

Hidden divide in literacy gap of muslim women from online gender based violence

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ABSTRACT

Background: In the growth of the digital environment, women face structural vulnerabilities, especially in cases of Online Gender-Based Violence (OGBV) in Indonesia. **Purpose:** Many studies expose how skilled digital and technological mastery among top activists, but a significant gap remains in understanding how the digital divide impacts grassroots Muslim women's safety. This research seeks to chart the digital gap among members of Naswiatul 'Aisyiyah in Yogyakarta and Fatayat NU in Kediri, to see how the gap affects OGBV prevention. **Methods:** The study adopted a qualitative semi-ethnographic approach, including in-depth interviews, field observations, and document analysis. The study adopted a qualitative semi-ethnographic approach involving in-depth interviews with three members of Aisyiah and Fatayat in Yogyakarta and Kediri. Data were also supplemented by observing their daily activities while accessing digital media and documenting their past activities. **Results:** The results revealed a hidden divide among less critical women in digital literacy and particularly technical security, as well as formal reporting systems, despite access through their devices. In addition, the culture within that society has influenced how women perceive and address online threats. **Conclusion:** The findings indicate that the digital divide is a structural problem and that it contributes to women's ability to digitally defend themselves in times of crisis. **Implications:** In intellectual terms, these findings depict a complex picture of the tiptoeing line that lies in Islamic gender and communication discourses. In reality, the research implies that community-based literacy initiatives should consider integrating digital safety with religious morals. It also highlights the immediate imperative of multi-stakeholder cooperation among religious communities, state actors, and digital platforms to redress the silencing of women.

Keywords: Digital divide; digital safety; digital literacy; online gender-based violence; semi-ethnography

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INTRODUCTION

The world at present is experiencing an unprecedented change as a result of digitalization whereby international organizations brand it as one of the instruments to redistribute society and economy. Beyond this facade of connectivity lies a challenging landscape where digital triumphalism often reproduces structural inequalities, disproportionately affecting women in the Global South (Ragnedda & Gladkova, 2020). International organizations and national statistical offices have warned for years that unequal access to technology closes an economic door but also increases risks of new digital perils facing women (BPS, 2023; GSMA, 2019). This was not only about economic gap but increasingly appeared to indicate a fundamental protection issue in Indonesia that is evident with the increase of Online Gender-based Violence (OGBV) becoming alarming.

The data of the National Commission on Violence Against Women (Komnas Perempuan) describes an ongoing crisis where cases increase sharply within a matter of approximately 10 years. Recorded incidents were high after that peak of 1,721 cases in 2021, with 1,697 in 2022 and 1,272 in 2023. Most importantly, the trend changed to upward with 1,791 case in 2024 and continued increase to 1,846 cases reported in 2025 (Kompas.com, 2026). The spreading of patriarchal violence via the nonconsensual image distribution, doxing, cyberstalking and digital extortion. This impact can be magnified by anonymity, spreadability and algorithmic

reach (Hicks, 2021). It suggests that OGBV is not merely a friction-less technical problem at the fringes, but indeed an articulation of patriarchal architectures in digital devices that enable our economic disempowerment (Amaechi, 2024; Barter & Koulu, 2021).

Grassroots organizations in Indonesia have yet to address the convergence of gender, religion and technology. Despite its importance, everyday experiences of grassroots members in their use of digital technology are scarcely represented in major studies, even among large religious mass organizations, such as Fatayat NU and Nasyiatul 'Aisyiyah that have led public campaigns, through skilled strategic use of digital means (Khan et al., 2024; Pardosi et al., 2024). This neglect hides a stark digital divide shaped not only by inequalities in access but also by the specific type of digital literacy required to defend one's dignity (Mikołajczyk, 2023). It is thus imperative that we understand how women in the community experience digital risk across a spectrum of socio-religious settings.

This study addresses this specific research gap by examining two contrasting settings in Java; Yogyakarta (a modern urban centre with deep traditional origins) and Kediri (which is characterized by a high density of pesantren (Islamic boarding schools) and conservative norms) (Wijaya, 2024). On the other hand, initial observations suggest an environmentally dependent moderation of digital risk. It meant Yogyakarta women felt entitled to voice their

opinion yet more vulnerable to economic exploitation and various other unofficial forms of violence. Eventually, Kediri would provide a firewall effect, or self-imposed subjugation through the strong religious norms held that speak to her ability and potential as a woman, while at the same time having more barriers to time sensitive information news dissemination channels and support communities available that can aid in escaping from living circumstances of an OGBV life. Only through a locality-driven investigation above and beyond an abstract first glance at the basic premises of the digital divide can such nuances be understood.

Conceptual Framework: To understand the complicated digital lives of women, this research connects traditional theories of the digital divide with feminist technology studies and moves beyond just ownership of devices. This first definition of the main concepts is digital divide. Getting beyond the sense of “either you are dead or alive” that marked the initial discussions of the digital divide in the late 1990s or 2000s and is still rife today (Rowse et al., 2017) means we must look at this situation from an entirely different angle. Van Dijk and Hacker (2003) originally developed a model that simply differentiates information facilities. This model is structured according to material access (device and infrastructure), skills access (literacy and technical ability), usage access (quality and frequency of use), and motivational access (interest and psychological drive). This model was further

developed by Lythreath et al. (2022) into nine different categories that take account of social demographic factors, economic status, support networks, and so on. Combining these theories with feminist theorizing of communication, we see that technology is never neutral. According to Wajcman (2011), it has power over the lives of men and women. Digital environments are imbued with power dynamics that often mean women end up as secondary users, meeting obstacles from generally accepted rules of society to the lack of educational opportunities encountered when navigating digital settings.

Secondly, OGBV refers to a range of harmful online behaviors that are directed at individuals and groups based on their sex. This type of violence is exerted against women, causing sexual and psychological damage, as well as being a means used for the imposition of the patriarchal model. Violence is defined as any behavior via the Internet where people are in one way shape or form hooded world, cyber sex harassment, dress-based abuse, gender role-based violence and anti-feminism violence (Zhong, 2025). As examples of what OGBV may look like, grooming, sexual blackmailing and sharing non-consensual private sexual content have been highlighted (Faith, 2022; Hicks, 2021). OGBV takes place in many platforms, such as Facebook, Instagram and Twitter; both known and unknown perpetrators engage with victims through harmful behaviors (Hicks, 2021; Monsees, 2025). At the moment, OGBV prevention activities with grassroots

Muslim women are rather individualistic and reactive (Fitri et al., 2024).

Next, digital literacy, which focuses on ethical evaluation of information (Livingstone, 2004), we claim that accumulated literacies may be instrumental in fighting OGBV. Especially for women in religiously conservative communities, digital literacy that is entwined with cultural identity and ethical religiosity such as *hifdz al-nafs* (the protection of life and dignity) works best. At the moment, OGBV prevention activities with grassroots Muslim women are rather individualistic and reactive (Fitri et al., 2024). There also appears to be a lack of awareness about how you report incidents formally to platforms or law enforcement. This highlights a clear lacuna in which victims are completely on their own, or in other words, with no community or systemic responses (Amaral et al., 2022).

Finally, the cultural moderation as an application of intersectional lens (Cho et al., 2013), this study explores how local religious beliefs, Javanese culture and community dynamics in Yogyakarta and Kediri are able to moderate or enhance vulnerabilities connected with digital media. The cultural moderation is a portrait that captures the meaning of intersectionality, where one woman being vulnerable in the digital sphere cannot be primarily dependent on her gender but many other factors such as self identification, faith, culture context and social class (Cho et al., 2013).

It also implies that technology is anything of a neutral; rather, it represents certain power relations and 'secondary users' who are women (Wajcman, 2011). This was an intersectional framework; that digital vulnerability is both gender-religion-culture and class based at the same time. Referring to this framework, this research is designed to answer the following questions: 1) What does the multidimensional digital divide look like among grassroots women members of Fatayat NU and Nasyyiatul 'Aisyiyah in different socio-cultural contexts (as in Yogyakarta, Kediri)? And 2) How can this information about the local digital divide develops place-based OGBV prevention practices?

Toward that end, this research employed a semi-ethnographic, qualitative approach as the foundations for presenting the human experience of women living through the digital space instead of aggregate data. In the end, we intended for this article to provide a social science rationale for digital policies and community practices breaking down gender hierarchies while also protecting people who have lesser power positions in digital spaces so they can be safe and respected in the online world.

RESEARCH METHODS

The research is an exploratory field based semi-ethnographically oriented qualitative study to examine the experience of Muslim women negotiating the two domains, turning

complexities of digital regimes and exposure to OGBV into obstacles impeding advancement. The reason is based on the consideration that we should follow-up beyond quantifications of device ownership to the underlying divisions in knowledge about digital literacies and sense of safety. Building up on a semi- ethnographic method, the study aims to bring closer the daily digital realities of its participants (Jaffe & De Koning, 2022). This approach is therefore designed to probe the subjective significance of daily life in ways that might be inaccessible to rigorous statistical analysis. The study further explains how people blend together practices connected to technology, faith and safety in their response to everyday life (Duncan-Horner et al., 2022; Scheibel, 2009).

The research took place in two purposively selected cultural centers located in Indonesia, Kediri and Yogyakarta. The selection of location was decided with regard to differences in sociocultural contexts that may impact women's online experiences. Sites were chosen to answer whether micro level cultural nuances play a role in the digital divide. Yogyakarta was chosen as one of the places we could work on, in part because its pluralistic nature is conducive for open digital presence in general. In contrast, Kediri was selected due to its long-standing pesantren culture where stricter laws regulate digital usage guided by religious systems. This comparative geographic context enables the study to consider how the intersecting nature of the digital divide gives geography (and culture)

an important influence over a woman's exposure to and vulnerability to OGBV.

The research subjects are two of Indonesia's largest Muslim women's organizations, *Nasyiatul 'Aisyiyah (Muhammadiyah)* and *Fatayat NU (Nahdlatul Ulama)*. We chose these two organizations based on their roots in the masses and sense of mission to increase women's life chances. Our participatory sampling method was grounded in the idea of conducting grassroots research. We find several types and levels of informants in interviews; this type includes persons who are naturally able to provide us with the vital and basic information for our research project. First, they must be either an active member of *Nasyiatul 'Aisyiyah* or *Fatayat NU*. Second, there must be 20–45 years old. This study offers an opportunity for those who grow up with modern technology. Third, they need to use digital devices regularly—laptop computers, cell phones, and tablets. Finally, they must be willing to talk about their own experiences with OGBV and online safety.

In this research, eight individuals provided data and information for the study (Table 1). Some participants were members of either the one or the other group. Three of them live in Yogyakarta and Kediri (Figure 1). Since the qualitative nature of this study stressed how deeply these participants lived out their experiences to do with digital divide and OGBV, we obtained data by verbatim inputs. Furthermore, the structured questions sought information on any differences among them in

Table 1 Informants

Name/Code	Organization	Location
AM	Fatayat NU	Kediri
DE	Fatayat NU	Kediri
JU	Fatayat NU	Kediri
LD	Fatayat NU	Kediri
LS	Fatayat NU	Kediri
IT	Nasyiatul ‘Aisyiyah	Yogyakarta
NB	Nasyiatul ‘Aisyiyah	Yogyakarta
HN	Nasyiatul ‘Aisyiyah	Yogyakarta

Source: Researcher observation results, 2025



Source: Author’s analysis, 2025

Figure 1 Data Collection

respect of three items: internet access, technical knowledge, and what they thought about this new tool.

Data collection was conducted through in-depth semi structured interviews as the primary method, with a total of eight interviews. Each interview lasted 60-90 minutes.

The research contributes within a new area which it adds to further under-represented documentation of data herself, since these data are about grassroots digital security users and not

professional women activists (Aspinall et al., 2021; Mahanani et al., 2024). To compensate this, qualitative research was also conducted in the form of semi-structured interviews and observations. Interviews (the principal source of data) were dedicated to three key aspects of the digital divide: (1) access and infrastructure capacity, (2) capability, and (3) usage interests. The questions were designed to test knowledge of security literacy and the OGBV reporting routes. Observations were conducted during

organizational meetings and digital online interaction using WhatsApp groups or other organizational communication platform with Digital Proximity close to people use and support practices. A document analysis was also built through an analysis of documentary materials, including secondary data such as organizational documents, reports of women Commission and media report.

Complex and deep findings were produced based on the iterative analytical process. The collected raw data from the interviews and speaking notes was further processed using data reduction to focus on information relevant to digital divide and OGBV prevention. Secondly, categorization and thematic coding were also applied to reassemble themes such as 'material access, literacy skills and attitude' which are concepts related to OGBV problems. This allowed a cross case analysis on the sites and institutions (Creswell & Creswell, 2023). The findings were subsequently discussed in the light of Van Dijk & Hacker's (2003) framework for digital divide at four levels, as well as Crenshaw's (1991) intersectionality theory. This phase was intended to go beyond mere description and attempt to understand why there were large attention/exposure discrepancies, given high possession of the device. Lastly, a validation approach was employed through the organization of the comparison or interview, field notes, and documents for acceptability consistency and reliability.

To ensure the validity and credibility of

the data, this study comprehensively applied triangulation techniques. Source triangulation was conducted by comparing data from informants from two different organizations and cultural contexts. It was conducted by combining interviews, observations, and document analysis. Then the analytical triangulation utilized multiple theoretical frameworks, by digital divide theory and intersectionality perspectives, to enrich data interpretation. In addition, member checking was conducted, requiring informants to review the interview summary to ensure the consistency of the researchers' interpretations.

To better understand the grassroots reality, we dissected comments from participants who derived from two separate organizations and cultures. Furthermore, we conducted member checks by inviting respondents to verify the preliminary interpretations of the interviews. We made the ethical issue paramount, asked everyone for consent, and confirmed that their identities were safe; hence, they are confident, particularly on the sensitive topic of OGBV.

RESULTS AND DISCUSSION

Empirical data from our qualitative semi-ethnographic study suggest a nuanced mapping of digital practices among Muslim women in Yogyakarta and Kediri. While the traditional digital divide discourse often paints a picture of access and no access, we find that the actual situation is much more complex, with broad

physical connectivity coexisting alongside large deficits in critical literacy and collective protection. We conceptualized digital and online literacy dimensions, based on the reality of access to material and infrastructures; a gap in literacy, motivations, and cultural moderation within the digital environments; and cultural moderation.

Our findings confirm that the first-order digital divide, relating to physical access to ICTs, seems largely surpassed within the group of *Nasyiatul 'Aisyiyah* or *Fatayat NU*. Participants expressing their views using their personal digital devices, particularly smartphones, along with notebooks and tablets as additional gadgets.

Our investigation confirms that the “first-level” digital divide, which is physical access to hardware, has largely been bridged among the members of *Nasyiatul 'Aisyiyah* and *Fatayat NU*. Numerous informants who share their views use personal digital devices, especially smartphones, supplemented by laptops and tablets. The internet usage is notably extensive, with the majority of informants engaging for about 4 to 10 hours each day in the online setting. The connectivity is mainly supported through personal Wi-Fi networks or mobile data subscriptions. However, the results also note that infrastructure is not equally accessible. A small portion of rural areas or those without any real localized support are managing with poor connections making for a lack of proper

engagement in online training and activities in our buildings.

It divides functional digital literacy from critical digital literacy in the way we are defining it. The ability for the skill is functionally sufficient in participants. In WhatsApp, Facebook, Instagram & TikTok every day to connect for friends, information and club duties. The results also point to a shortfall in online critical media literacy. New reports also reveal that victims have limited ability to validate information, and to navigate the technical security protocols and complaint process. Also, they have a broad understanding of the OGBV risks including dangers such as account hijacking, doxing and non-consensual sexual imagery. Yet, there is a terrible ignorance around the proper channels to file such incidents.

Harassment on public transportation posted on Twitter or couples fighting causes online abuse and insults, yet some consider it sexual jokes (HN personal communication, 20 September 2024).

Many participants reported only knowing how to avoid online harassment, but not the procedures for reporting it operationally to platforms, law enforcement agencies, or dedicated organizations. A cautiously optimistic impression of female relationship with tech emerges as the best way to depict Muslim women. On one hand, however, there is a view of technology as an indispensable tool for

empowerment, networking and increasing the potential of organizations. Informants view digital devices as quite accessible to acquire and consider them as conducive for the trajectory of their growth as Muslim women. The daily needs of technology One of the informants listed them as follows:

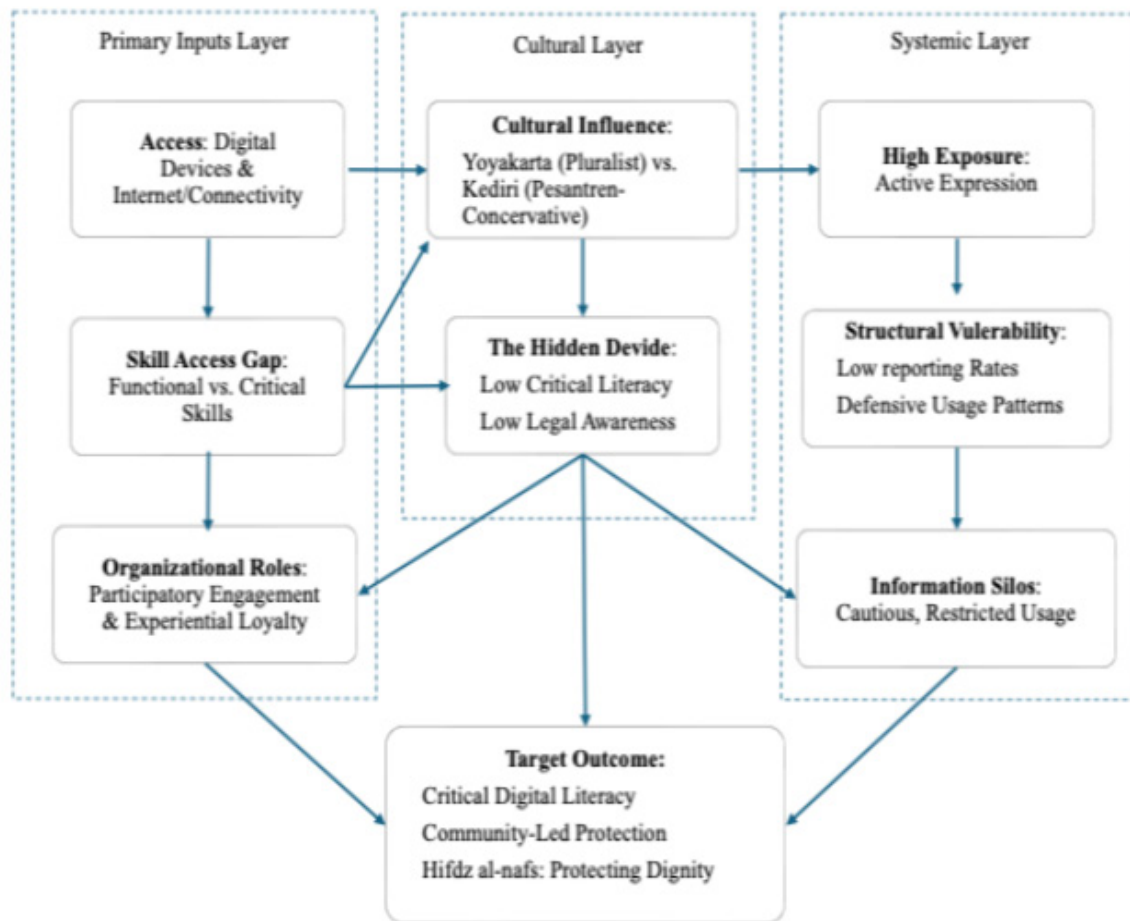
“At home, at the office, and in places where I need to access the internet. For example, when we are on the road and don’t know where we are going, so we need to access the internet to turn on GPS or as directions to our destination” (JN personal communication, 13 oktober 2024).

However, this positivity is being drenched by an ongoing concern about the digital threat. That kind of anxiety often presents in the form of self-imposed boundaries, with women opting to limit their online time in order to minimize exposure to harassment. Also, there are strong sociocultural determinants of digital behavior and risk perception. In Yogyakarta there seems to be more online presence of the sort of Muslimah molded by pluralism and kejawen. But when users are less defensive, it’s also easier for them to fall prey to online threats, because they are more *laissez-faire* with their activity. While pesantren culture reflects the more conservative religious and traditional values, they play an influential role to guide Muslim women in Kediri to practice and adopt them within their digital lives. This generates a cultural barrier that can be seen as “defensive”

but encourages more thoughtful interactions. This also inadvertently limits access to crucial information and awareness about OGBV prevention and reporting. Accordingly, the findings present solid legitimacy for a theoretical and practical revisit for the digital divide of Muslim women in Indonesia (Figure 2). When we ourselves relate the insights to existing theories, it provides us a more subtle understanding of the “hidden divide”. This methodology increases our understanding and illuminates shadows where once there was darkness.

Our analysis uses the multi-staged framework established by Van Dijk and Hacker (2003), who propose that the digital divide progresses along material access, skills, usage and motivational access phases. Our findings oppose previous research, which has focused on Muslim women in political representation (Aspinall et al., 2021) or on elite-level skills alone (Mahanani et al., 2024), and suggest that for the grassroots Muslim woman, the gap has shifted from material-based to involving skill and usage.

We are further adding to the body of knowledge on the digital divide presented as ‘haves’ and ‘have-nots’ (Rowse et al., 2017), where it is seen that “the hidden divide” arises, whereby physical access becomes pervasive but a critical power safeguarding one’s dignity and safety is missing. This is an important academic accomplishment; it challenges the



Source: Research Results, 2025

Figure 2 Mapping the Digital Divide and OGBV in Women Online Information Access

techno-optimistic idea that more access to the internet leads automatically to more secure or empowered people. Instead, without this critical literacy in place, the digital world becomes a space of increased risk (Nash, 2024).

In this study, we also find intersectionality, religion, and digital risk. Drawn from Crenshaw’s intersectionality theory, the results demonstrate that a woman’s digital identity is not only influenced by her gender but also by the combination of their values, location and background. The differences between

Yogyakarta and Kediri illustrate culture conquers all in closing the digital gap on cultural levels. The kejawen spirit there (Yogyakarta) is a lot more out actually and the expression digitally are bigger. Still, in a patriarchal digital ecosystem that is frequently brutalizes those words. On the other hand, culture pesantren Kediri which became religious of “buffers”. The buffer, however, can also have a negative aspect, the so-called information silo effect imposed on women in terms of being included in the field of digital defense skills (Roy et al.,

2024). This is a reminder that digital literacy programs cannot be one-size-fits-all. They need to be adapted to and relevant to the specific cultural and contextual norms of the community.

Consistent with Wajcman (2011) and Ross et al. (2022), we argue that digital technology is not a neutral tool but rather a space where already existing power differences are reinforced. The choice of agentic/defensive strategies engaged in by respondents (of privatizing accounts or deleting personal posts) rather than engaging in system-level resistance, illustrates that the digital space is still controlled by patriarchal norms which pressurize women to make themselves invisible for their safety (George, 2024; Narayani, 2024). An increase in OGBV cases in Indonesia presents important background for our findings (BPS, 2023; GSMA, 2019). The fact that our participants were not more aware of reporting indicates that the system failed. Consequently, in light of a bot form of violence, systemic and technical, the reaction is rather one which is personal and manual (Novitzky et al., 2023). This underpinning further demonstrates the pressing need for institutional support to be delivered by organizations like Nasyiatul 'Aisyiyah and Fatayat NU.

Another notable differentiator that is observed when the current work is correlated with the literature, like Mahanani et al. (2024), which demonstrates how organizations have focused on the digital tools as avenues for their activism. Our data indicate that there is a

point at the base of the pyramid. That means that "proficiency" has not yet percolated down to the membership at large. One consequence is a disjunction between the perspectives of policymakers and organizational leaders, who believe their members were digitally resilient enough, and what they actually encountered.

Finally, it is vital to bridge the dynamic role of groups for women as change agents; these groups are especially focused on mobilising and asset based transfer. Nasyiatul 'Aisyiyah and Fatayat NU, as organizations that have advanced levels of social capital are the right candidate to mediate the hidden divide. By contextualizing digital literacy via religious values such as *hifdz-al-nafs* or protection of life and dignity, they can raise technical safety education from a personal technical skill to a moral and communal responsibility. Anwar et al. (2023) presented the framework of digital safety establishment and social media hoax countering ability with collective identity and agency.

The digital divide should not be seen as an absence of connection; Rather, it must be treated as a bridge that everyone has access to; only some know where the emergency exits are located. This study demonstrates that many Muslim women have moved beyond the bridge step of technology (Ibtasam et al., 2019), but are still missing a needed "safety manual" to navigate difficult scenarios. As Sumartias et al. (2024) noted that even the digital transformation in Indonesia brings benefit to the society, there are some issues that need to address, especially

in cybersecurity as one the prominent negative effects in digital environment.

These results show that the digital gap for Muslim women in Yogyakarta and Kediri is no longer at the level of access, but at critical literacy and protection from (digital) Law. While access and use are at extraordinarily high odds for most of the respondents, provision of information around verification, digital security and mechanism to report OGBV are below marks. It reveals a discrepancy between utilization and protective ability. Therefore, this study expands van Dijk and Hacker's framework by adding the dimension of protective literacy.

The findings of this study make an important contribution to the development of digital divide studies by expanding the focus from material access to more subtle dimensions: critical capacity and digital protection.

Using the conceptual framework of Van Dijk and Hacker, this paper demonstrates how, in terms of the digital divide, the current gap between citizens has moved from access to skills (that is what people do with their access to information technology). Nonetheless, a digital usage is high, but still the gaps prevail for managing the digital risks —relatively conceived as an unseen chasm, a situation where users are connected but unprotected. After that, it also expands digital literacy from just technical skills to information verification, Digital security, and awareness of OGNV reporting — challenging the idea that just

getting access is empowerment.

Using Creshaw, this study highlights how gender, religion, and local culture shape digital experiences. Yogyakarta's openness increases both opportunities and risks, while Kediri's pesantren culture offers protection but may limit access to critical knowledge. In line with Wajcman, digital spaces reproduce unequal power relations, as women tend to adopt defensive strategies rather than challenge them.

This study contributes by introducing the hidden divide, expanding protective digital literacy, and how an intersectional perspective to digital risk.

CONCLUSION

The inquiry into the digital divide faced by Muslim women in Yogyakarta and Kediri shows that while initial disparities in material access and connectivity can be relatively easily addressed, a deep 'hidden divide' remains with respect to basic knowledge skills pertinent to digital literacy and safety. All attendees have a high level of physical access and frequent use of technology, as they view technology as an essential and relatively inexpensive tool to help grow the organization and meet professional needs for information. But this wide connection does not translate into comprehension of the protection measures towards OGBV. While different aspects of digital violence," including

hacking, doxing, cyber-harassment, commonly experienced through social media platforms or in organization-led workshops, were generally known and understood among OCs, there is a limited awareness of how to report such incidents and how to provide assistance services for victims.

This research demonstrates that Muslim's digital divide is no longer about access, but about protective capacity. The concept of the digital divide is proposed as a theoretical contribution: the condition in which access to and use of advanced technology are not accompanied by critical literacy and digital security skills, particularly in addressing OGBV.

The implication is that digital literacy policies need to shift from a technical focus to strengthening security, verifying information, and understanding reporting mechanisms. In particular, Fatayat NU, and Nasyyiatul 'Aisyiyah must also conduct community-based training in an integrated manner between the religious security side and the digital content of each religious belief. We need to ensure that government schemes are more contextual, gender sensitive and accessible on a mass level. At the same time, it is imperative that partners like TikTok, Meta and others double down on their security features to allow for quicker reporting systems.

Thus, bridging the digital divide is key to ensuring that digital empowerment does not increase vulnerability but actually improves

women's security and capacity in the digital space.

As a result, work to prevent violence against women in digital spaces currently faces not only the barrier of that gap between tool use and effective application of digital security protocols, but also leaves these women using tools to connect to the world around them, whilst chronically vulnerable when online. In view of these findings, it is suggested that religious and community organizations such as Nasyyiatul 'Aisyiyah and FatayatNU deploy their digital advocacy programs away from mere adoption of the technology to a more systematic form of training on technical security, as well as a legality reporting framework in the digital context. There is an additional critical need to support the creation of localized, culturally accessible digital safety materials that can make complex legal and technical reporting processes meaningful in the context of community-based solidarity work.

Furthermore, future studies should expand their scope to include a broader array of geographical areas and socioeconomic settings to provide a more complete national perspective on digital vulnerability. As a result, policymakers need to prioritize collaborations with grassroots organizations to ensure that formal protection systems are effectively communicated to and accessible to highly engaged digital citizens.

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REFERENCES

- Alauddin, M. B., Fitri, D., & Wenando, F. A. (2025). Tradition to technology: The transformation of Indonesian culture in the social media era. *Asian Journal of Media and Culture*, 1(1), 1–21. <https://doi.org/https://doi.org/10.63919/ajmc.v1i1.16>
- Amaechi, K. E. (2024). A resource mobilisation study of how facebook enables gender-base violence in the online space in South Africa. *Gender and Behaviour*, 22(1), 22235–22248. https://doi.org/https://hdl.handle.net/10520/ejc-genbeh_v22_n1_a8
- Amaral, I., Basílio-Simões, R., & Poleac, G. (2022). Technology gap and other tensions in social support and legal procedures: stakeholders' perceptions of online violence against women during the Covid-19 pandemic. *El Profesional de La Información*, 31(4). <https://doi.org/https://doi.org/10.3145/epi.2022.jul.13>
- Anwar, R. K., Khadijah, U. L. S., & Rizal, E. (2023). Rise against rumors: Leveraging online social movements for hoax prevention by netizens. *Jurnal Kajian Komunikasi*, 11(2), 268–287. <https://doi.org/https://doi.org/10.24198/jkk.v11i2.49492>
- Aspinall, E. White, S., & Savirani, A. (2021). Women's political representation in Indonesia: who wins and how? *Journal of Current Southeast Asian Affairs*, 40(1), 3–27. <https://doi.org/10.1177/1868103421989720>
- Badan Pusat Statistik (BPS - Statistics Indonesia). (2023). *Gender Inequality Index (GII) 2022*. <https://www.bps.go.id/en/pressrelease/2023/08/01/2042/gender-inequality-index--gii--2022.html>
- Barter, C., & Koulu, S. (2021). Digital technologies and gender-based violence—mechanisms for oppression, activism and recovery. *Journal of Gender-Based Violence*, 5(3), 367–375. <https://doi.org/https://doi.org/10.1332/239868021X16315286472556>
- Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs: Journal of Women in Culture and Society*, 38(4), 785–810. <https://doi.org/https://doi.org/10.1086/669608>

- Creswell, J. W., & Creswell, J. D. (2023). Research design: Qualitative, quantitative, and mixed methods approaches. In *SAGE Publications* (Sixth Edit). SAGE Publications, Inc. All.
- Duncan-Horner, E. M., Farrelly, M. A., & Rogers, B. C. (2022). Understanding the social entrepreneur: A new intentions model for advancing equity, social justice and sustainability. *Journal of Entrepreneurship in Emerging Economies*, 14(3), 361–391. <https://doi.org/https://doi.org/10.1108/JEEE-10-2020-0359>
- Faith, B. (2022). Tackling online gender-based violence; understanding gender, development, and the power relations of digital spaces. *Gender, Technology and Development*, 26(3), 325–340. <https://doi.org/10.1080/09718524.2022.2124600>
- Fitri, A., Triantoro, D. A., Nurrahmi, F., & Haekal, M. (2024). Digital literacy and islamic sharia values as a new perspective of preventing OGBV. *Jurnal Komunikasi*, 18(2), 133–150. <https://doi.org/https://doi.org/10.20885/komunikasi.vol18.iss2.art2>
- George, A. S. (2024). Exploring the limitations of technology in ensuring women's safety: A gender-inclusive design perspective. *Partners Universal International Innovation Journal*, 2(4), 19–38. <https://doi.org/https://doi.org/10.5281/zenodo.13621321>
- GSMA. (2019). *The mobile gender gap report 2019*.
- Hicks, J. (2021). *Global evidence on the prevalence and impact of online gender-based violence (OGBV)*.
- Ibtasam, S., Razaq, L., Ayub, M., Webster, J. R., Ahmed, S. I., & Anderson, R. (2019). “My cousin bought the phone for me. I never go to mobile shops.” The Role of Family in Women's Technological Inclusion in Islamic Culture. *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1–33. <https://doi.org/https://doi.org/10.1145/335914>
- Jaffe, R., & De Koning, A. (2022). *Introducing urban anthropology*. Routledge.
- Jurriëns, E., & Tapsell, R. (2017). *Challenges and opportunities of the digital 'revolution' in Indonesia*. Cambridge University Press
- Khan, T., Perren, R., & Quintanilla, N. (2024). Voices against violence: Empowering students to address domestic terrorism through digital activism. *Marketing Education Review*, 34(4), 324–346. <https://doi.org/https://doi.org/10.1080/10528008.2024.2421175>
- Kompas.com. (2026). *Kekerasan seksual online terus meningkat, negara diminta perkuat perlindungan*. <https://nasional.kompas.com/read/2026/04/20/07054871/kekerasan-seksual-online-terus-meningkat-negara-diminta-perkuat-perlindungan>
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies.

- The Communication Review*, 7(1), 3–14. <https://doi.org/https://doi.org/10.1080/10714420490280152>
- Lythreatis, S., Singh, S. K., & El-Kassar, A.-N. (2022). The digital divide: A review and future research agenda. *Technological Forecasting and Social Change*, 175, 121359. <https://doi.org/https://doi.org/10.1016/j.techfore.2021.121359>
- Mahanani, P. A. R., Pratiwi, F. D., Ifriqia, F., & Sari, N. P. (2024). Mastering digital media literacy of muslim woman's activists in preventing online gender-based violence. *Profetik: Jurnal Komunikasi*, 17(1). <https://doi.org/10.14421/pjk.v17i1.3097>
- Mikołajczyk, B. (2023). Universal human rights instruments and digital literacy of older persons. *The International Journal of Human Rights*, 27(3), 403–424. <https://doi.org/https://doi.org/10.1080/13642987.2022.2131772>
- Monsees, L. (2025). Sticking around: Hobbyhorsing, digital transgression, and gender-based violence in TikTok, Instagram, and YouTube commentary. *Feminist Media Studies*, 1–17. <https://doi.org/10.1080/14680777.2025.2540807>.
- Narayani, A. (2024). Women's safety in digital space. *Indian Journal of Public Administration*, 70(3), 546–561. <https://doi.org/https://doi.org/10.1177/00195561241271513>
- Nash, B. (2024). Critical inquiry in (and about) media environments: Examining an asset-based digital literacy curriculum. *Journal of Literacy Research*, 56(2), 133–156. <https://doi.org/https://doi.org/10.1177/1086296X241244700>
- Novitzky, P., Janssen, J., & Kokkeler, B. (2023). A systematic review of ethical challenges and opportunities of addressing domestic violence with AI-technologies and online tools. *Heliyon*, 9(6). <https://doi.org/10.1016/j.heliyon.2023.e17140>
- Pardosi, P., Muttaqim, H., & Sugeng, I. S. (2024). Social Media Activism: The Rise of Digital Movements in the Global South. *Cognitionis Civitatis et Politicae*, 1(6), 411–421. <https://doi.org/https://doi.org/10.70177/politicae.v1i6.1542>
- Ragnedda, M., & Gladkova, A. (2020). Understanding digital inequalities in the Global South. In *Digital inequalities in the global south*, 17–30. Springer.
- Ross, J. N., Eastman, A., Laliberte, N., & Rawle, F. (2022). The power behind the screen: Educating competent technology users in the age of digitized inequality. *International Journal of Educational Research*, 115, 102014. <https://doi.org/https://doi.org/10.1016/j.ijer.2022.102014>
- Rowell, J., Morrell, E., & Alvermann, D. E. (2017). Confronting the digital divide: Debunking brave new world discourses. *The Reading Teacher*, 71(2), 157–165. <https://doi.org/10.1002/trtr.1603>Digital Object Identifier (DOI)
- Roy, P., Raut, A., Samantaray, S., & Rana, A.

- (2024). Women and digital networking: digital skill gap and its challenges. *2024 International Conference on Advancements in Smart, Secure and Intelligent Computing (ASSIC)*, 1–5. <https://doi.org/https://doi.org/10.1109/ASSIC60049.2024.10507999>
- Scheibel, D. E. (2009). *Qualitative, ethnographic, and performative approaches to communications in 21st century communication, a reference handbook*. Sage Publication.
- Sumartias, S., Koswara, A., Ahmad, J., & Restianty, A. (2024). Influencing factors of West Java higher education digital transformation. *Jurnal Kajian Komunikasi*, *12*(2), 300–312. <https://doi.org/https://doi.org/10.24198/jkk.v12i2.58515>
- Van Dijk, J., & Hacker, K. (2003). The digital divide as a complex and dynamic phenomenon. *The Information Society*, *19*(4), 315–326. <https://doi.org/https://doi.org/10.1080/01972240309487>
- Wajcman, J. (2011). Gender and work: a technofeminist analysis. In *Handbook of gender, work and organization*, 263–275. Wiley-Blackwell Maldon, MA and Oxford.
- Wijaya, W. (2024). From mysticism to modernity: The evolution of kebatinan traditions in Indonesia. *Journal of Humanities Research Sustainability*, *1*(6), 455–463. <https://doi.org/https://doi.org/10.70177/jhrs.v1i6.1516>
- Zhong, J. (2025). Remedies of online gendered violence against women in the digital context. *Interdisciplinary Humanities and Communication Studies*, *1*(3). <https://doi.org/10.61173/5c8sqg52>.