

# Leveraging Social Media to Elevate Awareness of Nuclear Tests vs Natural Earthquakes among Indonesia's Diverse Communities

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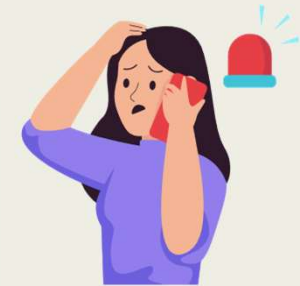
## Why this matters?



Indonesia experienced ~**10,789 earthquakes** in 2023 (BMKG)



**Nuclear explosions and natural earthquakes** may both cause ground shaking—but originate from different phenomena



Misinterpretation can **delay proper response** or create unnecessary panic



Vital to support **CTBTO's verification regime** with public understanding

## CTBTO & the Challenge

CTBTO utilizes **seismic monitoring technology** to detect subterranean nuclear explosions

Challenge in Indonesia:



High frequency of **natural earthquakes**

**Low public literacy** on nuclear monitoring



**Diverse communities** with varied access to education & information



## The Role of Social Media



Indonesia has over **200 million internet users**—most active on **social media**

Social media becomes a powerful channel to:



Disseminate **scientific info** quickly



Engage **youth and digital-native** populations



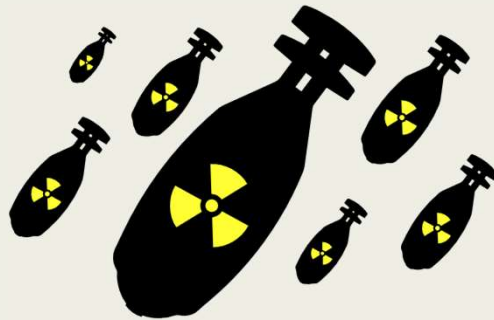
Reach **remote and diverse** audiences



Untapped potential for  
**CTBT outreach efforts**

## Research Objectives

Develop a comprehensive understanding of how social media can enhance awareness of:



**Nuclear test threats**



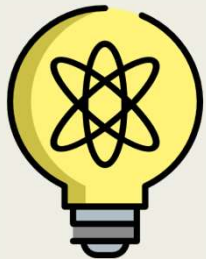
**Differences from natural earthquakes**



Focus **on Indonesia's diversity** in language, region, and digital access

## Methodology

Conducted an **online survey** via social media (Instagram)



**Knowledge** of nuclear testing

Targeted demographic: **15-60 years old**



Prior **education**/exposure



**Awareness** of nuclear testing

Topics explored:



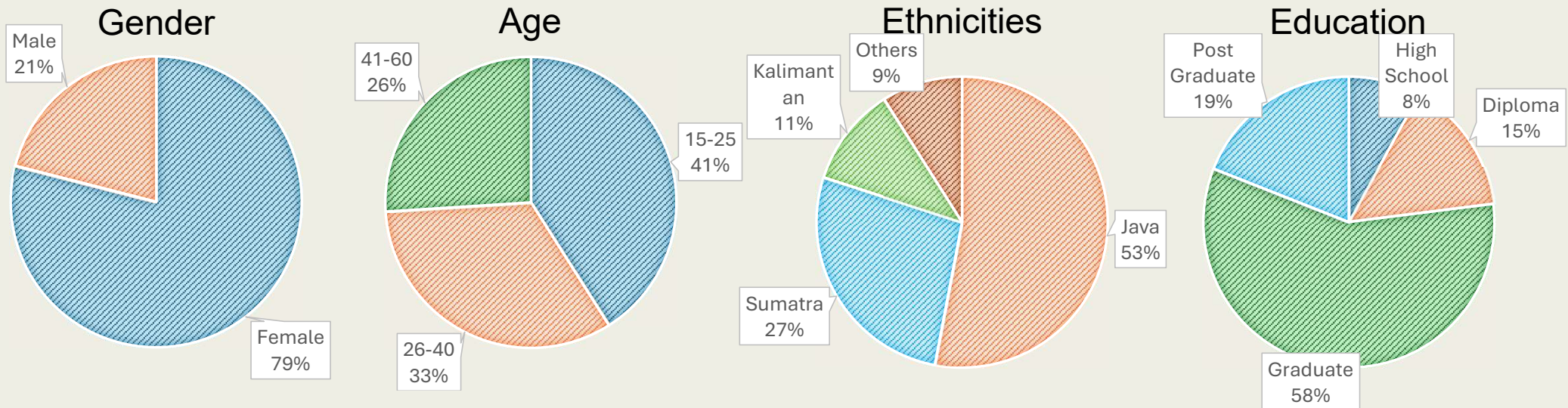
Preferred **information sources**



## Results

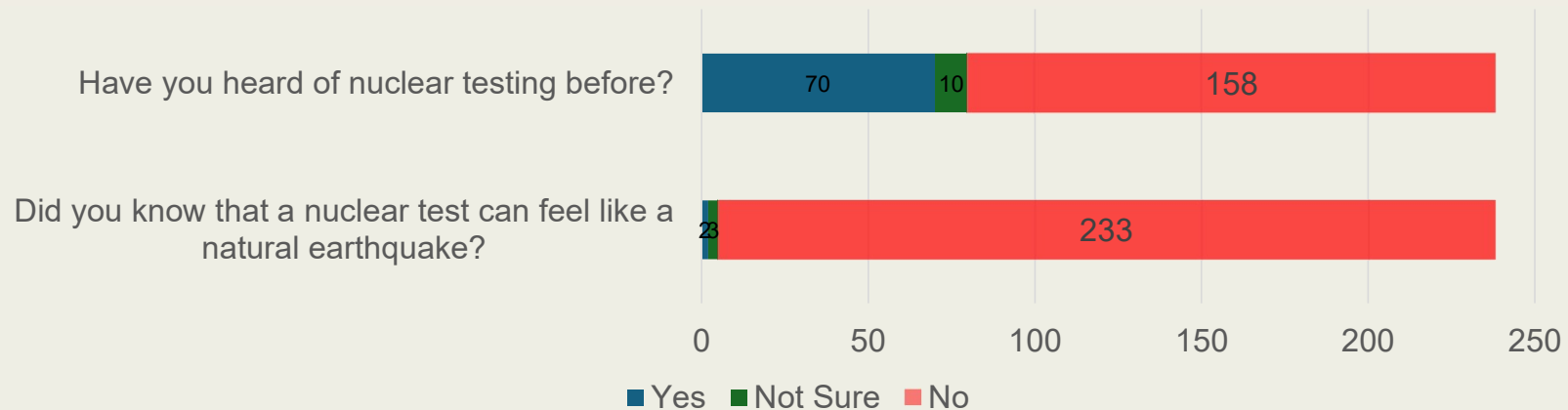
### Respondent profile:

238 total respondents

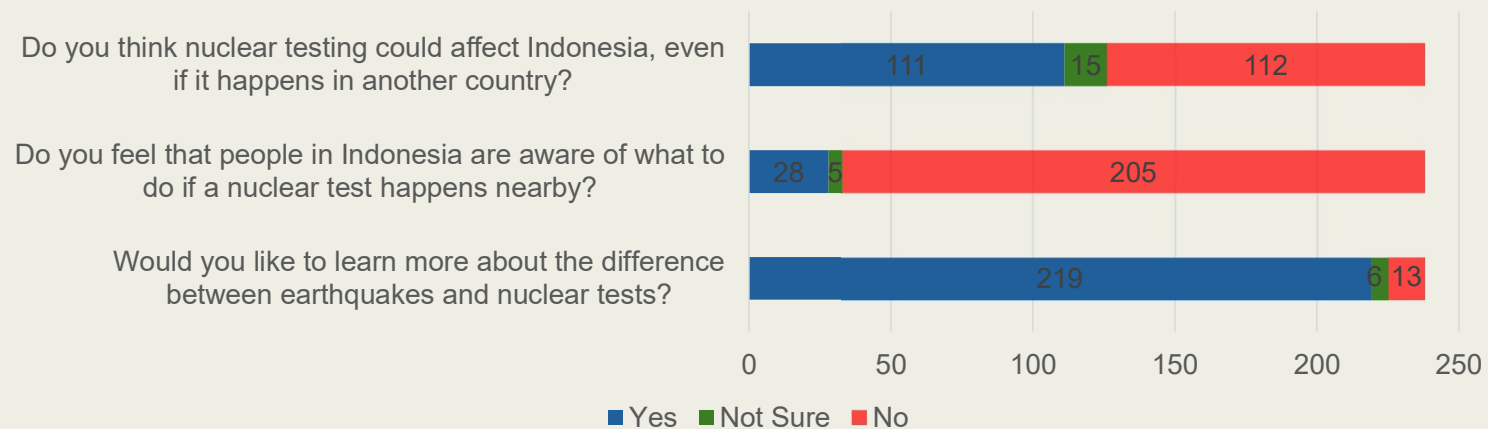


## Results

### Knowledge of Nuclear Testing



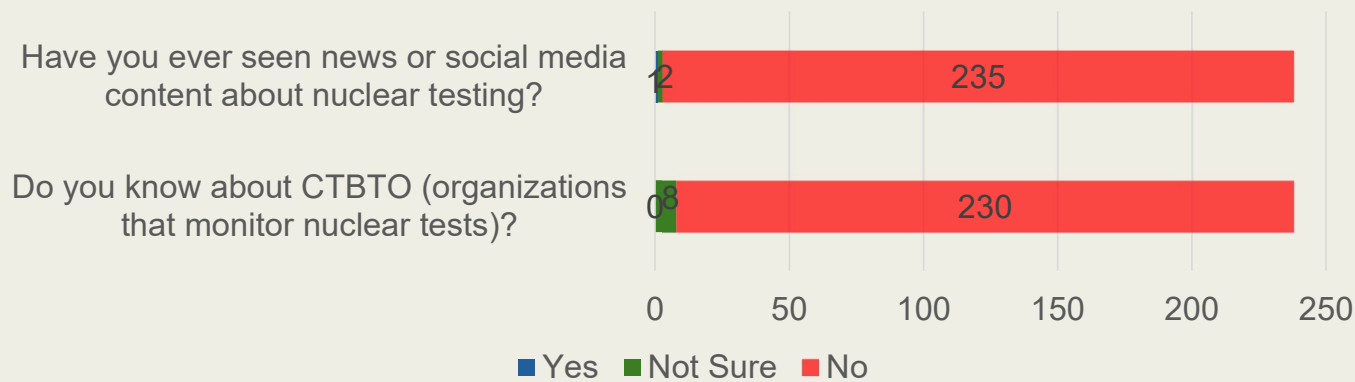
### Awareness of Nuclear Testing



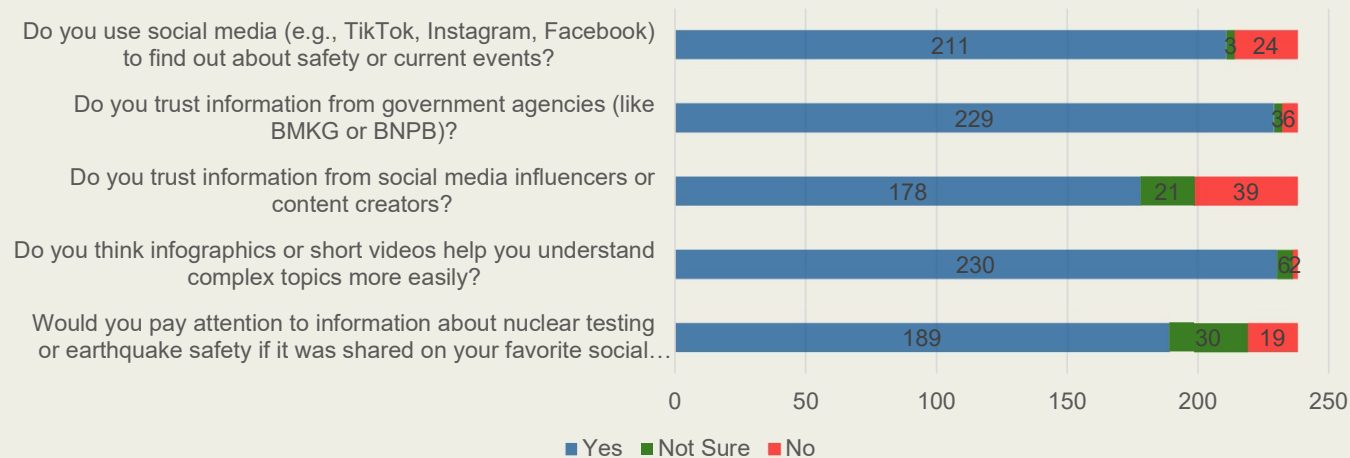


## Results

### Prior Education



### Preferred of Information Sources



## Discussion

Survey respondents were:

- Mostly **young, educated women from Java**
- Already active in online spaces
- A great audience for **early-stage awareness-building**

Interpretation of question responses:

### **Knowledge of Nuclear Testing:**

- Most respondents (>90%) have never heard of nuclear testing or the CTBTO, highlighting a **major information gap**
- 233 out of 238 respondents did not know that a nuclear test can feel like a natural earthquake, suggesting **low scientific literacy** on this topic

### **Awareness:**

- Only 28 respondents think Indonesians know what to do if a nuclear test happens, showing a clear **preparedness gap**
- Despite low awareness, **majority (219 respondents) want to learn more—** indicating **strong potential for outreach**

## Discussion

### Prior Education

- **Almost all respondents (235) had never seen nuclear test content** on social media or in the news and mostly don't know about CTBTO

### Preferred Information Source

- However, many already **use social media to follow disaster or safety info** (e.g., 211 use TikTok/IG for that)
- People **trust government agencies (228) but also influencers (178)**, showing both are important channels
- **Infographics and short videos** are widely accepted (229), confirming this is the **preferred learning format**
- **Strong engagement with mobile content** means social media is the best pathway for CTBTO-related education

## Conclusion & Recommendation



Public knowledge about nuclear testing in Indonesia is still very low



However, there is a **strong interest** to learn more



Social media can be a **powerful tool** for raising the nuclear testing awareness

Use **short videos, infographics, and animations** to share key messages



Work with **influencers and trusted voices** to reach more people



Adapt content into **local languages** or **cultural related** to reach diverse communities

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# Thank You!

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