MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages 5918-5921

Digital inequalities, algorithmic discrimination, and the emergence of new forms of violence against girls and women.

Omayma Achour,
Professor Habilitated, Faculty of Legal, Economic and Social Sciences Agdal, Mohammed V University, Rabat.

Abstract

In the digital age, social and technological transformations have redefined modes of interaction, access to information, and civic expression. Although these changes offer unprecedented opportunities, they also give rise to new forms of systemic inequalities and violence, particularly against girls and women. For example, image generators powered by artificial intelligence produce up to three times more images of men than of women in response to gender-neutral professional terms [(1)]. Women are often portrayed in low-status roles—cashiers, assistants, or cleaners—while men appear in technical or managerial positions [(2)].

According to the Global Gender Gap Report (2023), "If current progress continues, it would take 131 years to achieve full equality between men and women in all areas, including access to digital technology." [(3)]. Beyond content and algorithms, digital inequalities also manifest themselves in unequal access to technologies. According to the ITU report (2025), disparities in internet access remain profound; in 2023, only 5.1% of African households had access to fixed broadband, compared to 96% in Europe and more than 70% in Asia-Pacific. This means that women living in regions with low connectivity are not only excluded from information, but also unable to report or document digital violence [(4)].

This article examines the dynamics of digital inequality through a gender lens, highlighting the mechanisms that underpin new forms of digital exclusion. It adopts a resolutely intersectional approach that draws on theoretical and empirical sources to propose forward-looking recommendations for inclusive digital governance that respects human rights and is gender-sensitive.

Key words: cyberbullying, GBV, doxing, trolling, systemic inequalities, cyberviolence, intersectionality, algorithmic discrimination.

Introduction

With the advent of the digital age in the 21st century, digitization has increased girls' and women's access to new digital information technologies, thereby transforming their educational opportunities, employment sectors, and civic participation. However, when digitization is poorly governed, it can contribute to widening the digital divide between generations and result in serious gender inequalities. In this context, it is worth emphasizing that algorithmic discrimination can reinforce these inequalities by making certain online violence invisible or by targeting women differently in digital. By automating biased decisions, algorithms contribute to the normalization of these abuses and hinder women's equitable access to a safe digital environment.

According to the latest « Facts and Figures » report from the International Telecommunication Union (ITU), by 2024, 70% of men worldwide will have access to the internet, compared to 65% of women. This represents a difference of 189 million additional users in favor of men [(5)]. These women, active on social media or in digital spaces, are becoming targets of technology-facilitated violence: cyberbullying, non-consensual dissemination of intimate images, trolling, and identity theft.

As the Council of Europe states in its 2021 report, « *these forms of cyberviolence are part of a continuum with offline violence. These forms of violence correspond to behaviors that are already illegal, but are amplified, generalized, or made persistent by internet use* » [(6)].

In this context, it should be noted that this article aims to analyze digital inequalities, taking into account their impacts on the various social, economic and environmental dimensions. A detour that is both theoretical and empirical is necessary to better understand all the underlying challenges associated with systemic inequalities. This article will be structured in two parts. The first part will examine the impact of digital disparities on women's living standards and access to resources. The second part will present the new forms of violence suffered by women in the digital space as well as recommendations for the protection of women in the digital space.

Theoretical and conceptual framework

Studies conducted in recent years demonstrate that the digital transformation, while offering prospects for growth and emancipation, has accentuated inequalities.On the empirical level, several professors, such as Donna J. Haraway, considered one of the pioneers of cyberfeminism [(a)] in her book « *Cyborg Manifesto* » published in 1985, as well as researchers such as Safiya Noble [(7)] in her book « *Algorithms of Oppression* » and Joy Buo Lamwini [(8)] « *Gender Shades* », are enriching our understanding of the disparities between women and men.

Furthermore, other international publications such as that of the International Telecommunication Union (ITU), entitled « *Digital transformation as a lever for growth and economic inclusion* » (2025), or the report published by the seven mechanisms of the EDVAW Platform (Council of Europe) explore in detail « *the digital dimension of violence against women* » [(b)].

At the national level, the report of the Economic, Social, and Environmental Council on « *the social dimensions of* gender *equality* » (2016), that of the National Observatory for Human Development (2020) which addresses *« intersectional discrimination suffered by women in Morocco »* as well as « *the third edition of the national survey on social ties* » (Royal Institute for Strategic Studies, 2024) highlight the transformations in the relationship with digital technology and their impact on gender dynamics.

From a theoretical perspective, algorithmic discrimination can be examined through the filter of the structural inequalities that technologies perpetuate (particularly feminism[(c)] technoscientifique) [(9)]. Of course, algorithmic systems are not impartial: they are developed with historically biased data and reflect existing power structures. Reports by « *AlgorithmWatch CH* », « *Humanrights.ch*», et l'« *NGO Glitch*» highlight that these biases manifest themselves in the way algorithms classify or allocate resources, thus leading to indirect and systemic discrimination.

1. Systemic inequalities: a challenge for gender equality

In Morocco, the demand for gender equality materialized between 1993 and 2003[(10)], becoming an essential pillar in social evolution and political democratization, before being enshrined in the 2011 Constitution. More than a simple reflection of international commitments, this dynamic has made it possible to revise the bases of public policies by taking into account the intersections between gender, age and cultural belonging, it has also proven its importance in the digital age [(11)]. Moreover, this intersectional analysis has demonstrated that discrimination against women continues and takes new forms in digital spaces: cyberviolence, algorithmic bias, gender-based digital divide, and unequal access to technological skills.

Moreover, intersectional analysis has helped us understand how these forms of violence or exclusion affect women differently depending on their social and cultural contexts. It also explains how the digital divide is exacerbated by discriminatory gender norms, technological skill deficits, and digital environments designed without a gender perspective. In this regard, this section should analyze the impact of digital inequalities on the rights of women and girls.

1.1 Digitization and systemic inequalities: differentiated impacts on the rights of girls and women

Systemic discrimination is inherent to a given social system; in other words, systemic inequalities are those produced by the system. These inequalities are often invisible; they are the result of discriminatory social norms and unequal public policies. According to Annie Junter, « *While not all inequalities between women and men are discrimination, the fact remains that the definition of indirect discrimination encourages a delve into de facto inequalities to uncover potential discriminatory effects* » [(12)]. To better understand these inequalities, it would be possible to present their impact at the health, economic and digital levels on the rights of girls and women.

1.1.1 Increased gender disparities in the digital economy

The profound transformations brought about by the digitalization of the global economy have redefined all social, cultural, and economic spheres. The expansion of the digital economy goes beyond a simple technological evolution; it redefines social power dynamics and accentuates pre-existing inequalities, particularly those related to gender.

According to the latest "Facts and Figures" report from the International Telecommunication Union (ITU), by 2024, 70% of men worldwide will have access to the internet, compared to 65% of women, representing a difference of 189 million additional users in favor of men[(13)].

While this gap may seem small, it masks much deeper inequalities in access to digital skills, equipment, and technology-related economic opportunities. These disparities are even more pronounced in rural areas, among ethnic minorities, or among marginalized or older populations, of which women represent a significant proportion [(14)].

Unequal access to digital technology exacerbates women's economic insecurity. More than 40% of small, medium, and microenterprises in developing countries, often led by women, suffer from a lack of technological financing. This compromises their digital transformation and competitiveness in globalized markets [(15)]. This digital economic exclusion is exacerbated by limited access to professional support networks and training programs. As the International

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages 5918-5921

Telecommunication Union (ITU) points out, a 10% increase in mobile broadband penetration can lead to a 2.29% growth in GDP per capita. However, without targeted and gender-sensitive investments, digitalization risks entrenching or even widening existing structural inequalities, including those based on gender [16].

1.1.2 Health inequalities: the effect of electronic waste on women's health

Over recent years, health inequalities have multiplied because of the impact of the digital industry. According to the WHO report, « *between 2.9 and 12.9 million women could be at risk of exposure to toxic electronic waste because of their work in the informal sector* » [17]. Pregnant women are increasingly vulnerable to the toxic effects of waste resulting from informal digitization, which can lead to serious complications for their reproductive health, as well as an increase in preterm births and stillbirths [d]. These effects harm neurodevelopment and women's respiratory health, notably causing a decline in lung function and a rise in asthma cases, often linked to pollution at recycling sites [18]. In this respect, CNUCED's Digital Economy Report [19] highlighted that digital technologies can have repercussions for gender equality: « *nearly 12.9 million women and many work in the informal sector handling digitization-related waste, which exposes them to negative health consequences* » [20].

Moreover, it is important to emphasize that women working in the informal digital sector suffer a double marginalization—economic and social. Yet this sector itself holds underused economic potential [21] for women's entrepreneurship. In the coming years, digital activities could provide a lever for empowerment for women in this sector, provided systemic barriers are removed. This is not only a technological issue but a matter of social justice in terms of human right.

1.2 Digital inequalities that accentuate the scourge of online violence: social, institutional and feminist dynamics in Morocco

Digital inequality is one of the main factors exacerbating the risks of violence against girls and women during this era, revealing a worrying link between access to technology and new forms of online violence. These new forms of violence, such as cyberbullying, have dire consequences for women's well-being and mental health in a connected world.

In an increasingly interconnected world, women engaged on social media or in digital environments become the target of sexist cyberbullying, often exacerbated by anonymity. These violent phenomena, fueled by persistent gender stereotypes, have a significant impact on their mental well-being, psychological health, and ability to express themselves freely in the digital sphere. Furthermore, women with little or no connectivity experience another form of injustice: digital exclusion. Thus, digital inequalities are not only technical, they are structural, marked by gender, and contribute to maintaining social hierarchies.

1.2.1 Cultural barriers hindering digital access for women and girls

In many societies, girls and women face socio-cultural barriers that hinder their access to new digital technologies. Despite the opportunities these technologies offer to improve women's socio-economic conditions, they contribute to the emergence of new challenges that exacerbate existing gender inequalities [22]. By way of, discriminatory social and cultural norms can prevent girls in some societies from developing their technological skills. Indeed, in Pakistan, gender access inequalities have reflected social norms that limit women's mobility [23]. The report « *Achieving Gender Equality in Our Lifetimes* » [24] highlights that among disadvantaged households in Pakistan, for every 100 boys enrolled in primary school, only 70 girls are enrolled. Such educational inequalities have direct consequences for the ability to access digital technologies and to acquire technological autonomy, thereby excluding millions of young girls from the benefits of digital transformation. These sociocultural norms create structural disparities, notably in policies governing access to digital education, technological equipment, and continuing training.

1.2.2 Growing challenges that impact girls and women's education: gender stereotypes in technological fields

Despite the place, gender inequalities in learning digital skills create a cycle of vulnerability for girls and women. In particular, when women have limited access to the digital world, these inequalities can act as barriers to new professional and educational opportunities [25], which in turn is reflected in gender disparities in education and employment.

Indeed, the exponential expansion of the digital economy is reshaping modern societies while further exacerbating preexisting gender disparities. In many contexts, women and girls face particular challenges such as unequal access to technologies, underrepresentation in digital professions, and increased vulnerability to novel and complex forms of online violence.

Notably, the Covid-19 health crisis highlighted existing inequalities in education, especially regarding access to technological resources. The rapid adoption of distance learning widened the digital divide, particularly affecting female students lacking technical means. These disparities, reinforced by social, cultural, and linguistic factors, deepened educational gaps and limited access to scientific and academic resources. These new modes of online learning have widened training gaps, producing a « *setback for an entire generation* » [26]. At the university level, these inequalities are linked to limited access to numerous databases and scientific journals, which can reduce access to education [27].

In the same spirit of intersectional analysis, although women make up the majority of students in higher education, according to UNESCO they remain underrepresented in ICT and STEM fields, with only 28% of engineering graduates and 40% of computer science graduates being women [28]. This underrepresentation contributes to the growth of sexist stereotypes and to algorithmic discrimination in AI applications.

In this regard, the work of the group at the 67th session of the Commission on the Status of Women in 2022 highlighted a shortage of interventions that integrate both the arts and the human and social sciences into STEAM (science, technology, engineering, arts, and mathematics) [29]. According to Donna Haraway, in data science women and the most marginalized groups are absent from the teams that make decisions — and no one sees that as a problem; she insists that a supposedly neutral point of view never truly is [30]. « *If we are to speak of objectivity in data science, then we must pay attention to the default perspective that this purported objectivity upholds* » [31].

2. Emergence of new forms of gender-based violence in the digital age

In the 21st century, the social transformation in favor of preserving women's rights has gradually aligned with technological and demographic changes. At the same time, the increased use of social networks and digital platforms has given rise to new forms of violence, which reflect a shift in social norms influenced by socioeconomic, cultural, and geographic factors that mirror the frustrations of new generations.

Indeed, these digital disparities—cyberbullying, cyberfraud, SMS and voice phishing, identity theft—only reproduce and reinforce inequalities already deeply rooted in societies. Moreover, these digital inequalities should not be seen as isolated problems but rather as manifestations of preexisting structures of power and domination within societies. They highlight the importance of adopting a holistic approach to counter the pernicious effects of the systemic inequalities that underlie them.

However, it is essential to prevent potential excesses both within the family sphere and at the societal level by promoting interdisciplinary collaborations capable of identifying concrete responses to structural inequalities and supporting sustainable transformations. Educational initiatives must be grounded in current realities, adopting a pragmatic approach oriented toward applied research.

According to the 2024 survey by the Royal Institute for Strategic Studies (IRES) on social cohesion [32], Moroccan society remains deeply attached to the nation's identity symbols; these technological evolutions have not yet profoundly changed individual behaviors or collective identity.

With the development of artificial intelligence, new ethical issues are emerging, notably in cybercrime, algorithmic discrimination, manipulation through deepfakes, and cyber-physical attacks. Questions related to megadata protection, confidentiality, personal data security, technological dependency, and the potential reduction of human interactions need strict regulation. Such vigilance is essential for technological advances to genuinely contribute to improving women's lives while guaranteeing their fundamental rights.

2.1 Algorithmic discrimination and intersectional analysis

Digital disparities and algorithmic discrimination intensify gender inequalities, affecting girls and women in particular because of biases embedded in algorithmic systems. They encounter digital obstacles, suffer reinforcement of stereotypes, and see their access to online opportunities reduced.

According to a UNESCO report [33], algorithmic biases embedded in artificial intelligence systems tend to reproduce and amplify sexist stereotypes, restricting women's access to online education and to safe digital . A study by the « *AI Now Institute* » [34] reveals that recruitment algorithms, by , often discriminate against female candidates by favoring male profiles, thereby perpetuating structural inequalities in the labor market.

To analyze these social representations, intersectionality has become one of the most influential theoretical contributions in feminist studies, according to Leslie McCall [35] .Considered one of the four key perspectives of third-wave feminism, intersectionality stands alongside poststructuralist approaches, postcolonial feminist theory, and the priorities of the « *young generation* » [36].

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages 5918-5921

According to intersectional analysis, online violence specifically targets women and girls, as shown by an Amnesty International report [37] on sexist harassment, where nearly 58% of women surveyed reported having suffered abuse on social media. These violences, combined with intrusive algorithmic surveillance (doxing), create a hostile digital climate that discourages their public participation. The intersectional approach, as developed by researchers such as Safiya Noble [38] and Joy Buolamwini [39], highlights how race, social class, and gender interact to intensify these discriminations. To reverse these processes, it is imperative to adopt ethical regulations of algorithms [40] (the European Union's Artificial Intelligence Act) and to promote digital inclusion based on equitable technological designs.

2.1.1 Online violence: a gender issue

According to the Council of Europe in its 2021 report [41], there are forms of cyberviolence that exist on a continuum with offline violence and that reflect the persistence of patriarchal structures transposed into digital environments, « *the majority of these forms of violence correspond to behaviors that are already illegal, but amplified, generalized or made persistent by the use of the Internet* ».

Under the cover of anonymity, aggressive behaviors online have increased, causing emotional distress or anger, fueled by cyberharassment, trolling, doxing, hacking, revenge porn and the dissemination of humiliating content. Since the start of the COVID-19 pandemic, a global rise in cases of online GBV has been observed, described as a « *shadow pandemic* ». In the United Kingdom, a study found that 46% of women surveyed said they had experienced online abuse, and 29% of them confirmed having experienced it during the pandemic [42]. The perpetrators of online gender-based violence target women and girls, particularly those from minority groups such as women of color and women with disabilities, who often face multiple forms of discrimination and are therefore especially vulnerable. In recent years, online gender-based violence has become a threat to the exercise of human rights and fundamental freedoms of girls and women, exacerbating stigma and systemic inequalities.

2.1.2 Cyberharassment: a new form of online violence

In recent years, cyberharassment has become a new form of violence that particularly affects young people on digital platforms and social networks, allowing perpetrators to act with impunity in this digital space. Statistics also show that young adolescents who engage in cyberharassment are 15 times more likely to die by suicide [43].

In this regard, the results of the 2022 HBSC survey [e] conducted in 44 countries highlighted an increase in the prevalence of problematic social media use and cyberharassment between 2017 and 2022 among girls and boys. Between 2021 and 2022, this prevalence showed that 6% of boys in were victims of cyberharassment and 32% in Lithuania. This rate even reached 4% of boys in the Netherlands and 25% of girls in Romania [44].

Moreover, with the aim of combating this societal scourge, the General Assembly, through ECOSOC, adopted resolution 68/181, which expressed concerns about technological violations affecting women human rights defenders[45]. Separately, the Human Rights Council and the Committee on the Elimination of Discrimination against Women adopted Council resolution 38/5 (2018), which targeted the prevention of violence against women in digital contexts, recognizing various forms of discrimination and violence such as harassment, unlawful surveillance and extortion as growing global concerns.

2.2 Recommendations for the future: toward feminist and inclusive digital governance

In an increasingly connected world, guaranteeing gender equality is essential to building an egalitarian and inclusive society. To achieve this, it is necessary to adopt a comprehensive approach that legislates the digital domain, regulates interventions, and protects users while ensuring gender equality and inclusivity.

2.2.1 Modernizing the legal corpus: toward an egalitarian digital environment for digital inclusion and combating the digital divide and online abuses

To build a truly inclusive digital environment, it is essential to invest in creating equitable digital communities.

First, through training girls in the digital field to make technologies financially accessible to them and enable them to benefit from new opportunities in the digital world. To do this, it is essential to integrate new digital skills into education from primary school through university by including systems thinking, critical thinking, and blockchain [46]. it would be appropriate to encourage the creation of inclusive digital educational platforms to support online learning.

The protection of women and girls who are victims of online violence requires the establishment of robust laws specifically addressing online violence, regulating interventions, and punishing offenders. States should, in this regard, ratify the Budapest Convention and adopt specific legislation that implements the provisions of that convention in their domestic law. According to the Council of Europe: « *The Convention on Cybercrime, or the Budapest Convention, serves as a guideline for any country developing comprehensive legislation to combat cybercrime* » [47].

Alongside this process of harmonizing laws, it is important to equip the actors in the support chain for women victims of violence, particularly judicial actors, including law enforcement, to ensure the enforceability of adopted laws. Furthermore, it is important to establish mechanisms for legal and psychological assistance and to provide specific accompaniment for the protection and care of women victims of violence, especially those who have the courage to report abuse, in order to prevent any form of revenge or reprisals.

2.2.2 Equal access to academic digital knowledge

Equal access to new technologies in the academic field requires the sharing of digital knowledge. To begin with, universities should invest more in ensuring female students' access to digital academic platforms [48]. For example, collaborative platforms can be developed to host articles, theses, and research data, accessible to all researchers, regardless of their home institution. This would provide equal opportunities for access to information and support for research in often-neglected contexts.

Several approaches have proven effective in reducing these inequalities. Open access initiatives, such as the Research4Life program (2023) [49]; have provided more than 10,000 institutions in 125 countries with free access to scientific publications. Online learning platforms such as Coursera and edX have also expanded their offerings of free courses, reaching millions of learners worldwide (Class Central report, 2024). At the same time, countries like Rwanda have implemented ambitious rural connectivity policies, bringing internet access to 75% of the population by 2023 [50].

Conclusion

In conclusion, online violence, whether physical, psychological, or economic, reflects systemic inequalities entrenched in society. It contributes to the marginalization of girls and women, making it more difficult for them to fully participate in digital life. Based on the above, it is essential to build a safe and inclusive digital environment for girls and women, through the adoption of inclusive and egalitarian digital public policies, including: stricter laws against online harassment, more robust data protection policies, and awareness-raising initiatives that aim to educate users about their rights and the remedies available in cases of digital violence. Finally, this comprehensive approach requires the collaboration and coordination of all stakeholders—government, businesses, and society—to combat these systemic inequalities.

Bibliography

1) Zhang, H., Dubois, R. & Schmidt, A. (2023). "Algorithmic Gender Bias in AI Image Generation : A Multidimensional Analysis". *Journal of Digital Ethics*, 8(2), 145-167. MIT, Press. https://doi.org/10.1016/j.jde.2023.05.003.
2) Humanrights.ch. (2023). *Discrimination 2.0 : les algorithmes discriminent aussi les femmes*. https://www.humanrights.ch/fr/nouvelles/discrimination-2-0-algorithmes-discriminent-femmes.
3) World Economic Forum. (2023). *Global gender gap report 2023*.
4) **International Telecommunication Union (ITU). (2025). Digital transformation as an engine of growth and economic inclusion: Report on global economic preferences 2025. Geneva.**
5) **International Telecommunication Union. (2024). Facts and figures 2024. https://www.itu.int/fr/mediacentre/Pages/PR-2024-11-27-facts-and-figures.aspx**
6) **Council of Europe. (2021). The relevance of the Istanbul Convention and the convention of Budapest on cybercriminality,** https://rm.coe.int/istanbul-budapest.
7) Noble, S. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism. NYU Press*.
8) Buolamwini, J. (2018). Gender shades: Intersectional accuracy disparities in commercial gender classification. *Proceedings of Machine Learning Research, 81*, 1-15.
9) In algorithms. (2024). Gender technologies, power technologies. https://dansalgorithmes.net/technologies-de-genre.

MSW MANAGEMENT -Multidisciplinary, Scientific Work and Management Journal
ISSN: 1053-7899
Vol. 36 Issue 1, 2026, Pages 5918-5921

10) **Secretariat of State for the Family, Children and Disabled Persons (Morocco). (2005). Feminine-Masculine: The March towards Equality in Morocco 1993-2003. Publications of the Ministry.**
11) **Report of the National Observatory for Human Development (2020) deals with 'intersectional discrimination suffered by women in Morocco.**
12) Junter, A., & Ressot, C. (2010). *Sexist discrimination: the views of the law. OFCE Review, (114), 65-84. ttps://doi.org/10.3917/reof.114.0065.*
13) *International Telecommunication Union (ITU). (2024, 27 November). Facts and figures 2024. https://www.itu.int/fr/mediacentre/Pages/PR-2024-11-27-facts-and-figures.aspx*
14) *Granjon, F. (2022). Social-digital inequalities: sociological decryption. Urban social development notebooks*, 2022(1), 6-8. https://shs.cairn.info/revue-cahiers-du-developpement-social-urbain-2022-1-page-6?lang=fr.
15) Organisation for Economic Co-operation and Development (OECD). (2004). https://dx.doi.org/10.1787/232536850825.
16) International Telecommunication Union (ITU). (2025). Digital transformation as a driver of growth and economic inclusion: Global Economic Preferences Report 2025.
17) World Health Organization. (2021). *World health statistics 2021: Monitoring health for the SDGs, sustainable development goals*. https://www.who.int/data/gho/publications/world-health-statistics
18) Issah, I., Arko-Mensah, J., Agyekum, T. P., Dwomoh, D., & Fobil, J. N. (2022). Health risks associated with informal electronic waste recycling in Africa: A systematic review. *International Journal of Environmental Research and Public Health, 19*(21), 14278. https://doi.org/10.3390/ijerph192114278,
19) CNUCED. (2024). *Shaping an environmentally friendly and inclusive digital future (Digital Economy Report* 2024). https://unctad.org/system/files/official-document/der2024_en.pdf.
20) Parvez, S. M., Jahan, F., Brune, M.-N., Gorman, J. F., Rahman, M. J., Carpenter, D., Islam, Z., Rahman, M., Aich, N., Knibbs, L. D., & Sly, P. D. (2021). Health consequences of exposure to e-waste: An updated systematic review. *The Lancet Planetary Health*, 5(12), e905–e920.
21) Atkinson, A. B. (2017). *Inequalities (T. Piketty, Préf.). Éditions du Seuil.*
22) *UN Women. (2023) Innovation and technological change, and education in the digital age to achieve gender equality and empower all women and girls: 67th CSW.*
23) Adeel, M., Yeh, A. G. O., & Zhang, F. (2017). « Gender Inequality in Mobility and Mode Choice in Pakistan ». Transportation, 44, 1519-1534.
24) Loukissas, Yanni A. (2019). *All Data Are Local: Thinking Critically in a Data-Driven Society*. University of California Press. https://luminosoa.org/books/156/files/d68a1092-2a71-4873-94df-f7b9bd29ba12.pdf.
25) Lemieux, M.-M. (2021). Inequalities, digital skills and conditions. International journal of technologies in university pedagogy, *18*(1), 157-169. https://doi.org/10.18162/ritpu-2021-v18n1-14.
26) UNFPA et Women Enabled International (2021), « The impact of COVID-19 on women and girls with disabilities ».
27) Jullien, Nicolas. (2012). Does digital technology facilitate open access to scientific commons? Terminal. Information Technology, Culture & Society, (111). https://doi.org/10.4000/terminal.8058.
28) UNESCO (2021) " UNESCO Report on Science: A race against time for better development ".
29) Sáinz, M. (2022). *How to address stereotypes and practices limiting access to STIM-related education for women and girls*. Prepared for the expert group meeting of the sixty-seventh session of the Commission on the Status of Women.
30) Haraway, Donna Jeanne., Simians, cyborgs, and women : the reinvention of nature, Routledge, 1991 (ISBN 978-0-415-90387-5, OCLC 21870286, lire en ligne [archive]).
31) Menthonnex, Camille. (2024, July 9). For a feminism of data. In algorithms.
32) Royal Institute of Strategic Studies. (2023). National survey on social ties in Morocco - 3rd edition.
33) UNESCO (2023). Education in the age of AI: challenges and opportunities for girls.
34) AI Now Institute (2021). *Discriminating Systems: Gender, Race, and Power in AI.*
35) McCall, L. (2005). The complexity of intersectionality. *Signs*, *30*(3), 1771-1800. The University of Chicago Press. https://doi.org/10.1086/426800.
36) Archer Man, S., & Huffman, D. J. (2005). The decentering of second wave feminism and the rise of the third wave. *Science & Society*, *69*(1), 56–91. https://doi.org/10.1521/siso.69.1.56.56799.
37) Amnesty International (2022). *Toxic Twitter: Violence and Abuse Against Women Online*.
38) Noble, S. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism*.
39) Buolamwini, J. (2018). *Gender Shades: Intersectional Accuracy Disparities in Commercial Gender*.
40) *European Parliament & Council of the European Union.* (2024). **Regulation (EU) 2024/... of the European Parliament and of the Council on harmonised rules on artificial intelligence,** *Official Journal of the European Union*, L, 1–120.
41) **Council of Europe. (2021). The relevance of the Istanbul Convention and the Budapest Convention on Cybercrime.**
42) Glitch UK and End Violence Against Women Coalition (2020) « The Ripple Effect: COVID-19 and the Epidemic of Online Abuse ».
43) UNICEF French. (2020). *Le cyberharassment* (UNICEF/UN017585/Ueslei Marcelino).
44) Inchley, C. et al. (2023), Health Behaviour in School-aged Children (HBSC) study protocol: Background, methodology and mandatory items for the 2021/22 survey, MRC/CSO Social and Public Health Sciences Unit, University of Glasgow,
45) United Nations. (2013). *A/RES/68/181 :* https://undocs.org/A/RES/68/181.
46) Royal Institute of Strategic Studies (IRES). (2020). Strategic report: Towards a new development model.
47) Council of Europe. (2020). *BC Benefits: temporary Report* (T-CY (2020)16). https://rm.coe.int/t-cy-2020-16fr-bc-benefits-rep-prov-1/16809efc6c
48) **Fuchs, C. (2023).** *Digital Capitalism and the Political Economy of Digital Divides*. Routledge.
49) **Fuchs, C. (2023).** *Digital Capitalism and the Political Economy of Digital Divides*. Routledge.
50) Research4Life (2023). Annual Report 2023.World Bank (2024). Digital Progress and Trends Report.

Notes:

a) Cyberfeminism describes the activities of feminists interested in cyberspace.
b) The Istanbul Convention and the Budapest Convention on Cybercrime are presented as legal instruments for combating online violence.
c) Technofeminism addresses the relationship between gender and technology.
d) The HBSC survey is a cross-country study conducted by WHO for over 30 years, sur la santé, le bien-être, et les comportements de santé des jeunes de 11 à 15 ans.
e) Le taux de mortinatalité est le rapport entre le nombre d'enfants mort-nés (nés sans vie à partir de 22 SA ou avec un poids d'au moins 500 grammes).