

# INSIGHTS FROM THE FIELD: GENDER EQUALITY, CHALLENGES, AND OPPORTUNITIES IN OPEN-SOURCE RESEARCH

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# EXECUTIVE SUMMARY

Open-source research is recognised for its decentralised structure, adaptability, and potential to democratise investigative work. Its open nature allows researchers from diverse backgrounds—including those outside formal institutions—to contribute to high-impact investigations. This study explores how that promise plays out in practice, drawing on 20 key informant interviews, a focus group discussion, and a comprehensive literature review. What emerges is a field marked by opportunity and inequality: while open-source research offers entry points that more traditional sectors often do not, many of its leadership models, training systems, and funding pathways continue to reflect entrenched hierarchies.

Participants described the space as uniquely dynamic, noting that women, researchers from global majority countries, and individuals with non-traditional career paths have found ways to meaningfully shape investigations. However, not all participants experienced this sense of inclusion equally. Respondents from North America and Europe often reported feeling empowered, while others—particularly from underrepresented regions—expressed concern that their inclusion felt tokenistic or extractive. These disparities point to a broader tension in the field: one between its inclusive ethos and the persistence of unequal power structures that shape access, recognition, and influence.

To address this tension, the study offers a set of recommendations for institutions, funders, and practitioners. These include expanding mentorship and leadership opportunities, integrating gendersensitive and intersectional methodologies, improving ethics and reflexivity training, and addressing structural and algorithmic biases. Rather than treating inclusion as an afterthought, the study positions it as essential to the integrity, quality, and contextual relevance of open-source investigations. With thoughtful investment and structural reform, the field can realise its potential not only as a democratic space but also as a model for equity-driven, high-impact research.

# **KEY FINDINGS**

- Gender Disparities: Women are underrepresented in the hierarchies supporting open-source research, specifically in leadership, high-tech investigations, and strategic decision-making. They are more likely to work in gender-based violence (GBV), human rights, and disinformation investigations, while men are more dominant in cyber, military, and geospatial OSINT fields.
- **Tokenism and Lack of Influence:** Participants noted that inclusion efforts often stop at representation. Women and researchers from global majority countries stated that in many cases they do not have real influence over research design, authorship, or dissemination.
- Geographic and Technological Exclusion: Researchers in global majority countries face barriers to training, tools, and recognition. These include cost-prohibitive premium tools, insufficient mentorship opportunities, and the often-lesser value placed on contextual knowledge.
- Algorithmic Biases and Platform Limitations: Many open-source research tools are designed by Western, male-dominated teams, hindering the ability of researchers to capture gendered experiences and contributing to the invisibility of certain types of violence and people. Al systems and algorithms often reinforce existing power hierarchies and deprioritise non-English or non-male data sources. This dynamic was flagged by all participants.
- Structural Funding Gaps: Funder preferences often shape what is researched and who gets funded. Research into gendered or politically sensitive topics is often deprioritised, and organisations may self-censor to preserve funding relationships.
- Lack of Standardised Training: Most participants had no formal training in gender-sensitive methodologies, cultural competence, or reflexivity. The absence of ethics and safety protocols was widely noted, particularly in work involving GBV or vulnerable populations. Participants identified a need for organisations to establish Standard Operating Procedures (SOPs) and protection guidelines similar to what exists in traditional or academic research settings.
- Intersectionality Matters: Participants emphasised that gender cannot be examined without other identity factors like race, class, nationality, and language. As such, intersectional approaches are necessary for producing accurate research.
- **Reframing Gender as Inclusive:** A notable challenge during the research process was the difficulty in recruiting male participants. Despite broad outreach, 99% of responses to the study's open call came from women, suggesting a broader perception that gender-focused research is primarily intended for female audiences. This reflects broader disciplinary norms where gender is often misinterpreted as outside the remit of male practitioners.

# RECOMMENDATIONS

This section differentiates between structural and operational barriers to facilitate the implementation of the recommendations. Structural barriers encompass embedded systems of power, exclusion, and inequality that influence access and authority within the field. Operational barriers are challenges that can be more readily addressed through adjustments to training, tools, practices, and organisational policies. The recommendations are not intended to be sequential; they are intended to be implemented in tandem. Structural changes require long-term, systemic engagement, while operational improvements can build institutional momentum and readiness for in-depth reform.

# STRUCTURAL BARRIERS AND RECOMMENDATIONS

# Address gendered and geographic exclusion in leadership and funding structures

Prioritise structural reform of hiring, promotion, and funding mechanisms to ensure the representation of women and non-Western practitioners in decision-making roles. Furthermore, funders should require grantees to demonstrate how they actively promote diversity and inclusion within their projects and institutions. However, this study stops short of recommending that diversity and inclusion metrics be mandated as a condition for funding. While such metrics can be useful, they may unfairly disadvantage smaller organisations which are needed in this field. Instead, a more effective and equitable approach may be to require fundees to transparently report on the concrete steps they are taking to foster inclusive practices, recognising that context, scale, and structure vary across institutions.

## Confront algorithmic bias embedded in research tools

Fund the development of alternative, gender- and culturally sensitive technologies and encourage diverse development teams. Auditing tools for algorithmic bias should be routine and required. This means that organisations using AI or automated tools to conduct open-source research should regularly examine those tools for embedded inequalities related to factors such as gender and race. In theory, this may involve testing how algorithms perform across different demographic groups, evaluating training data for skewed representation, and identifying patterns where certain types of violence or actors are consistently deprioritised. In practice, this could involve soliciting periodic reviews from third parties, developing internal audit protocols, or conducting bias impact assessments before deploying the tool. The goal is to ensure that the technology used in investigations does not inadvertently reproduce the very power imbalances open-source research seeks to challenge.

## Shift away from tokenistic inclusion toward equitable powersharing

Move beyond representational metrics by giving underrepresented researchers control over research design, authorship, and dissemination. Representation must include power. Importantly, funders and organisations must also share responsibility for the risks associated with elevating more diverse and potentially challenging viewpoints. Whilst funders may not explicitly limit critical or politically sensitive research, selfcensorship often emerges when organisations are fearful of jeopardising funding relationships. Enabling equitable participation requires a collaborative approach to risk—one in which funders actively support and protect research that challenges dominant narratives rather than leaving organisations to manage potential backlash alone.

## Reframe the concept of 'expertise' to include lived experience and non-traditional career paths

Expand definitions of expertise to include cultural, linguistic, and regional knowledge, which is often lacking in Western open-source research organisations. Institutions should validate diverse forms of contribution to open-source research, particularly those not tied to Western academic or security sector credentials. This is critical because common hiring barriers are often related to: 1) funders requiring traditional metrics linked to the number of years of experience needed to qualify for a research role, and 2) the requirement for security clearances, something only provided to Western analysts who have already worked in the security sector. These caveats often unnecessarily limit the ability of talented people to get into the open-source field and make it more difficult for organisations to hire researchers with the contextual and language experience required to conduct comprehensive and relevant investigations.

# Advocate for intersectional approaches in funding and research design

Funders may need additional encouragement to support investigations into GBV, online harassment, reproductive rights, and other underfunded areas. The onus is also on organisations to proactively propose intersectional investigations that centre marginalised voices. Promoting a gender or intersectional lens is not just about funders or just about implementers—there needs to be a feedback loop between the two to ensure lesser-researched issues are brought forewards.

# OPERATIONAL BARRIERS AND RECOMMENDATIONS

#### Develop and implement gender-sensitive research frameworks and policies

Develop internal protocols incorporating a gender lens into all research projects, including guidance on identifying and analysing gendered security threats and influence campaigns. However, these protocols cannot simply be about checking boxes or the tokenistic inclusion referenced above. A key challenge lies in confronting elements of open-source research culture that stem from a deliberate rejection of the structural constraints associated with traditional research. While this rejection often reflects a desire for greater flexibility and democratisation, it can inadvertently cause harm. Without established frameworks or research plans to identify and address gender bias or demographic exclusion, the risk is that research outputs will be less ethical and inclusive.

#### Standardise ethics and safety training

Develop and implement SOPs for ethics and safety across all stages of open-source research. These protocols should include guidance on informed consent, the protection of vulnerable and marginalised groups, and the responsible handling of sensitive content, particularly where GBV is present or suspected. Researchers should also be trained to critically reflect on their own identities and assumptions (i.e., positionality), recognising how these may influence the research process and its outcomes. However, given the rapid pace of change in the open-source field, ethics training must be ongoing, adaptive, and context-specific to respond to changes in platforms, risks, and investigative methodologies. Researchers need to remember that the focus should not be solely on obtaining the story or the data.

#### Increase capacity building and mentorship support

The open-source field is innovative, partly due to the inclusion of talented yet younger researchers who would benefit from capacity-building and mentorship support. As such, it will be important for organisations and funders to invest in long-term capacity-building initiatives that prioritise sustained, peer-based mentorship and support, especially for early-career and independent researchers in under-resourced or high-risk environments. These models should promote horizontal learning and crossregional collaboration, creating opportunities for skill development in open-source tools, ethics, and investigative best practices. Capacity-building efforts should include technical training and leadership development to address some of the structural concerns identified in this study. When done effectively, mentorship can be approached as a strategic mechanism to support retention, foster inclusion, and build resilient research ecosystems globally.

## Strengthen partnerships with affected communities

Wherever possible, there should be a focus on working with—not on—communities by involving local researchers in all stages of the investigation process. This includes co-developing research questions, ensuring findings reflect local priorities, and respecting community ownership of data and narratives. Efforts should be made to avoid extractive or colonial approaches, which is essential to building ethical, contextually grounded research. Long-term partnerships with local researchers and communities will also play a crucial role, particularly in helping researchers remember that real people are on the other side of the platform data they collect. Relationships and partnerships will go a long way towards ensuring that sterile data and numbers can be contextualised with real-world narratives.

#### Enhance digital safety protocols

Digital safety protocols are a must in this space. Researchers should be equipped with tools and knowledge for digital selfprotection against online harassment and surveillance. This is about more than simply ensuring researchers know the resources are available; it should be approached with a real-world appreciation for the risks researchers take in less-stable contexts. Plans should be established to clearly outline the risks involved in specific research projects and the steps researchers can expect organisations and funders to take if their safety is compromised online or in physical spaces.

# Expand training on cultural competence and coded language

There is a need to develop comprehensive training modules that enhance researchers' understanding of cultural norms and regionally specific linguistic nuances and communication patterns. These should include glossaries of coded and red-flag language used in contexts involving violence, trauma, or repression. Case-based learning materials should also be developed to illustrate how a lack of cultural fluency can result in analytical blind spots or harm to individuals and communities. This type of training is particularly critical for researchers looking at conflict and war, where underrecognised indicators of harm are often embedded in culturally specific terminology or imagery.

#### Promote reflexivity as a research standard

Reflexivity—critically examining one's identity, assumptions, and power within the research process—is a well-established component of traditional academic research, particularly within the social sciences and feminist methodologies. It is often embedded in research design coursework, ethics reviews, and institutional protocols to ensure researchers know how their worldviews and experiences influence their research approach. Despite its importance, this study finds that reflexivity is often overlooked in open-source investigations due to its fast-paced nature and decentralised structures. To address this, organisations should integrate reflexivity throughout the project lifecycle—starting with research design and continuing through team discussions, data analysis, and reporting. Encouraging researchers to examine their own biases and ethical responsibilities enhances analytical depth and strengthens accountability, particularly in politically sensitive or cross-cultural investigations.

#### Resource long-term capacity, not just short-term outputs

Donors should allocate dedicated funding and sufficient time for organisations to invest in inclusive research practices, ethical infrastructure, and team development—not just immediate investigative outputs. While speed and cost-effectiveness are often prioritised, quality, safety, and diversity require sustained investment. Funders should recognise that building capacity in areas such as ethics, reflexivity, inclusion, and community engagement improves the rigour and relevance of open-source investigations over time and should be treated as core—not peripheral—components of project delivery.

# **KEY QUOTES**

"Sexual violence and conflict [...] a lot of times, those things are hidden because they're not outright reported on because people don't see them as a gendered crime or a gendered thing that's of interest or that should be looked at. So, you also have to learn about local language, coded language, things like that. I think there's a lack of education and a lot of blind spots that are skewing findings." "First, the point of open-source research is to actually present factual information, or to explain how certain events unfolded with the facts in mind. If you omit a gender lens to in any type of research, that means that you just didn't represent the reality as it is. Because, obviously, there are exceptions, but in most cases, gender does play a role in events, whether the women are victims, whether the women are survivors, whether they're bystanders, or if they're researchers. So, in order to reflect the societal issues properly as a researcher, you do need to have it. Or, [if you] don't have it, then that automatically means that you have omitted part of the reality or part of the story in your story, or that you have distorted the truth. One of the two."

"Not in attempting to get into it. I think [the barriers are] in attempting to get hired and especially get hired in roles of either management or decision-making or influence. [...] I think, with OSINT, you can selftrain online. There are so many tutorials. There's no barrier in terms of learning this skill. I think there's a barrier in terms of having influence. "

"I've seen research on gender-related security issues withheld from publication due to concerns that funders might find it politically sensitive. There's a lot of selfcensorship that happens because the organisation doesn't want to risk the funding relationship." "I would like to know where the training data comes from and who's applying the training data, right? Because if it's going to be a bunch of white male engineers in Silicon Valley training the models and seeking out their friends and buddies to test them out—providing the betas yeah, of course, it's gonna be skewed in that direction. But, if it were a diverse group explicitly when it first gets started, where we have to have this many of this cultural background, this many of this race, this many of this ethnicity, this many of this gender, I think it'd be more representative of the entire population."