsApp Can Stop It.

Oct. 17, 2018



# Field Experiment: An WhatsApp Media-Constrained Deactivation

Deactivation experiments have been recently used to causally identify the effects of social media on users' behavior ans attitudes (Asimovic et al 2021 and Alcott et al 2020). Deactivating WhatsApp users is **theorethically and empirically unfeasible**.

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- **Experiment:** Offer respondents a monetary incentive to
  - Disable their automatic download of media on WhatsApp
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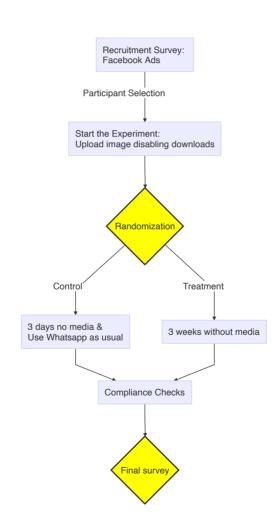
- **Our Solution:** cut channels through which users' are exposed to misinformation and polarizing content
- **Experiment:** Offer respondents a monetary incentive to
  - Disable their automatic download of media on WhatsApp
  - Dot not purposefully click and watch any media on WhatsApp
- Treatment Period: Three weeks:
  - Start: Two week before presidential elections in Brazil
  - **End:** One week after the voting day

#### Design

Filtering Questions

**Timeline** 

**Treatment Groups** 



Design

Filtering Questions

Timeline

**Treatment Groups** 

- Time spent on WhatsApp > 10 minutes every day
- Should not use desktop WhatsApp
- Accept to join the study
- ? Received images about politics on WhatsApp

Design

Filtering Questions

**Timeline** 

**Treatment Groups** 

- Start Recruitment: Between September 2th 5th
- Start the Experiment September 15th
- Activation of the Control + First Compliance: September 18th
- **Treatment duration**: From September 15th to October 6th
- Presidential Election: October 2

Design

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**Treatment Groups** 

#### **→** Treatment

- 3 weeks with automatic download disabled
- 3 weeks without consuming media
- Weakly screenshots of storage of media consumption on WhatsApp

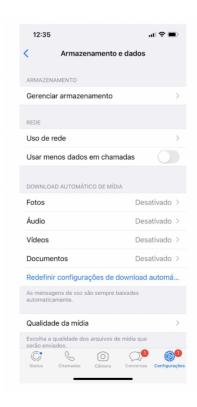
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Automatic Download



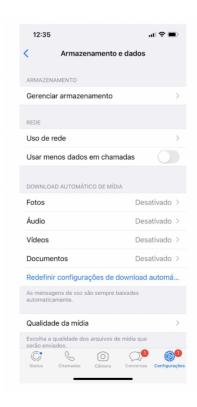
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#### **Subjective Well-being**

How did you feel last week? (Happy, Anxious, etc...)