

Understanding the Security and Privacy Implications of Online Toxic Content on Refugees

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** equal contribution*



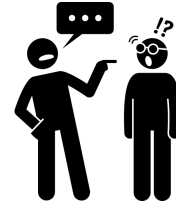
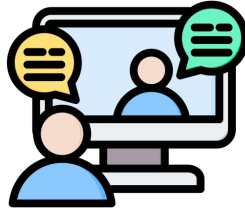
Refugees as a Vulnerable Population

- A refugee is someone:
 - Unable to return to their country
 - Fear of persecution
- Exceeds 43.4 million in 2024



Refugees as a Vulnerable Population

- Refugee crisis centers this population in online discourse
- Online discourse can be benign or supportive
- However, they can also be negative and toxic



Toxic Content against Refugees

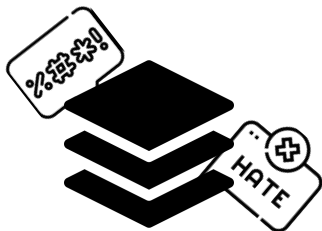


10.5K dataset

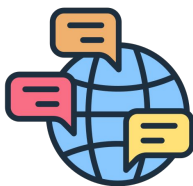
7 languages

1.4K labelled

†



Compound attacks (>1 attack) are popular (> 50%)



Trends are consistent across languages

† [1] Arunasalam et al., An Exploration of Online Toxic Content Against Refugees , USEC 2024

Motivation and Research Gap

- Build on research for at-risk users and refugee S&P †
- Toxic content against refugees is prevalent and global
- However, **lack of work in understanding,**
 - How toxicity affects refugees' S&P behaviours?
 - What S&P actions they take in response?

† [2] Simko et al., Computer Security and Privacy for Refugees in the United States, IEEE S&P 2018

Research Question

We design a study to answer the broad research question

What are the **impacts of toxic content** exposure on refugees and corresponding **security and privacy measures** they take?

Data Collection Challenge

- Refugees are a vulnerable population
- Data collection had many barriers
 - hard to reach population
 - burden of NGOs due to refugee intake
 - sensitive topic
 - language barriers

Methodology

Liaison Interviews



Refugee Focus
Groups



Surveying
Refugees



Methodology

Liaison Interviews



Refugee Focus
Groups



Surveying
Refugees



- Entry point for hard to reach population
- Informed subsequent data collection methods

Methodology

Liaison Interviews



Refugee Focus
Groups



Surveying
Refugees



- Function as group interviews
- Group setting alleviates discomfort during discussion of sensitive topic

Methodology

Liaison Interviews



Refugee Focus
Groups



Surveying
Refugees



- Data collection for participants who wished to remain anonymous

Methodology

Liaison Interviews



4 Professions

2 lawyers
1 doctor
3 academics
6 NGO workers

In 4 Regions

Turkey
Spain
Bulgaria
USA

Refugees from 4 Regions

Middle East
Africa
Asia
South America

Methodology

Refugee Focus Groups



- 9 focus groups, N = 27
- Varied in settings:
 - 1 family
 - 1 student group in a language school
 - 7 participating in NGO provided lessons

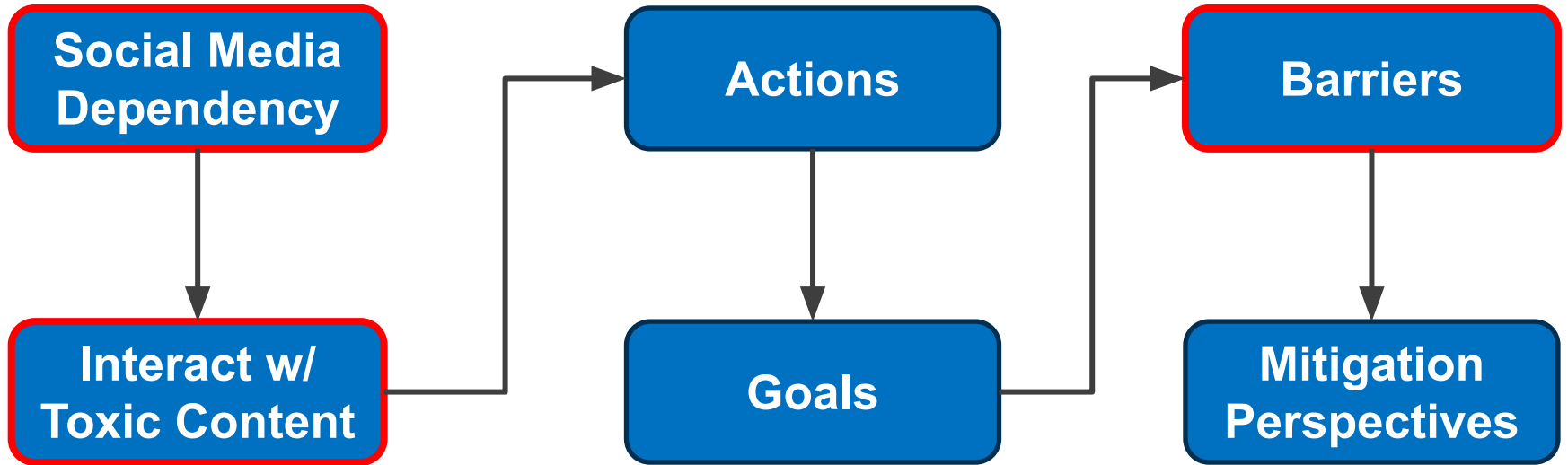
Methodology

Surveying Refugees



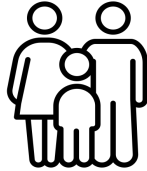
- Prepared in 4 additional languages
 - Arabic, Urdu, Turkish, Spanish
- N = 29, diverse backgrounds
 - Incomplete demographics
 - Many participants **chose** not to self-disclose

Findings



Social Media Dependency

- Beyond leisure and recreation



Reunification

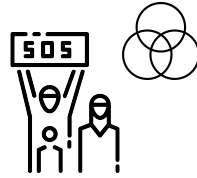
- Rejoining of friends and families separated via the refugee crisis



Aid and Support

- NGOs partake in online communities
- Provide aid to refugees

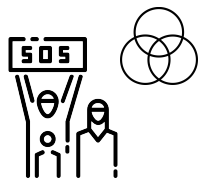
Toxic Content Interaction



Intersectional Identity

- Additional sensitive identifiers exacerbate threats
 - Sexual orientation and gender
 - Language, culture and religion

Toxic Content Interaction



Intersectional Identity

“ *[Someone] came on to the post [advocating for] the evacuation of LGBTQ+ refugees to prevent persecution and attacked the refugee that was tagged in the post* ”

Interviewed liaison speaking about Block13 Kakuma, Kenya

Barriers to Protective Practices

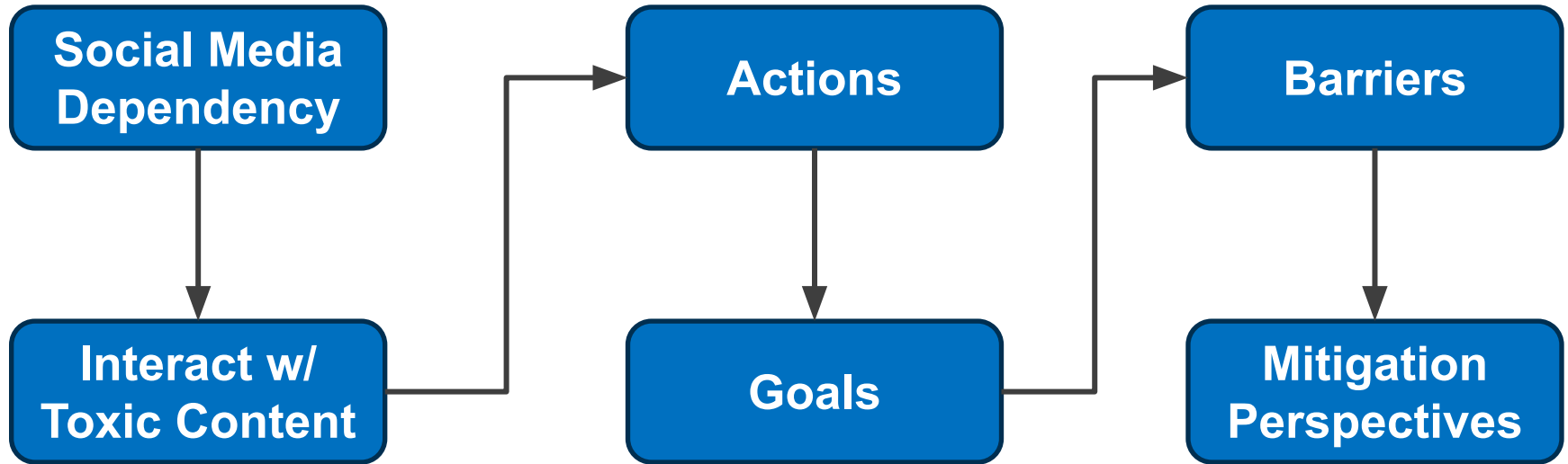


Privacy-Utility
Trade Off

“Most people, I know, don’t necessarily put Kakuma on their profile. And without that, you wouldn’t necessarily be able to tell [preventing others from reaching out]”

”

Findings - Presented only a teaser!



Summary

- We conduct a mixed-methods approach to investigate:
 - S&P implications of online toxic content against refugees
- Our study highlights how
 - Refugee circumstances lead to unique dependencies and behaviour on online platforms
 - S&P mechanisms can be difficult to enact for refugees

Thank you! Questions?

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