

# Apps against Violence against women: A systematic review of 171 apps and some ethical reflections

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# META

mHealth:

Ethical, legal and social aspects in the technological age



## 2. What are Anti-VAW Apps and why review them?

- New intervention strategy: Anti-VAW Apps
  - Apps with the common aim to help victims, bystanders and/or health workers implement different prevention or response strategies to VAW
- The development and use of mobile technologies as tools against VAW is supported by the *UN Commission on the Status of Women*
- Mobile penetration rate: 66% Anti-VAW App download numbers: > 160 Mio
- Nevertheless: (Currently) complete lack of systematic reviews and/or evaluation of Anti-VAW Apps

Freeman, Marsha A., et al. "Violence Against Women." *The UN Convention on the Elimination of All Forms of Discrimination Against Women*, 2012 GSMA Mobile Economy 2018

### 3. Methods: How to review mHealth apps?

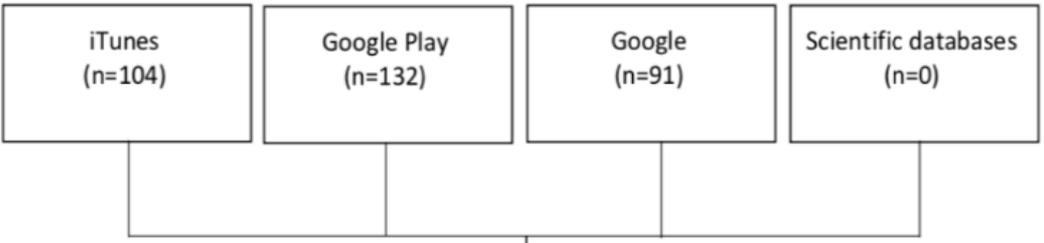
- Aim: Methodological groundwork for App reviews on mHealth responses to global health concerns, e.g. VAW
- Difficulties:
  - Lack of scientific literature
  - Previous systematic App reviews not applicable to Apps targeting global health issues
  - Different format of sources

Alyami, M., Giri, B., Alyami, H., & Sundram, F. (2017). Social anxiety Apps: a systematic review and assessment of App descriptors across mobile store platforms. *Evidence-based mental health*

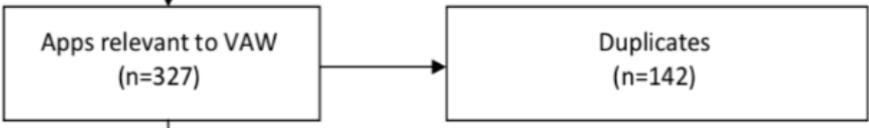
**Search terms (Engl, Ger, Fr, Span):**  
 "violence against women", "GBV",  
 "gender based violence", "anti GBV",  
 "anti gender based violence", "sexual harassment"

**Relevance to VAW:**  
 Mention of  $\geq 1$  of the search terms stated above in the app title and/or description

Identification



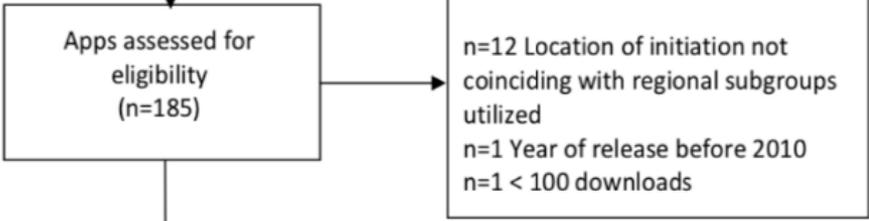
Screening



**Eligibility criteria:**

- Location of initiation (Europe and Central Asia, North America, Latin America and the Caribbean, South Asia, MENA, Sub-Saharan Africa)
- Year of release (2010-2018)
- Number of downloads ( $\geq 100$ )
- Interface language (Engl, Ger, Fr, Span)

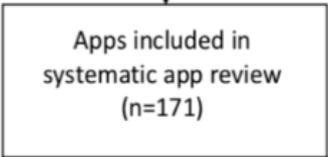
Eligibility



**Systematic app review:**

- Data extraction
- Qualitative content analysis (categorization with regards to app function)

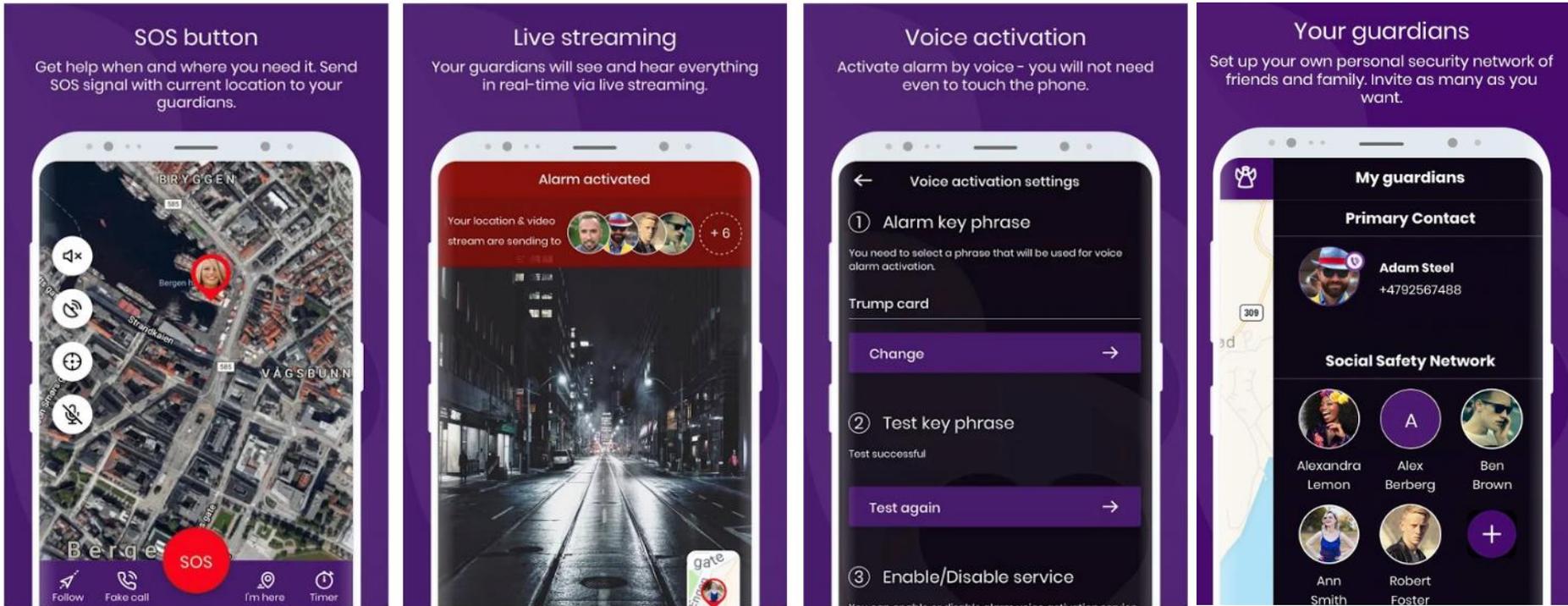
Included



Data extraction: Sector (public/private/both), Location of initiation, Target group[s], Year of release, Number of downloads  
 Based on PRISMA 2009 Flow Diagram, Moher et al. 2009

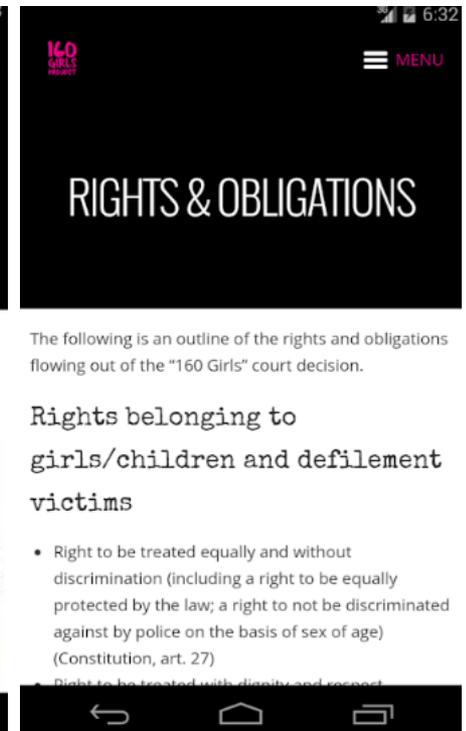
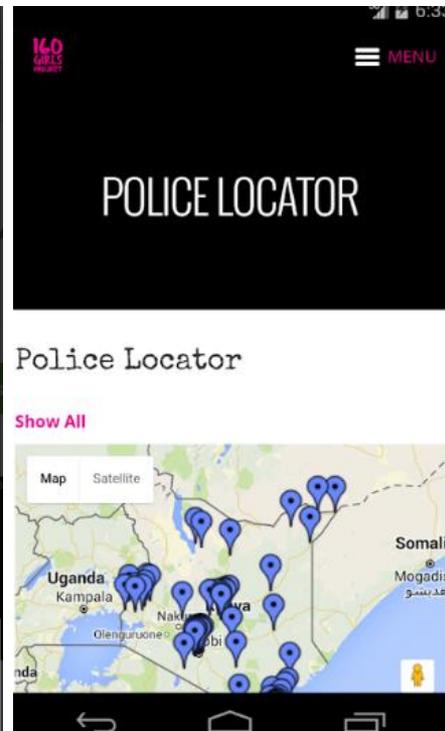
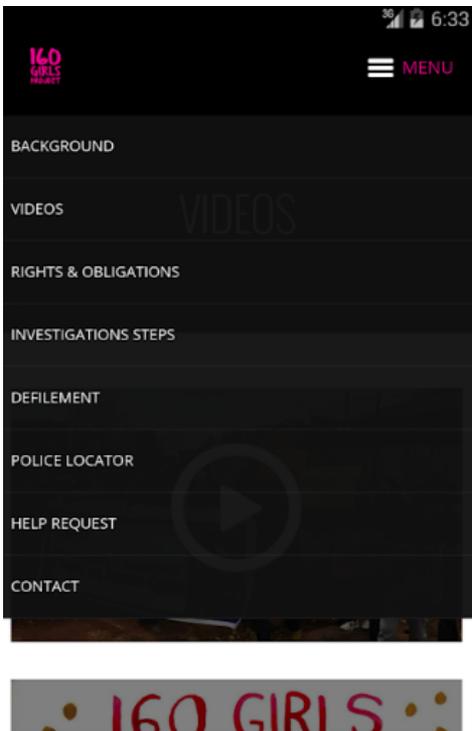


### 3. Emergency App: “BSafe”



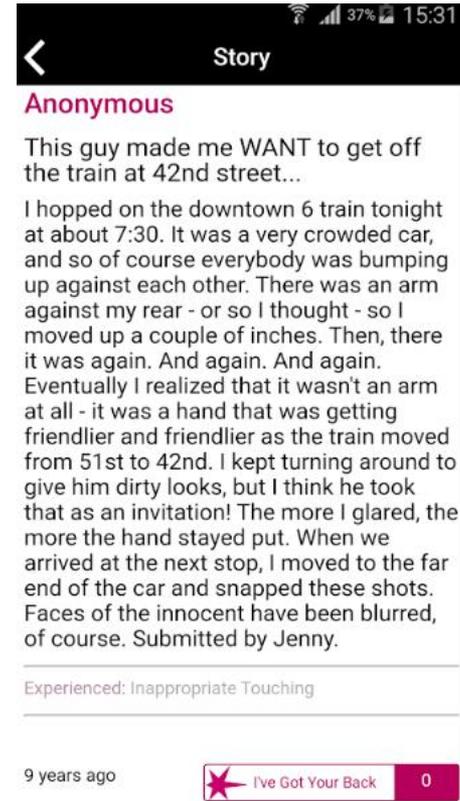
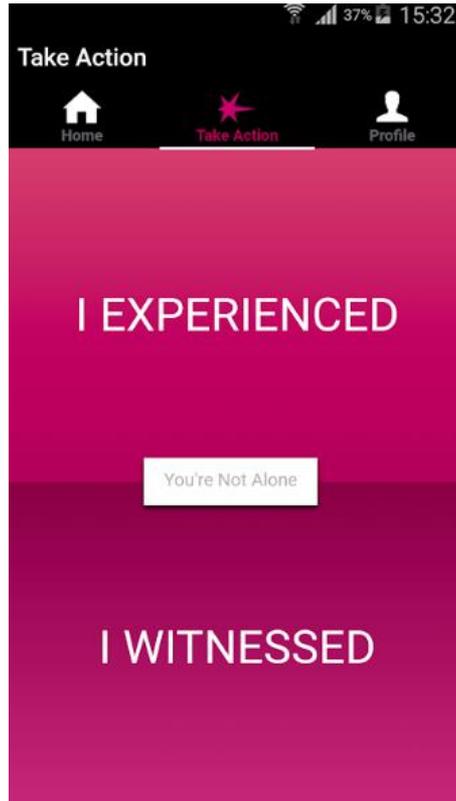
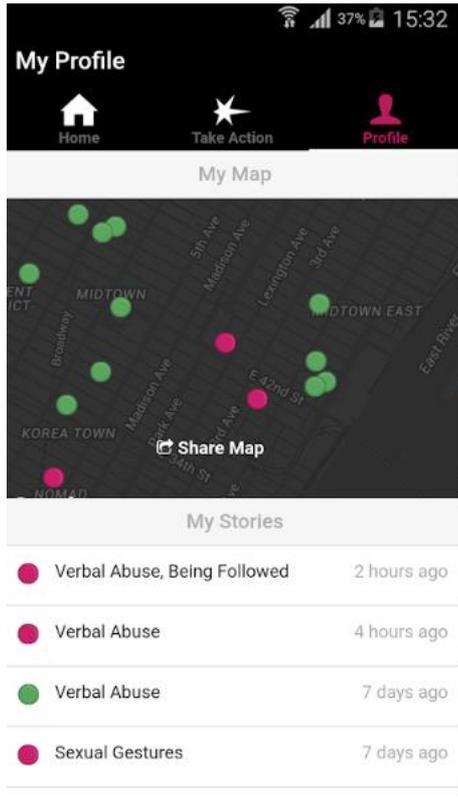
<https://play.google.com/store/apps/details?id=com.bipper.app.bsaf&hl=de>

### 3. Education app: “160 Girls”



<https://play.google.com/store/apps/details?id=org.theequalityeffect.onehundredandsixtygirls>

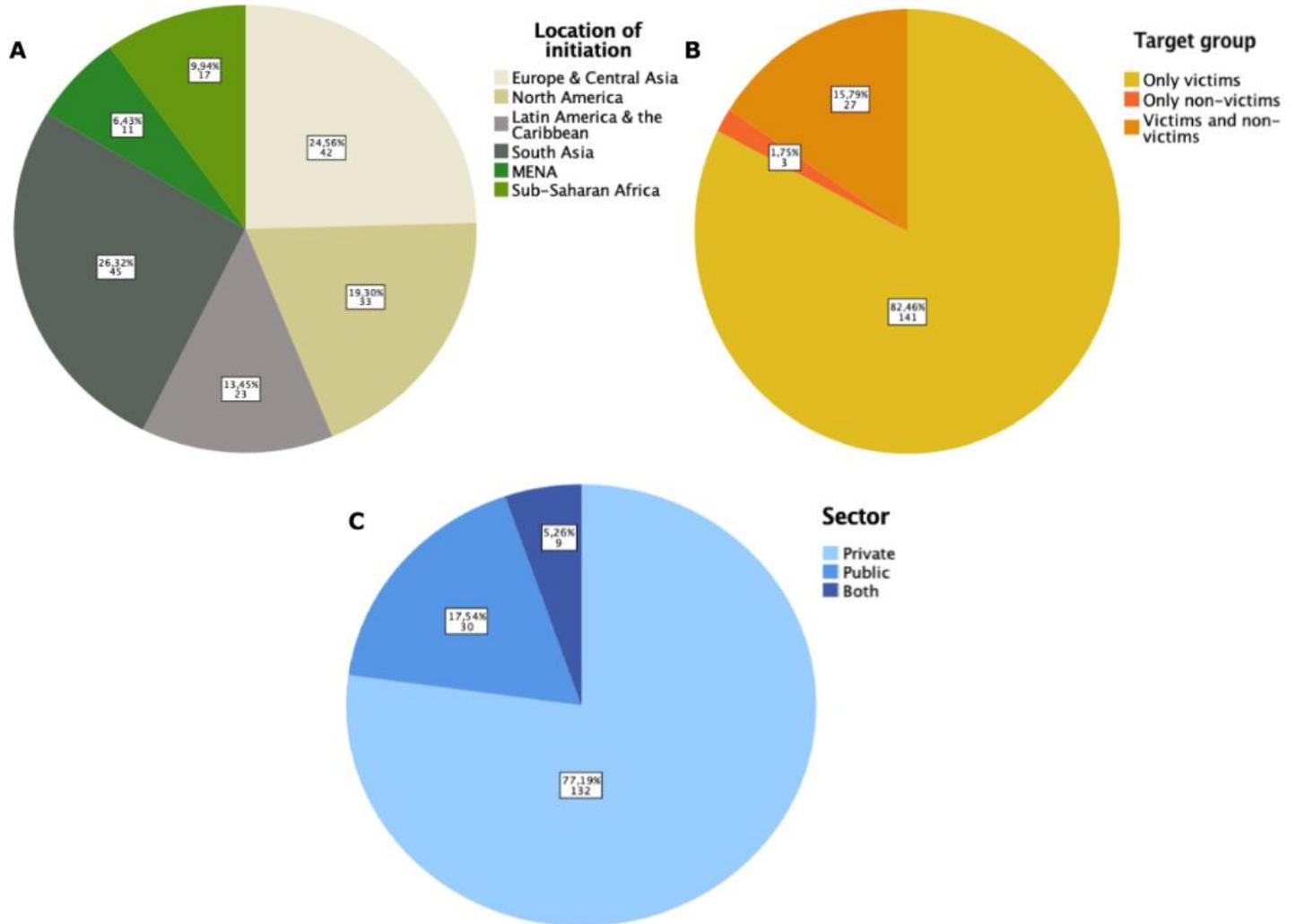
### 3. Reporting App: “Hollaback!”



<https://play.google.com/store/apps/details?id=org.ihollaback.android>

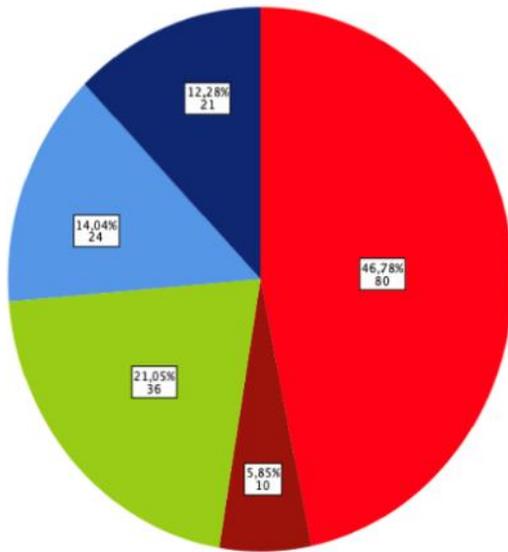
### 3. Results: Anti-VAW Apps

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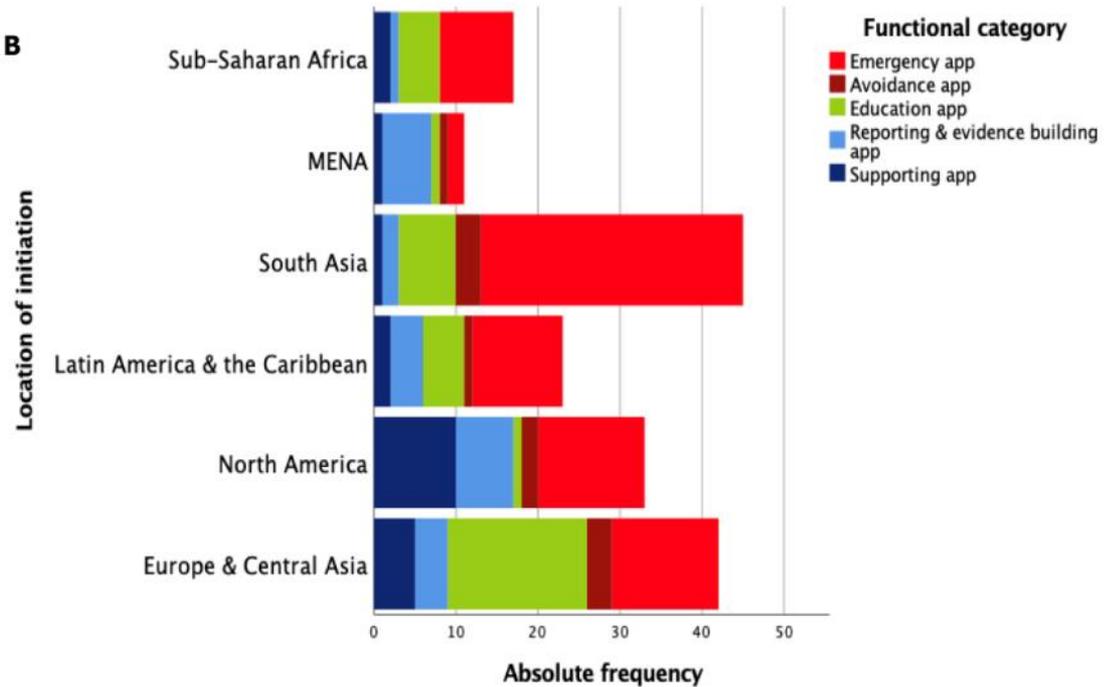


### 3. Results: Anti-VAW Apps

A

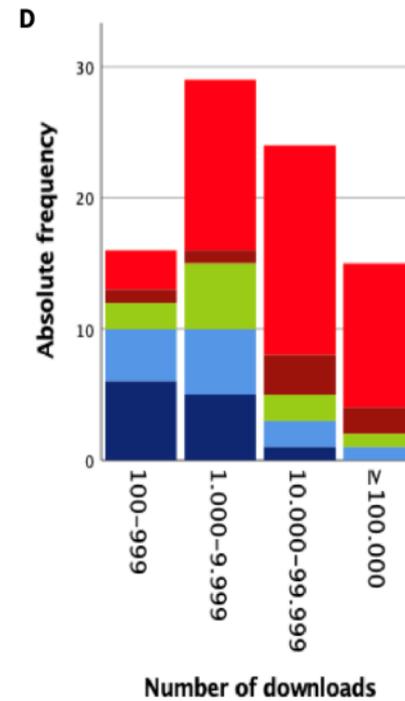
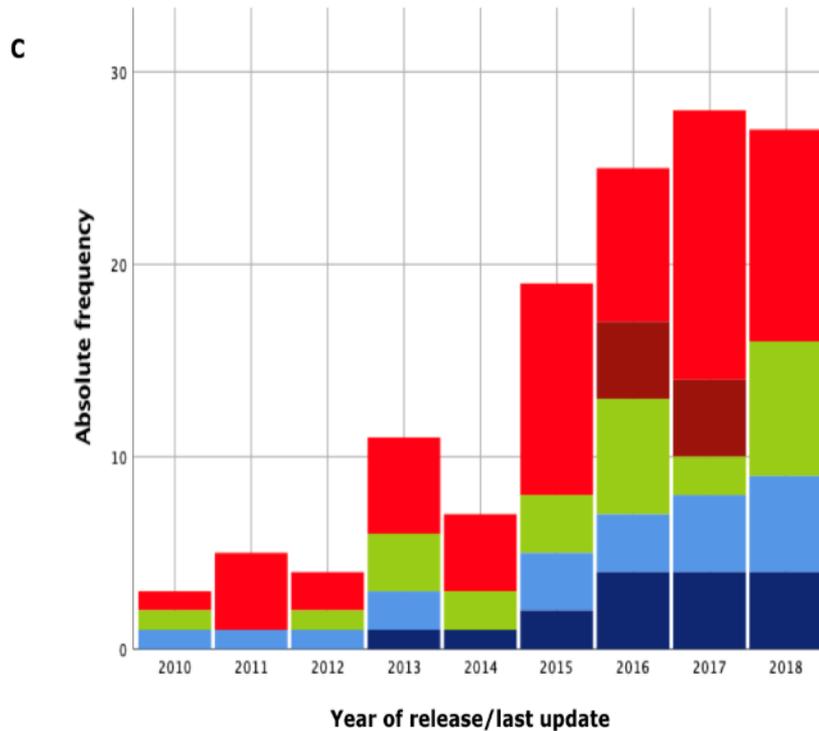


B





### 3. Results: Anti-VAW Apps



Global Trends 2010-2018



## 4. Potential advantages

- Raising awareness and supporting removal of taboos, especially in generation of digital
- Empowerment through sharing & connecting (e.g. on social media)
- Lower threshold to report and/or seek help in cases of VAW
- Facilitation of interactions between VAW survivors and existing support institutions
- Opportunity for comparably easy and quick access to information (multilingual)
- Low-cost technology that is easy to implement globally

## 4. Potential disadvantages I

- Flooding market by for-profit sector, driven by advertisement economy and user engagement? > not necessarily based on scientific evidence, voices of women, intrinsic motivation to end VAW
- Believe in and hype of “quick fixes” might push more complex, long-term, holistic, personal approaches to the side, that would address root causes, personal care, complex social norms & dynamics, interplay of policy and practice
- Knowledge and strategies stay within users’ world of anti-VAW-apps, not necessarily connected to non-digital policy and practice

## 4. Potential disadvantages II

- Majority are emergency apps: Misrepresentation of VAW as singular, interindividual event that can be overcome through an SOS-call?
- Safety of women at risk? > e.g. link of Hollaback to facebook; App visible on smartphone; data security in general?

## 5. Recommended steps

- Research: Intervention studies, continuing monitoring of app-market, qualitative interview studies
- Emphasize the argument that health & life, gender justice are at stake: Argue for higher responsibility also in private sector
  - Inclusion of women's voices into design, etc process
  - Certification of mHealth technology based on quality standards
  - Open, evidence-based approach looking for the best solution to end VAW
  - Understanding of mHealth as one tool among many others; Integration into existing strategies
  - Keeping complex eco-system in mind: Which social dynamics, political and power structures, etc. are drivers of VAW? What is necessary for long-term *prevention*?

## 4. Challenges and open questions

- How to increase advantages and decrease disadvantages?
- Can the technology and the obtained information be integrated into more complex intervention strategies and change of social norms, etc.?
- Should apps target other parts of the population (not only women experiencing violence?)
- How can women's voices be integrated into development, design, implementation and evaluation?
- How can more complex apps be supported (given market & marketing-paradigms in the private sector?)

Thank you for your attention

META-Website:

<https://www.en.meta.med.uni-muenchen.de/index.html>