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Gender-based cyber violence: how a sociodemographic perspective uncovers the new face of an old enemy

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"I want there to be a place in the world where people can engage in one another's differences in a way that is redemptive, full of hope and possibility. Not this 'In order to love you, I must make you something else.' That's what domination is all about, that in order to be close to you, I must possess you, remake and recast you."

Hooks, B. (1997). *Reel to Real: Race, Sex, and Class at the Movies*.

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Acknowledgments

Before proceeding with the written work, I would like to dedicate a few lines to all those who have been close to me in this path of personal and professional growth.

A heartfelt thanks to my supervisor Giordano and co-supervisor Testa for their availability and patience to my requests. Thank you for providing me with all the support for the drafting of the report and not putting pressure on me.

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I want to thank Roberta for taking care of me in my most critical times and Mateusz for having stood by me in this intense period with support and for making me never give up. You are rare.

Thank you all, I would never have made it without you.

Lastly, I want to dedicate this thesis to all those people who do not get adequate justice for their suffering and whose injustice is frequently undermined, with the purpose of reminding that any experience of violence and distress should be listened and regarded equally valid.

Abstract

Digitalization unavoidably replicates the socio-economic disparities and struggles that are prevalent all around the world. It follows that socioeconomically disadvantaged groups are prevented from taking full advantage of digital opportunities due to the lack of digital resources and threats to their safety and wellbeing, as a result of already existing social inequalities and discrimination in the physical world. The easier access to digital technologies and the increase in the digital platforms' usage have contributed to the rise of cyber violence, an issue that is becoming more and more globally widespread and has serious societal and economic repercussions on the victims, who turn out to be mainly women and girls. Above all, the main purpose of this thesis is to demonstrate how social inequalities are replicated in the digital world, through sociodemographic research that allows to uncover digital inequalities, arising from less recent social dynamics that continue in new settings, and to draw attention on an insufficiently investigated and inadequately regulated global issue, that is online gender-based violence.

Introduction

Digital technologies have been transforming the way the world functions continuously and quickly since the early 2000s. The way individuals interact socially, participate in political discourse and public debate, organize and mobilize for social change has all been revolutionized by them. Easier access to information and communication technology led to a significant increase in the usage of digital platforms, especially during the COVID-19 pandemic. Nonetheless, social inequalities already existing in the physical world are not exempted from the process of digitalization, in which societal hierarchies are replicated on the basis of demographic variables like gender, ethnicity, age, disability and so forth, alongside prejudices and discrimination. On one side, it is true that increased and facilitated access to the Internet provides individuals, including social minorities, with a variety of opportunities, on the other side, it should not be undermined that digital inequality is still one of the most major worldwide problems keeping socioeconomically disadvantaged groups from fully taking advantage of digital opportunities without any backlash. Access inequality to digital technology is crucial to be taken into account seriously as it is likely to perpetuate inequality in possibilities for economic mobility and social participation. The digital divide is exacerbated by elements including low levels of literacy and poverty, geographic limitations, a lack of technological motivation, a lack of physical access to technology and digital illiteracy. Thereby, demographic analysis for modern social issues is necessary to identify digital inequalities by taking into account demographic variables that might indirectly lead not only to a restriction of equal access to digital technologies and online active participation, but also to the reproduction of social inequalities and discrimination in the virtual world. Indeed, discrimination does not only exist offline, but it also continues in online spaces, having a negative impact on daily lives and well-being of targeted social groups. The latter often end up being forced to silence themselves or forced by others to do so in order to protect their safety and wellbeing.

To clarify, the main objective of this thesis is to raise awareness on the issue of gender-based cyber violence, focusing on how it affects women and girls' quality of living and discourage them from using the Internet and actively participating in digital spaces. Fundamentally, this thesis aims at highlighting the replication of social inequalities and discrimination in the digital world, taking into consideration primarily the demographic variable of gender, intersected with ethnicity, nationality, age, education level, disability and so on.

It is crucial to understand that gender-based violence, that already takes place offline against individuals on the basis of their gender and disproportionately harms them, has moved online and

exists on a continuum between offline and online forms of violence. All types of violence, including those enabled by technology, shall therefore be referred to as gender-based violence and those conducted online or made feasible by Internet resources will be defined as online gender-based violence, that is a fully-fledged type of discrimination and gender inequality and includes stalking, harassment, bullying and non-consensual sharing of private material. Online gender-based violence is particularly dangerous because many online platforms and States themselves still lack sufficient norms and laws to prevent and prosecute this kind of violence, which frequently results in perpetrators escaping punishment for their damaging activities.

At the beginning of the first chapter, I will introduce to the overall concept of digitalization and the existence of digital divides in relation to societal inequalities preventing certain social groups to fully benefit from the worldwide process of digitalization. In this regard, I will provide a general outline of the relation between social inequality and the process of digitalization, focusing on how the latter have been mirrored in the digital domain, with the aim to demonstrate the existence of social inequalities in the digital world by discussing the digital divides, which are based on the common demographic and socioeconomic factors shared among digital users who experience digital disparities in terms of Internet access and usage. By combining the gender variable with other types of inequality, I will then concentrate on the gender digital divide and examine the barriers that impede women and young girls from gaining Internet access and digital literacy. Finally, I will underline the significance of an intersectional approach in demographic research and its potential advantages in identifying and addressing contemporary societal concerns.

In the second chapter, I will define the concept of online gender-based violence and which impacts it has on the victims and their digital usage. Specifically, I will focus on the demographic variables that are shared respectively by victims and perpetrators of gender-based cyber violence. Then, I will argue about how technology facilitates the use of violence as a result of the dehumanization of some social groups that is made stronger by digitalization. Given that this type of cyber violence should be generally understood as a continuum of abusive behaviors against women from offline to online and, vice versa, its normalization can lead people to commit acts in the physical world, I will highlight the various threats faced by women online and the effects online violence has on their quality of life and safety.

In the third chapter, I will illustrate the case study of the development of the manosphere in the Western world, with the objective to show the dangers of online radicalization legitimizing the

performance of gender-based violence in the physical world to the point of committing terrorist attacks based on misogyny. Accordingly, I will describe what the manosphere is and analyze the sociodemographic aspects contributing to its evolution and the risks it poses both online and offline.

In the fourth chapter focuses on the case study of gender-based cyber violence in the MENA region that serves as an example of the replication of the widespread forms of gender-based violence within MENA countries in the digital platforms. With regard to that, I will firstly discuss the general situation of gender-based violence in MENA countries and I will explain the online backlash experienced by women as a result of the strongly persistent perpetration of gender-based violence in the MENA region and the increased access and active participation of women in the digital world.

Lastly, in the fifth paragraph, I will provide a general overview on the main initiatives, policies and regulations recommended and adopted so far at the international and regional level with the aim of reducing the digital gender gap, which results from barriers to accessing and participating in the digital world safely. Furthermore, I will briefly explain how sociodemographic research and analysis can contribute to face contemporary social challenges related to the digital rights, through the new digital methods of data and information collection.

This thesis is based on research and surveys conducted at the international, regional and local level to show evidence of digital inequalities. Moreover, it is also based on a systemic literature review of academic books, papers and articles, written by sociologists, social psychologists, demographers and PhD scholars, with the aim to provide a broader overview of social dynamics and repercussions online gender-based violence. Both qualitative and quantitative studies have been included with the objective to discuss the relevant issue of gender-based cyber violence and analyze the sociodemographic factors contributing to its spread.

1. Digitalization, population and inequality

While digital technology is constantly evolving, its development and accelerated use daily impacts human behavior and almost all aspects of human society. The digital revolution has transformed and continues to transform our lives and the way we interact with and perceive the external world, especially after the COVID-19 pandemic. The advent of social media has been particularly significant for changing interpersonal communication, which in the pre-modern world was mainly characterized by face-to-face communication. Such new ways of communication and changes in the human lives have led to many debates between various researchers and scholars regarding the effects of the use of digital technology on the population's well-being. It is said that, on one side, digital technology and innovation are a fundamental driver of economic growth, including developing countries through productivity improvements, on the other side, the potential of digital technologies to reduce inequality and expand opportunities depends on the capabilities to access the use of technologies. The so-called digital divide between people who have effective access to digital technologies and those who are partially or completely excluded from them highlights that socio-economic inequalities are reflected also in the virtual world. Indeed, the last should not be understood as part of a non-real world with no rules, but as a part of the reality in a different form. As socio-economic inequalities do limit the full economic and social participation offline, they do it also through digital media, where social hierarchies are reproduced on the basis of demographic factors, such as gender, race, nationality, age and so on, to which social prejudices and discrimination are attached. Indeed, discrimination does not end offline, but it continues online and negatively impacts the daily life of minority groups, who frequently end up being silenced to preserve their safety and mental health or are forced to silence themselves. Clearly, social inequalities and discrimination, both offline and online, impacts the well-being of minority groups increasing their perceived stress level, that is one of the main disadvantages associated to the usage of social media. Furthermore, the nature of digital media contributes to facilitate online discrimination since it increases the tendency to dehumanize social groups to which negative stereotypes are attributed and to which hate speech and dehumanizing language are addressed, frequently leading to hate crimes and violence also in the physical world. In this regard, demographic research for new social challenges is essential in order to uncover, on the one hand, digital divides by taking into consideration demographic characteristics to which equal access to digital technologies and online participation may be limited, on the other hand, the reproduction of social inequalities and discrimination in the virtual world by analyzing the casual relationship between certain demographic characteristics and social inequalities. When studying discrimination and inequalities, it is

fundamental to avoid a color-blind approach which suppresses diversity and treats people equally as individuals, contrary to their own experience within society, and consequently does not allow to find out social differences based on the analysis of certain common variables among population.

In the first subparagraph, I will give a general overview on the relationship between the process of digitalization and social inequalities, in particular how the latter have been reproduced in the digital sphere. In the second subparagraph, I will discuss the digital divides, based on the common demographic and socioeconomic characteristics shared among digital users who experience digital inequalities in terms of Internet access and usage, with the purpose of showing the existence of social inequalities in the digital world. In the third subparagraph, I will focus on the gender digital divide by intersecting the variable of gender with other forms of inequalities and I will analyze the obstacles that hinder and prevent women and young girls from getting Internet access and acquiring digital skills. Finally, in the last paragraph, I will argue about the importance of an intersectional approach in the demographic research and the benefits that may be given to uncover and face modern social challenges.

1.1 Digitalization and social inequality

Digitalization is a process based on the conversion of information into digitized data through the use of digital technologies, that radically interferes and changes the way of life and work in a postmodern society which is more and more globalized and digitalized. During the recent years, the term ‘digitalization’ is frequently misused in public discourse due to other similar variants, such as digitization and digital transformation, that can make the distinction of meaning between the terms quite misleading. As different processes of digitalization and the roles they play in relation to the impact of digital technologies on society and its systems are defined by different conceptual meanings, the term should be used cautiously. Digitalization is defined as the aim to change the effects and consequences of information and communication technology on society and its economic, cultural, social and political systems, whereas digitization refers the mere process of digitizing, namely of converting analog data such as images, video and texts, into digital format. The difference between the two conceptual meanings is based on the fact that digitization is needed to realize digitalization which takes significant advantages of the former’s opportunities, leading to the daily and increasing use of digital technology by civil society, organizations, industries and so on. Therefore, digital transformation is conceived as the tool that tackles the challenges and opportunities

of digitalization as it can be described as the process that restructures all aspects of human society around digital communication and media infrastructures and comprises the set of economic, cultural, political, organizational, social and managerial changes associated with the use of digital technology[1]. However, the transition to a completely digitalized world has many challenges to face in order to be achieved. On one side, digital technology can make it easier for people to participate in the economic and social sphere, on the other side, the transition to a completely digitalized society and the opportunities to improve people's lives in relation to digital transformation are unfortunately not automatic for all individuals. Indeed, the main challenge of digitalization is to make sure no one is left behind in this process and that the latter benefits all by improving their well-being.

Unavoidably, digitalization is not exempted from the socio-economic inequalities and struggles that dominate the world. Digital inequality between individuals with different backgrounds is one of the most critical global issues that prevents socio-economically disadvantaged groups from enjoying digital opportunities. Essentially, digital inequality can be defined as the inequality to access and use information and communication technologies. Several survey studies and statistical data have pointed out that digital inequality exists across a variety of demographic dimensions such as age, gender, place of residence, ethnicity, education and income level, and that some of them correlate to each other. Indeed, as argued by the scholar Pippa Norris, the digital inequality connects with deeper patterns of social inequality and is understood as "*the gap between information haves and have-nots, including splits along racial, gender and class lines*[2]". Norris mentions that since 1993 the U.S. Department of Commerce has highlighted the disparity of lack of access to digital technologies and the Internet on the basis of age, education, ethnicity, race and gender, thus among American black and Hispanic populations, poorer households, rural communities and women. These findings related to the digital divide have been subsequently confirmed by recent surveys and statistical reports, which will be examined in the next paragraph.

Concerning less recent research, inequality in accessing digital technologies can be seen to exist already since 2000 via Pew Surveys analyzing the U.S. population online by social groups[3] (Fig.1.1.).

[1] Kohont, A., Gorenšek, T. (2019). Conceptualization of the Digitalization: Opportunities and Challenges for Organizations in the Euro-Mediterranean Area, 12(2), 93-115. Retrieved from https://emuni.si/wp-content/uploads/2020/01/IJEMS-2-2019_93%E2%80%93115.pdf
[2] Norris, P. (2001). *Digital Divide: Civic Engagement, Information Poverty and the Internet Worldwide*. Cambridge, UK: Cambridge University Press.
[3] *Ibid*, p. 69.

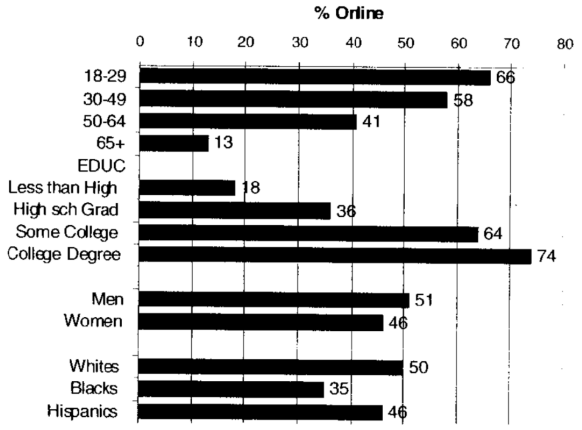

Figure 1.1. *Percent Online by Social Groups, U.S. 2000.*

Source: Pew Surveys, United States, 2000, (Norris, p. 69).

The table above summarizes trends in the social profile of online community within U.S. during 2000 and shows the gaps in Internet access, taking into consideration age, education level, gender and ethnicity as variables. According to the Eurobarometer[4], similar trends have also featured the European social profile of Internet users from spring 1996 to spring 1999[5] (Fig. 1.2.).

	Percent online spring 1996	Percent online spring 1999	Change
All EU-15	5	20	+15
Age			
15–25	9	32	+23
26–44	7	24	+17
45–64	5	16	+11
65+	1	3	+2
HH income category			
–	4	14	+10
–	3	14	+11
–	5	22	+17
++	10	37	+27
Age finished education			
Up to 15	1	5	+4
16–19 years	4	15	+11
20+	9	33	+24
Gender			
Men	6	22	+16
Women	4	17	+13
Occupational status			
Managers	14	44	+30
Other white collar	8	29	+21
Manual worker	3	15	+12
Home worker	2	8	+6
Unemployed	3	10	+7
Student	13	44	+31

Fig. 1.2. *Trends in the social profile of Internet users in Europe*, 1996-1999

Source: Eurobarometer 44.2, spring 1996; 47.0, spring 1997; 50.1, fall 1998; and 51.0, spring 1999, (Norris, 2001, p. 78).

[4] Eurobarometer is a series of public opinion surveys conducted regularly on behalf of the European Commission and other EU Institutions since 1973.

[5] *Supra*, note 3, p. 78.

Both tables show similar gaps in relation to the same variables. Furthermore, the latter table even highlights the acceleration of digitalization in a very short period of time, while keeping the same digital gaps with a slight decrease. It follows that, based on the demographic variable, people can be more or less likely to have access to the Internet. Hence, it seems that, from statistical data and scholars' researches[6][7], younger, middle-high income, high education level and non-black people, with a male gender identity and higher occupational status, have been commonly more likely to be online in the Western world. Digital gaps have been even more accentuated in developing countries. Focusing on the gender variable, while the degree of gender asymmetry in the adoption of the Internet in 2000 amounted to 75:25 in Western Europe and nearly to 50:50 in the United States, it amounted to 94:6 in the Middle East and to 78:22 in Asia, depending on the region[8]. It is noteworthy to underline that digital gaps are narrowed or exacerbated by the economic conditions of the country. According to the World Bank, from 1990 to 2001, the countries that did not classify as High-income OECD were significantly disadvantaged in the digitalization process. In the table below, it is shown the substantial difference between the percentage of Internet users in the high-income countries, that in 2001 amounted to nearly the 40% of the world's population, and that of the rest of the world, amounting to less than 10%[9] (Fig. 1.3.). Since the beginning of the nineties, the gap between developed and developing countries has continued to widen.

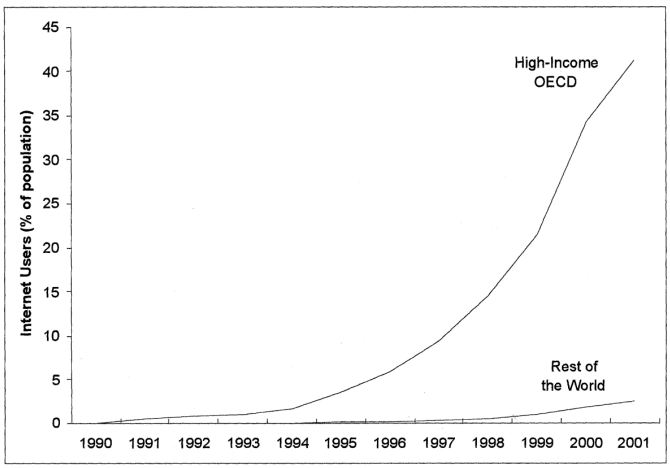

Fig. 1.3. *Internet Users Worldwide* (24 countries classified as High-income OECD), 1990-2001.

[6] *Supra*, note 3.
[7] Dholakia, R.R., Kshetri, N. (2002, January). Gender Asymmetry in the adoption of Internet and E-Commerce. Retrieved from https://www.researchgate.net/publication/246291922_GENDER_ASYMMETRY_IN_THE_ADOPTION_OF_INTERNET_AND_E-COMMERCE
[8] *Ibid*.
[9] Guillén, M.F., Suárez, S. L. (2005, December). Explaining the Global Digital Divide: Economic, Political and Sociological Drivers of Cross-National Internet Use. *Social Forces*, 84(2), 681-708. Retrieved from https://www.jstor.org/stable/3598474

Source: World Bank, 2003 (Guillén, Suárez, 2005, p. 682).

This illustrates that, from the very beginning, not everyone has benefited from the economic, social, and political improvements predicted and brought by digitalization, at least not at the same pace, rather the latter may have aggravated already existing socio-economic inequalities that have only been reproduced in the digital world. As social inequalities in the physical world are not exempted from digital technology, it is crucial to understand the digital world as a continuum of the real world, instead of an abstract world with no rules and no hierarchies, in order to uncover the inequalities featuring it. The number of Internet users in relation to different demographic variables is, indeed, one of the main indicators used to measure the development of the new means of communication.
With this in mind, it is argued that the global digital divide is the outcome of the economic, social and political conditions of countries and their evolution over time leading to the uneven development of Internet around the world. Although at the beginning the digital world was mainly regarded as a decentralizing, globalizing and empowering means of communication that would lead to a "*smaller, more open world*[10]", after the late nineties, international organizations, governments and scholars, including some cyber-optimists such as Tapscott and Caston, started to recognize the emerging issue of the existence of a global digital divide, both within and through the countries, as a consequence of the strengthening of the existing social structure. Nowadays, the majority of researchers shares the view that the Internet has both empowered and discriminated, improving the living standards of some while leaving a wide part of the world's population behind. The sociologist Castells, regarded as the first significant philosopher of cyberspace, summed up clearly this controversy by claiming that "*the heralding of the Internet's potential as a means of freedom, productivity, and communication comes hand in hand with the denunciation of the 'digital divide' induced by inequality on the Internet*[11]". A range of gaps in the access to Internet that existed in the 2000s were predicted to stay because they are the outcome of fundamental economic, political and social inequalities resulting from unequal power relations in society.

In the long run, the issue of digital divides has given even more evidence and light to the role of digitalization in the COVID-19 pandemic, which is regarded as "the great accelerator" in speeding up the global trend towards the daily use of digital technologies driving significant changes in lifestyle, business models and work patterns. The shift to remote working and remote operations in response to the travel restriction and quarantine measures around the world is identified as one of the

[10] Tapscott, D., Art Caston. (1993). *Paradigm Shift: The New Promise of Information Technology*. McGraw-Hill.
[11] Castells, M. (2001). *The Internet Galaxy*. Oxford University Press.

main drivers accelerating digitalization, while technology infrastructure and institutional constraints are considered as the main barriers[12]. During the COVID-19 pandemic, social inequalities have been further exacerbated not only in terms of a lack of access to digital support, but also in terms of discrimination, both offline and online, as the last should be seen as a continuum of the former. Quarantine measures and self-isolation policies have increased Internet usage between 50% and 70%, as more than half of the world's population was under lockdown conditions by the beginning of April 2020. Despite the global prevalence of information and communication technologies usage, digital transformation is featured by the risk of increasing inequality, given that the reality in many social groups does not yet reflect the potential of a digital ecosystem[13] that aims at driving a sustainable and equitable growth. Marginalized groups frequently end up being excluded from the digital ecosystem due to inadequate infrastructure or a lack of affordability or due to political, social, environmental and economic factors hindering equitable uptake.

Moreover, the digital ecosystem can have significantly negative repercussions when not developed with the proper respect for the individual rights of digital users. Authoritarian governments and malign actors can exploit digital tools to suppress political dissent and individual rights or take advantage of individuals who lack digital skills. Digital technology has increased the risks that social minorities already face in the physical world through the deployment of digital tools as instruments of intimidation, surveillance and control silencing their voices and the creation of social platforms that enable or do not protect from discrimination, hate speech, cyber violence, recruitment into trafficking and radicalization to violence. The negligence of geographic or gender gaps in the access to, or use of, mobile phones might end up affecting the most marginalized populations. The evolution of society in the digital age does not depend on technological advancement and innovation, but mainly on non-digital building blocks, such as domestic and international regulations, political economy, institutional capacity and individuals' skills and digital rights[14]. Although the COVID-19 pandemic is considered to have been a sort of "catalyst" for the adoption and increasing use of digital technologies, the pandemic has also highlighted the existence of the digital divide, especially at the socio-economic level and between developed and developing countries.

[12] Amankwah-Amoaha, J., Khanb, Z., Woodd G., Knighte, G. (2021, August). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 602–611.
Retrieved from https://doi.org/10.1016/j.jbusres.2021.08.011
[13] The stakeholders, systems, and enabling environments that together empower people and communities to use digital technology to gain access to services, engage with each other, or pursue economic opportunities.
[14] USAID (2021). *Digital Strategy 2020-2024*. Retrieved from
https://www.usaid.gov/sites/default/files/documents/USAID_Digital_Strategy.pdf.pdf

1.2. Digital divides and digital users

In the postindustrial societies, at least in those most affluent, the social profile of the online population has progressively been widened over time. The *Digital 2022 July Global Statshot Report* of DataReportal, in collaboration with world-class data partners dealing with statistical and demographic reports, indicates that the number of online users amounted to 5 billion in July 2022, that is 63.1% of the world's population, and increased by 178 million new users from last year. Likewise, it is reported that global mobile population has grown by 93 million from July 2021, reaching around the 67% of the world's population using mobile phone, and the number of active social media users has amounted to 4.70 billion in July 2022, that is equivalent to 59% of the world's population[15]. However, as predicted by previous scholars, digital divides that existed from 1990s to 2000s remained in place, despite the fact that online population belonging to developing countries and social minorities has grown over time too (Fig. 1.4.).

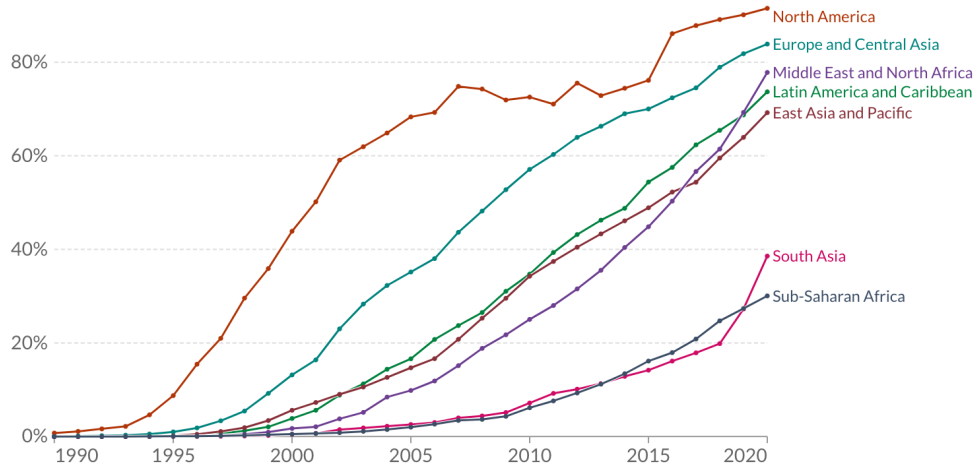

Fig. 1.4. *Share of the population using the Internet* (2020).
Source: International Telecommunication Union (via World Bank), 2020, (OurWorldinData, 2020).

According to the World Bank, in 2020, the online population within the region of Middle East and North Africa reaches about 78%, while the online population within North America and the region of Europe and Central Asia reaches respectively about 91% and 84%. Sub-Saharan Africa ranks the lowest with only 30% of online population within the region[16]. In July, through the publication of the

[15] DataReportal (2022, 21 July). Digital 2022: July Global Statshot Report. Retrieved from https://datareportal.com/reports/digital-2022-july-global-statshot
[16] Roser, M., Ritchie, H., Ortiz-Ospina, E. (2020). Internet. *Our World in Data*. Retrieved from https://ourworldindata.org/Internet

collected number of Internet users in the world by region in 2022, the Statista Research Department has confirmed the continued existence of the unequal access to the Internet between developing and advanced economies across the world, despite the fast Internet user growth worldwide, including developing countries[17]. As already mentioned, the gap between people who do and do not have access to digital technology and the Internet is commonly defined as *digital divide*. Access, use and results are the three commonly acknowledged research themes on the digital divide. Access to computers and the Internet on a physical level is referred to as the first-level digital divide[18]. In a 1995 report by the National Telecommunications and Information Administration titled "*Falling through the Net: A Survey of the "Have Nots" in Rural and Urban America*", the term "digital gap" was first used. This publication launched a research area that examined the digital divide in terms mostly of who had access to the requisite gear and who did not[19]. A large portion of the research examined demographic indicators of Internet access. In the early discussions and investigations related to the digital divide, the concept of access was associated mainly to the physical access to the Internet, computers and other digital media and, consequently, the most popular idea among critics was to close the digital divide by simply making a computer and Internet connection available to everyone in a private or public space. However, access by itself suggests a techno-deterministic viewpoint in which the advantages of a technology follow adoption automatically, but the Internet can be difficult to use at first and the mere fact that someone has access to the Internet does not guarantee that they will know how to use it well. Later, the usage and the skills needed to use digital media started to be taken more into consideration and the issue of the digital divide turned out to be more complicated than the mere access to digital technology[20]. However, access by itself suggests a techno-deterministic viewpoint in which the advantages of a technology follow adoption automatically, but the Internet is complicated and difficult to use at first and the mere fact that someone has access to the Internet does not guarantee that they will know how to use it well. As a result, the conceptual focus was expanded to include the issue of who uses digital technology effectively. This area of research is also known as the "participation gap", "emerging digital differentiation" or the "usage gap". It is also referred to as the "second-level divide"[21]. These ideas draw attention to participation disparities that are based on digital literacy, Internet usage and demographic determinants. When describing Internet use, access,

[17] Statista (2022). *Number of Internet users in the world as of 2022, by region*. Retrieved from https://www.statista.com/statistics/249562/number-of-worldwide-Internet-users-by-region/
[18] Lutz, C. (2019). Digital inequalities in the age of artificial intelligence and big data. *Human Behavior and Emerging Technologies*, 1, 141-148. Retrieved from https://doi.org/10.1002/hbe2.140
[19] Robinson, L., Schulz, J., Blank, G. et al. (2020). Digital inequalities 2.0: legacy inequalities in the information age. *First Monday*, 25(7).
[20] Van Dijk, A. G. M. (2006). *The Network Society: Social Aspects of New Media*, Second Edition. SAGE Publications.
[21] *Ibid*.

knowledge and usage are only considered to be inputs when describing Internet use; the outcomes are what count. This is the so-called "third-level digital divide", which refers to how differently populations use the Internet to further their education, information-seeking, productivity and other livelihood-enhancing endeavors[22]. People who fall victim to one of the three digital divides, access, usage or outcomes, can suffer significant disadvantages. With minimal opportunity costs, those with access to digital technology regularly and reliably have options in all areas of life, including employment, education and access to health-related information, goods and services. Given all of these reasons, from a macro viewpoint, as nations become more dependent on digital technology, digital resources are crucial for boosting economic productivity, promoting social inclusion, and providing effective public services. In this way, the economic, social and political welfare of entire nations is impacted by digital inequality[23].

Firstly, a distinction must be made between four different kinds of access to the digital media and technology, namely, motivational access, material or physical access, skill access and usage access. In regard to the motivational access, motivation influences the decision to purchase a digital tool and the network connection and the direct cause of lack of motivation may relate to a lack of income, time, technical knowledge, social relations, cultural lifestyles and identity that fit to digital media use[24]. Therefore, it is unlikely to find a dividing line between 'have-nots' and 'want-nots' that is clear cut and that never shifts. In turn, personal inequalities can explain the lack of availability of these resources.

For instance, it is well known that elderly people and women tend to be less motivated to apply digital media than young people and men. Elderly women, women with low education and unemployed or housewives will be less likely to be motivated to start using computers and the Internet. Especially with regard to differences of digital usage between women and men, gender stereotypes and gender roles associated with digital technology play a key role[25]. Stereotypes are still widespread within the digital media and outside, where women are often associated with household and physical care and portrayed as objects of male attention, while men are associated with power, sport and serious

[22] *Supra*, note 19.
[23] Büchi, M., Festic, N. & Latzer, M. (2018). How Social Well-being Is Affected by Digital Inequalities. *International Journal of Communication*, 12, 3686–3706. Retrieved from https://ijoc.org/index.php/ijoc/article/view/8780
[24] *Supra*, note 20.
[25] Wei, L. (2012). Number Matters: The Multimodality of Internet Use as an Indicator of the Digital Inequalities. *Journal of Computer-Mediated Communication*, 17, 303–318. Retrieved from https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1083-6101.2012.01578.x

business. Unavoidably, these representations can influence social expectations from women and men that promote an unbalanced perspective of gender roles in society, both offline and online. Characteristics stereotypically related to masculinity and femininity and idealized expectations associated with the respective gender roles do not only shape individuals and their identities, but also determine the social, political and economic systems in which political, social and economic power tends to be structured in favor of a gender hierarchy mainly ruled by the hegemonic masculine identity. It is found out that men tend to look for information on a broader variety of subjects than women, including political news, and to be more interested in the world of technology with which they seem to feel more confident, compared to women. The strengths in the context of digital activities are valued differently by men, who seem to be more involved in the tech world and appreciate the Internet for the breadth of experience it offers in regard to jobs and business, and women, who instead seem to value the digital media more in the context of friendly and familiar relations, communicative purposes and the sharing of personal aspects of their life[26]. The differences in the usage of digital media by gender may increase gender biases and influence confidence with digital tools, improvements with digital skills and online participation. The European Institute for Gender Equality reported that, through a gender analysis concerning the use of digital technology revealing the historically unequal power relationship between men and women, not only differences in access to economic resource and knowledge can sideline women from technological developments, but also gender norms and perceptions of technological self-efficacy[27]. The latter are considered as a key motivational construct impacting their use. The Eurobarometer 460 survey presenting European citizens' opinions on the impact of digitalization and automation on daily life discloses that women have more negative technological perceptions and mistrust in digital technologies than men, who are more likely to think digital technologies have had a positive impact on their quality of life. This comes also from the fact that research findings reveal that that exclusivity in the design of digital technologies and lack of testing on women has contributed to the reduction of women's confidence with regard to technologies[28].

Nonetheless, after acquiring motivational access, the key challenge for new online users is the material and physical access, namely the disposable income to purchase or be provided with digital

[26] Pew Research Center (2005, December). *How Women and Men Use the Internet*. Retrieved from https://www.pewresearch.org/Internet/2005/12/28/how-women-and-men-use-the-Internet/#:~:text=Younger%20women%20are%20more%20likely,21%25%20of%20women%20that%20age

[27] European Institute for Gender Equality (2020). *Gender Equality Index 2020: Digitalisation and the future of work*. Retrieved from https://eige.europa.eu/publications/gender-equality-index-2020-report/gendered-patterns-use-new-technologies

[28] *Ibid*.

devices and Internet connection, that remains a necessary condition for other kinds of access, starting from the acquirement of digital skills and the use of the technology itself. Between 1985 and 2000, all divides of physical access to digital technologies and the Internet connection increased in both the developed and developing countries, except for the gender gap and the gap between disabled people and able-bodied people that remained quite stable. However, the physical access divide is narrowing in developed countries, contrary to the developing countries where it keeps widening.

Another key challenge concerns the ability to manage the hardware and software, therefore, the need to acquire the digital skills in order to operate digital technologies, to search process and select information in them and to use them for specific or general goals. Substantially, digital skills can lead to an increasing level of inequality, especially information and strategic skills are unevenly distributed among the populations of both developed and developing countries. Clearly, this kind of inequality is built more on the distribution of mental rather than of material sources as it refers to the intellectual information skills and the positional strategic skills, more likely to be acquired by people with a high level of education, particularly with regard to the use of technologies. In the same manner, the social and cultural environment in which new Internet users live or have been educated is a decisive factor in the opportunities to learn digital skills. Both positional and personal categorical inequalities of having a certain level of education, employment, age and gender are responsible for the unequal distribution of social and cultural resources. They also define the social contexts that enable Internet users to learn digital skills and indicate the strongest individual determinants of digital skills[29].

Moreover, the usage access is the ultimate goal of appropriation of digital technology and other kinds of access are not sufficient conditions. The material and mental resources are more decisive for physical and skills access than for usage access, which is mainly influenced by temporal, social, and cultural resources, including lifestyles. The personal categories of age, gender, ethnicity and health or ability determine the interests people have in applying digital media, while the positional categories of labor, education, household income and place of residence might explain time availability[30].

Secondly, inequalities in the digital information and network society are explained through the causes and consequences related to these kinds of access. The sociologist Van Dijk points out that the distribution of material, temporal, mental, social and cultural resources is the direct cause of unequal access to digital technology. These resources comprise household income, possession of equipment,

[29] *Supra*, note 20.
[30] *Ibid*.

sufficient time to work with computers, technical knowledge, social ties, motivations and cultural status and the way in which they are distributed among the population can be explained by a range of positional and personal inequalities. The former refers to the level of education, place of residence, household role and occupation, while the latter refers to age, gender, ethnicity, intelligence, personality and health or disability. The amount of access that different people have to digital technology and benefits from it can be related to all these inequalities[31].

In his book *Digital Divide: Civic Engagement, Information Poverty and the Internet Worldwide*, Norris claims that "*access to digital technologies is heavily contextual, depending on the structure of opportunities available within each society*[32]". Geographical digital access divides between countries and within countries of high and low income and human development have been impressive from the eighties onward and they keep growing. The economic wealth is the most important factor in explaining digital gaps among countries, but of course it is by far not the only one. Other causes involve the availability and cost of digital technology, the general level of literacy and education in the country's population, the level of democracy, the strength of policies promoting digital access and information and the cultural background in relation to technology and digital communication. At the same time, within countries, the divides between the regions, states and between city and countryside also keep growing. In developing countries, a trend of so-called combined and uneven development is perceived to exist due to the fact that material access is mainly concentrated in a few urban centers by leaving the rest of the country far behind. In other words, the highest social categories benefit from the globalization process by a relatively fast adoption of technology while the other categories are stagnating. Consequently, all digital divides related to particular positional and personal categories seem to be wider in developing countries than in the developed countries.

To analyze the digital divide, it is fundamental to understand which are its main characteristics at the internal level and observe whether and how digital access differ on the basis of the income, level of education, gender, ethnicity, age and place of residence. From the two figures below (Fig. 1.5., Fig. 1.6.), it follows that digital divides keep narrowing or widening, depending on the country.

[31] *Ibid*.
[32] *Supra*, note 2.

		Age			Education			Income		
	TOTAL	18-34	35+	Diff	Less education	More education	Diff	Lower income	Higher income	Diff
	%	%	%		%	%		%	%	
U.S.	89	99	85	+14	80	95	+15	84	97	+13
Canada	90	100	87	+13	81	95	+14	85	99	+14
France	75	98	66	+32	65	95	+30	61	87	+26
Germany	85	99	80	+19	74	92	+18	73	95	+22
Italy	72	100	65	+35	68	95	+27	56	87	+31
Poland	69	98	56	+42	28	78	+50	56	81	+25
Spain	87	100	82	+18	81	97	+16	80	95	+15
UK	88	98	85	+13	82	98	+16	82	98	+16
Russia	72	97	60	+37	-	-	-	51	81	+30
Ukraine	60	93	44	+49	20	62	+42	44	73	+29
Turkey	72	93	53	+40	49	96	+47	-	-	-
Jordan	67	75	57	+18	41	96	+55	50	80	+30
Lebanon	66	89	50	+39	34	90	+56	41	92	+51
Palest. ter.	72	87	55	+32	54	88	+34	66	79	+13
Israel	86	96	80	+16	80	93	+13	78	94	+16
Australia	93	100	90	+10	87	98	+11	84	99	+15
China	65	93	49	+44	48	91	+43	56	80	+24
India	22	34	12	+22	9	38	+29	11	28	+17
Indonesia	30	52	12	+40	13	55	+42	17	41	+24
Japan	69	97	64	+33	56	88	+32	51	86	+35
Malaysia	68	91	50	+41	29	82	+53	46	79	+33
Pakistan	15	20	10	+10	6	33	+27	8	20	+12
Philippines	40	58	23	+35	15	57	+42	26	52	+26
South Korea	94	100	92	+8	89	98	+9	89	99	+10
Vietnam	50	81	25	+56	32	79	+47	42	70	+28
Argentina	71	92	58	+34	61	94	+33	47	76	+29
Brazil	60	82	44	+38	39	86	+47	42	76	+34
Chile	78	96	65	+31	26	87	+61	62	90	+28
Mexico	54	76	38	+38	35	87	+52	44	66	+22
Peru	52	76	37	+39	16	74	+58	23	63	+40
Venezuela	67	82	56	+26	55	87	+32	-	-	-
Burkina Faso	18	22	12	+10	11	72	+61	15	37	+22
Ethiopia	8	12	4	+8	5	43	+38	5	23	+18
Ghana	25	32	18	+14	14	62	+48	13	30	+17
Kenya	40	53	22	+31	19	70	+51	26	52	+26
Nigeria	39	52	21	+31	9	53	+44	27	52	+25
Senegal	31	40	20	+20	21	82	+61	18	42	+24
South Africa	42	52	33	+19	24	61	+37	22	57	+35
Tanzania	21	28	11	+17	-	-	-	13	27	+14
Uganda	11	16	3	+13	-	-	-	7	17	+10

Fig. 1.5. *Adults who use the Internet at least occasionally or report owning a smartphone*

Source: Spring 2015 Global Attitudes survey (Pew Research Center, 2016).

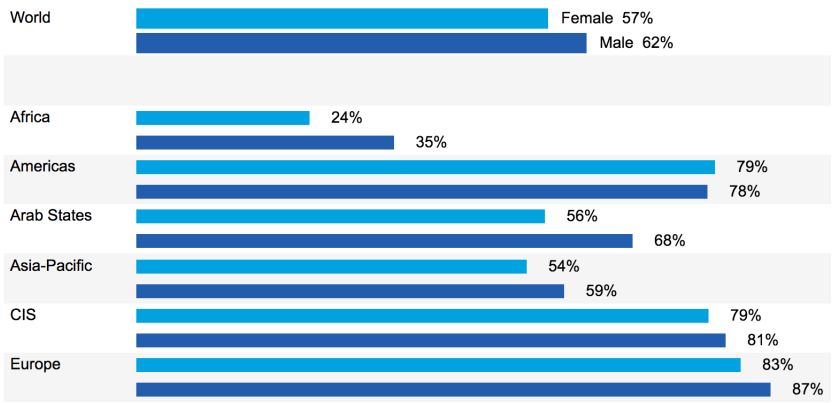

Fig. 1.6. *Percentage of female and male population using the Internet, 2020.*

Source: International Telecommunication Union, 2021.

In particular, it is noticeable that the main personal inequality categories explaining differences of material access and Internet usage are age and gender. According to the Pew Research Center survey of U.S. adults conducted between 2000 and 2021[33], with growing age, material access first increases

[33] Pew Research Center (2021, April). *Internet/Broadband Fact Sheet*. Retrieved from https://www.pewresearch.org/Internet/fact-sheet/Internet-broadband/

and then, after the age of 30, start to decrease and even more after the age of 65. Older generations tend to have more barriers in terms of access, usage and skills to go online than younger generations due to the cost of equipment and the Internet connection, the lack of skills and interests and less trust or confidence with technologies. They are more likely to experience issues with technostress and technology upkeep in addition to these aspects of the digital inequality stack. Although the percentage of older adults who use technology is rising, those 65 and older constitute a diverse demographic group with varying levels of digital technologies exposure, use and effects[34].

Although in the United States the gender gap is narrowing and the Internet usage appears to be equally distributed, in Europe this only applies to the youngest generations who have access to education and for this reason an equal distribution has not been reached yet. In developing countries, the gender divide is still quite large in terms of physical access, skills and usage and tends to rise. Africa and Arab States have the widest gender divide, given that the International Telecommunication Union reported that 24% of Africa's female population had online access in 2021, compared to 35% of men, and that in Arab States 56% of women had online access, compared to 68% of men[35]. In 2021, Africa's online access rate was the lowest worldwide, considering that just over 30% of the total population was using the Internet, in comparison to the global average online usage rate that was 51%. The gender gap also featured mobile Internet usage in low-and middle-income countries. In 2020, the gender gap in mobile Internet use in these countries amounted to 15%. Other obstacles include low literacy rates, limited access to education, time restraints brought on by women's triple role of domestic, productive and community management responsibilities and geographic location because more women than men tend to reside in rural areas where digital technologies are less common[36]. In developing nations, across all age categories, the proportion of women using the Internet is lower than the proportion of men using it. However, highly educated women are a significant exception, as they apparently use the Internet as often as males. This suggests that if given the opportunity to go beyond the traditional tasks of childrearing and housekeeping and adequate means alongside knowledge, women will be likely to use the Internet as much as men, disproving the claim that women's capacity prevents them from doing so[37]. Some people believe that online

[34] Cotten, S.R. (2021). Technologies and aging: Understanding use, impacts, and future needs. In Ferraro, K.F. & Carr, D. (editors), *Handbook of aging and the social sciences*. Ninth edition. New York: Elsevier.
[35] International Telecommunication Union (2021). *Measuring digital development: Facts and. Figures 2021*. Retrieved from https://www.itu.int/en/myitu/Publications/2021/11/25/14/45/Facts-and-figures-2021
[36] Alozie, N.O. & Akpan-Obong, P. (2017). The Digital Gender Divide: Confronting Obstacles to Women's Development in Africa. *Development Policy Review*, 35(2), 137-160. Retrieved from https://doi.org/10.1111/dpr.12204
[37] Antonio, A. & Tuffley D. (2014). The Gender Digital Divide in Developing Countries. *Future Internet*, 6(4), 673-687. Retrieved from https://doi.org/10.3390/fi6040673

engagement encourages gender equality, women's empowerment, and opportunity to question conventional wisdom. Others, however, will find that the Internet offers additional opportunity for the creation of new patriarchal and exclusive structures and practices. In any event, it is critical to think critically about the changes brought on by the adoption of digital technologies and the Internet, how they affect gender relations, how they may be measured and evaluated and, lastly, how much empowerment they give women and girls. To address power connections between men and women and the ways in which these intersect with class, racism, disability, religion, and other types of inequality, a number of gender evaluation models have been developed. Utilizing digital tool adds a new layer to gender interactions that intricately interacts with the aforementioned types. Access, information quality, use, education, language, privacy and security issues, as well as other ways to interact with digital technology, reflect and influence social and gender relations[38]. The gender digital divide and its causes will be explored more in-depth in the next paragraph.

Another key personal inequality category is ethnicity that can lead to differences in economic wealth, occupational status, cultural resources and, accordingly, in unequal material access to the digital media too. For instance, it is well known that minorities are more likely to access online health information but less likely to employ e-health services, a service that is crucial during the ongoing COVID-19 pandemic, as a result of health-related social disparities[39]. This shows that digital resources could either exacerbate current racial disparities or open up new ways to lessen some disparities. According to the stratification theory, online networks mirror offline social network structures, and the adoption, usage and skills of digital tools replicate existing social inequalities. Early studies revealed that Internet use among racial and ethnic minorities was often lower than for dominant populations, suggesting that that racial and ethnic digital disparities followed the same patterns of offline marginalization[40]. Because of their smaller social networks and higher levels of network homophily, disadvantaged minorities in the U.S. face a barrier to accessing social capital.

[38] European Parliament (2018). The underlying causes of the digital gender gap and possible solutions for enhanced digital inclusion of women and girls. *Policy Department for Citizen's Rights and Constitutional Affairs: Women's Rights and Gender Equality*. Retrieved from https://www.europarl.europa.eu/RegData/etudes/STUD/2018/604940/IPOL_STU(2018)604940_EN.pdf

[39] Mitchell, U.A., Chebli, P.G., Ruggiero, L. & Muramatsu, N. (2019). The digital divide in health- related technology use: The significance of race/ethnicity. *Gerontologist*, 59(1), 6–14. Retrieved from https://doi.org/10.1093/geront/gny138

[40] DiMaggio, P. & Garip, F. (2012). Network effects and social inequality. *Annual Review of Sociology*, 38, 93–118. Retrieved from https://doi.org/10.1146/annurev.soc.012809.102545

As reported by a Pew Research Center survey[41] conducted in 2021 (Fig. 1.7.), black and Hispanic people resident in the United States remain less likely than white people to own a traditional computer or have the Internet connection at home, whereas there are no particular differences as regards other devices, such as smartphones and tablets. The survey reveals that 80% of white adults report owning a computer, compared to 69% of black adults and 67% of Hispanic adults.

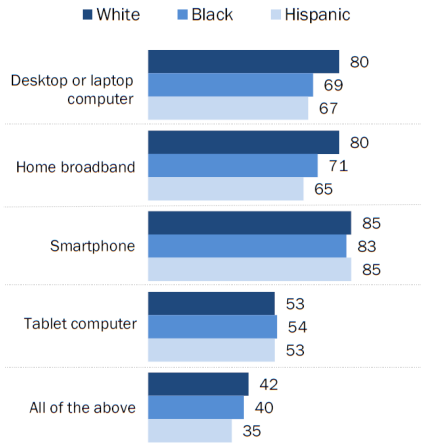

Fig. 1.7. *% of U.S. adults who are white, black or Hispanic.*
Source: Pew Research Center, 2021.

The last other personal inequality category related to digital access is *disability.* According to a Pew Research Center survey of U.S. adults conducted in 2021[42] (Fig. 1.8.), disabled people are less likely than the able-bodied population to use computers or the Internet. Around 62% of disabled adults own a desktop or laptop computer, compared to 81% of able-bodied people. As regards smartphone ownership, there is a gap of 16% disabled people and able-bodied people. Instead, there are not statistically significant differences related to the ownership of a broadband at home and other devices. The primary material access issue for disabled people is the expensive cost of technical and software solutions appropriate to various disabilities.

[41] Pew Research Center (2021, July). *Home broadband adoption, computer ownership vary by race, ethnicity in the U.S.* Retrieved from https://www.pewresearch.org/fact-tank/2021/07/16/home-broadband-adoption-computer-ownership-vary-by-race-ethnicity-in-the-u-s/
[42] Pew Research Center (2021, September). *Americans with disabilities less likely than those without to own some digital devices*. Retrieved from https://www.pewresearch.org/fact-tank/2021/09/10/americans-with-disabilities-less-likely-than-those-without-to-own-some-digital-devices/

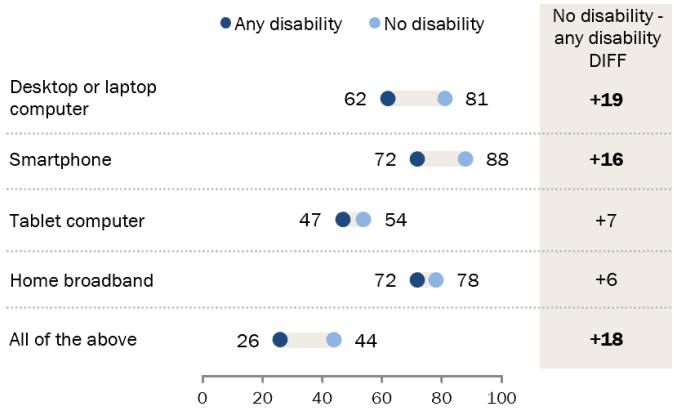

Fig. 1.8. *% of U.S. adults who are disabled or able-bodied.*

Source: Pew Research Center, 2021.

In certain ways, the notion that technology can somehow improve people's lives with disability and involve people who had previously been excluded has been rejected by disability research. Digital innovations do not alter the dynamic between disabled people and society. They have the ability to help lessen the restrictive barriers that exist in the workplace, educational system and environment. It is critical to understand that digital technologies cannot eliminate disability and social exclusion; rather, they can only change the social context[43]. Digital technologies often have the opposite impact and have further excluded persons with a variety of impairments, rather than fostering an environment of inclusion. The researchers Goggin and Newell claim that the reason is that creators of technology want to "normalize" disabled individuals[44]. The fact that technology is frequently too expensive and inefficient for the majority of disabled people is one of the main challenges they highlight. The main obstacles that prevent people from using assistive devices are expense, poor design and inadequate provider training. Further, a lot of these technologies are not sufficiently accessible to disabled people. It is acknowledged that disabled people who do not use digital technology risk increased exclusion and encountering more impairing obstacles, greatly limiting their prospects of success in life[45].

On the other hand, the most important positional inequality categories include household income and the level of education. Economic class continues to be a significant predictor of differences in the

[43] Cho, M. & Kim, K.M. (2021). Effect of digital divide on people with disabilities during the COVID-19 Pandemic. *Disability and Health Journal*, 15. Retrieved from https://www.sciencedirect.com/science/article/pii/S1936657421001874

[44] Goggin, G. & Newell, C. (2003). *Digital disability. The social construction of disability in new media*. Oxford: Rowman & Littlefield Publishers.

[45] Macdonald, S.J. & Clayton, J. (2013). Back to the future, disability and the digital divide. *Disability & Society*, 28(5), 702–718. Retrieved from http://dx.doi.org/10.1080/09687599.2012.732538Ó2013

quality of hardware, software, network access, usage patterns, and skills across the entire digital inequality stack. It is asserted that individuals who currently hold privileged economic positions in society benefit from better access to digital resources, which they use more productively and efficiently to promote their own financial security. More precisely, people from higher socioeconomic class groups are more likely to use the Internet for job, to increase their capital, for leisure, for healthcare, for education and to improve their social standing[46]. Levels of digital capital and the ability to utilize the Internet to its fullest extent are influenced by economic class as well[47]. Education inequities are implicated in every component of the digital inequality stack, similarly to many other legacy inequalities. Researchers are starting to explore how crucial it is for success to have access to digital resources, to develop students' skills in educational environments, and to establish connections with career training. Furthermore, studies show significant links between different levels of access to digital resources and educational opportunities that improve students' emotional well-being and motivation to master digital skills. Research points to the significance of digital disparities that affect career trajectories. Employers place a higher value on digital literacy and abilities as the information economy transforms a wide range of professions. For many low-income adolescents, school is where they learn most of their digital abilities[48].

Thereby, the higher the household income, the higher the possibility to afford the cost of owning digital technologies and have the Internet connection. Likewise, the higher the level of education, the better acquisition of digital skills and the higher quality of Internet usage. This mainly applies to younger generations as older generations born before the period between the sixties and seventies usually have not been put in contact with computers at school. Regular education motivates younger people in the developed countries to get access to computers and the Internet at school and stimulates to follow their intellectual interests through the use of digital technology.

[46] Van Deursen, A.J.A.M. & Van Dijk, J.A.G.M. (2019). The first-level digital divide shifts from inequalities in physical access to inequalities in material access. *New Media & Society*, 21(2), 354–375. Retrieved from https://doi.org/10.1177/1461444818797082

[47] Ragnedda, M., M.L. Ruiu, M.L. & Addeo, F. (2020). Measuring digital capital: An empirical investigation. *New Media & Society*, 22(5), 793–816. Retrieved from https://doi.org/10.1177/1461444819869604

[48] Robinson, L., Wiborg, Ø. & Schulz, J. (2018). Interlocking inequalities: Digital stratification meets academic stratification. *American Behavioral Scientist*, 62(9), 1251– 1272. Retrieved from https://doi.org/10.1177/0002764218773826

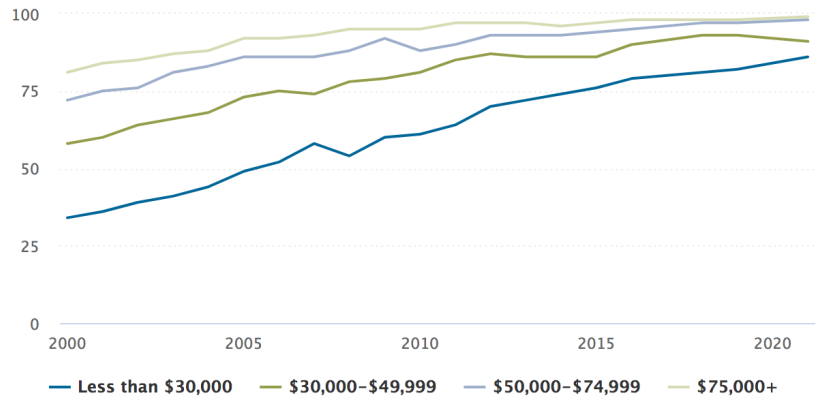

Fig. 1.9. *% of U.S. adults who say they use the Internet, by annual household income.* Source: Pew Research Center, 2021.

The graph above (Fig. 1.9.) shows share of Internet users in the United States in 2021, sorted by annual household income. The Pew Research Center survey's results reveal that 86% of the population with a household income of less than 30,000 U.S. dollars per year were Internet users in 2021 and the number of Internet users with a household income between 30,000 and 49,000 U.S. dollars per year decreased to 91%, contrary to 98% of Internet users with a household income between 50,000 and 74,999 U.S. dollars per year and 99% of Internet users with a household income more than 75,000 U.S. dollars per year[49]. This demonstrates that the digital divide related to household income remains in place and seems to even keep growing, despite the increase in the number of Internet users in general for each household income since the new millennium. Moreover, the household income often depends on the type of occupational status people have in relation to the costs and the motivation. The national institution of statistics (Istat) in Italy found out that in 2021 almost 89% of directors, managers, entrepreneurs and freelancers and 81% of employees used Internet daily, compared to only 68% of unemployed people looking for a job, 41% of the homemakers and 28% of retired people[50].

[49] *Supra*, note 33.
[50] Statista (2022). *Share of daily Internet users 2021, by occupational status*. Retrieved from https://www.statista.com/statistics/541845/share-of-persons-using-the-Internet-daily-in-italy-by-occupational-status/

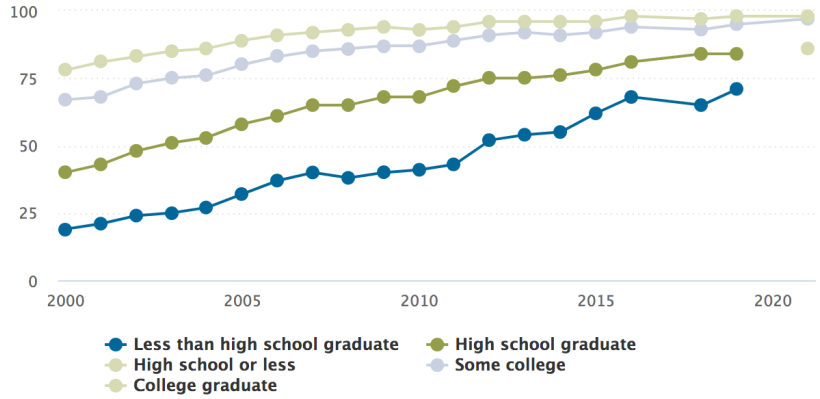

Fig. 1.10. *% of U.S. adults who use the Internet, by education level.*
Source: Pew Research Center, 2021.

As concerns the education level, the graph above (Fig. 1.10.) shows. The share of Internet users in the United States in 2021, sorted by educational background. Thanks to the Pew Research Center survey, it was found out that 98% of college graduates were Internet users, while 86% of high school graduates or non-graduates used the Internet[51]. Similarly, thanks to the European questionnaire on Information and Communication Technologies Data[52], it was found out that there is a digital gap between people with a low, medium and high education level. The amount of disparity, although existing in most European countries, differs. For instance, in Croatia, the 96% of people with higher education used the Internet daily in 2020, while only 33% with low education did so. Portugal shows a very similar trend in Internet usage. Conversely, Norway and Sweden have only small differences in daily Internet usage between people with different education levels.

Having provided a general background on different digital divides worldwide, it is essential to remind that the digital divide cannot be measured only through the number of Internet users considering specific personal variables, but also by analyzing the consequences of both having connection and not having connection and the safety itself of being online considering how personal variables impact the individual experience of being online. Overall, it seems that those who already have a great number of resources at their disposal are likely to benefit most of all from the opportunities provided by the new media. This is called the 'rich-get-richer' phenomenon. The consequences of unequal access to digital technologies impact the participation in the most important fields of society. The access to digital media is instrumental for an increasing number of jobs and

[51] *Supra*, note 33.
[52] Statista (2021). *Share of daily Internet users in selected European countries according to formal education levels in 2020*. Retrieved from https://www.statista.com/forecasts/1239244/selected-countries-Internet-users-use-accessed-Internet-daily-education-group

making progress in the labor market or one's own business. At the same time, to get access to digital media implies the opportunity to create new ties or to maintain old ties in modern society. Those without access may end up finding themselves isolated from the rest of society. Absolute exclusion from the network society and new media use may leads to a case of structural inequality, as people who do not get digital access might have less opportunities in the labor market, lesser educational opportunities, less chances of participation in politics and citizenship entitlements such as public benefits and healthcare[53]. Digital inequality is a new form of inequality of the twenty-first century that places itself alongside more traditional forms of inequality[54]. Those who function better in the digital world and participate increasingly to it enjoy advantages over their digitally disadvantaged counterparts. As the digital development advances, forms of digital exclusion proliferate. First-level digital disparities in access include digital engagement gaps and still exist, whereas second-level digital inequalities are related to skills, participation and efficacy and are those that affect a greater proportion of the population. Given that the Internet is ever more integrated in most daily routines, forms of disadvantage affect the individual well-being on a daily basis and can be more or less evident. To study forms of disadvantage, it is fundamental to take into consideration the social, economic and cultural contexts of digital engagements since digital inequality cannot be analyzed by disregarding the offline circumstances of individuals and social groups. Digital inequalities continue to combine with ethnicity, class, gender, age, disability and other offline axes of inequality. Even in countries with high levels of digital access, many economically disadvantaged or traditionally underrepresented portions of the population may be excluded from basic access to digital resources and skills. Henceforth, digital inequalities can strengthen existing social inequalities and even exacerbate them because they pursue preexisting differences in society into online settings[55]. The next paragraph will be focused on the gender digital gap.

1.3. The Gender Digital Divide

The digitalization provides a unique opportunity for countries to increase their economic growth. Nevertheless, the benefits derived from the digitalization are currently not equally balanced between social groups and genders, making access, use and ownership of digital tools gendered. The

[53] Van Dijk, A. G. M. (2005). *The Deepening Divide: Inequality in the Information Society*. SAGE Publications.
[54] Chipeva, P. et al. (2018). Digital divide at individual level: Evidence for Eastern and Western European countries. *Government Information Quarterly*, 35(3), 460-479. Retrieved from https://www.sciencedirect.com/science/article/pii/S0740624X1730401X
[55] *Supra*, note 20.

'*digital gender divide*' is defined by the OECD as the term used to refer to gender differences in resources and capabilities to access and effectively use digital technologies within and between countries, regions, sectors and socio-economic groups. There are several root causes related to the digital gender divide, among which barriers to access, affordability, education, lack of technological literacy, along with inherent biases and socio-cultural norms that result in gender-based digital exclusion[56]. In the post COVID-19 period, digitalization has accelerated across the world and reduced digital gender gaps, however, it is important to remind that most developing countries still lack sufficient and adequate resources to first stay ahead and then to narrow gaps between social groups. In 2022, according to the World Bank, almost 3 billion people remained offline and 43% of the world's population are not using mobile Internet, the vast majority concentrated in developing countries[57]. The gender digital gap still exists worldwide: 62% of men go online, whereas only 57% of women do so. Moreover, 71% of the world's younger population aged 15-24 is using the Internet, compared with 57% of other age groups, which means that elderly women might be less likely to go online[58]. The achievement of gender parity is reached when the gender parity score, that is the female percentage divided by the male percentage, stands between 0.98 and 1.02. All around the world, the gender digital divide has been narrowing in recent years and has improved from 0.89 in 2018 to 0.92 in 2020[59]. Parity has been achieved in almost all developed countries, such as North America, Europe, the Commonwealth of Independent States region and the small island developing states. Nevertheless, the divide remains wide in developing countries where women are disproportionally excluded as in average only 19% of women are using the Internet, that corresponds to 12% lower than men[60]. Gender inequality may be reduced, and inclusive and sustainable growth can be encouraged with the use of digital technology. Women may have more opportunities to find employment as a result of digital technology. Additionally, as the gender wage gap between men and women narrows, women may earn higher wages and have better access to health care, children's education and other services. The possession and use of digital technology hold great promise for the economic emancipation of women and the advancement of gender equality. Owning and using digital equipment, as well as having access to the internet, can increase one's knowledge, income and work options[61].

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[56] Larsson, A. & Viitaoja, Y. (2019). Identifying the digital gender divide, in *The Digital Transformation of Labor*. Routledge.
[57] World Bank (2022, 8 October). Digital Development. Retrieved from https://www.worldbank.org/en/topic/digitaldevelopment/overview
[58] *Ibid*.
[59] Alliance for Affordable Internet (2021). The Costs of Exclusion: Economic Consequences of the Digital Gender Gap. *Web Foundation*. Retrieved from https://webfoundation.org/research/costs-of-exclusion-report/
[60] *Ibid*.
[61] Panie, N.A. & Nae, T.M. (2021). Digital recovery – a tool for gender equality. *Theoretical and Applied Economics,* 28, 7-18.

The Internet is now regularly used by the entire population since it is the most widely available digital tool and is expected to benefit from the digitization of the business and society. As shown in the figure below (F.1.11.), the data at the level of EU Member States is concerning with regards to the percentage of persons, broken down by gender, in the European Union in 2019 who have never accessed the Internet. More than 20% of people in Bulgaria, Greece and Portugal have never used the Internet[62].

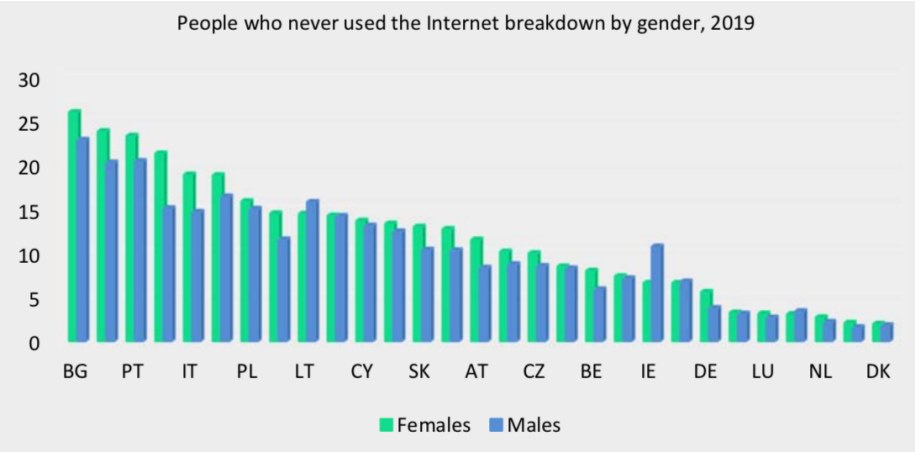

Fig. 1.11. *% of EU population who never used the Internet, by gender*.
Source: European Commission, 2019.

The average for men and women in the EU is 8.72% and 10.2%, respectively[63]. With the exception of Lithuania, Ireland, France and Finland, where men score higher, there are more women in 23 nations than men who have never used the Internet. In order to ensure that everyone has access to the Internet and digital literacy, Member States must pinpoint the reasons behind this data and suggest relevant reforms. As is evident, there is a gender difference that is discernible and that highlights gender inequities.

Many barriers obstruct women from getting digital access and actively participating online, including unaffordable devices and data tariffs, inequalities in education and digital skills, social norms discouraging women from being online and threats addressed to their own safety. The main reasons are linked to the gender pay gap[64], which does not allow women to really enjoy economic and social independence. The International Labor Organization estimates that women on average continue to be

[62] European Commission (2020). *Shaping Europe's Digital Future*. Retrieved from https://ec.europa.eu/info/sites/info/files/communication-shaping-europes-digital-future-feb2020_en_4.pdf
[63] *Ibid*.
[64] The difference between the average annual wage earned by women and that earned by men, taking into account working hours, chosen occupations, school education and work experience.

paid about 20% less than men worldwide. However, there are significant variations between countries, from a high of over 45% to barely any difference[65]. The reduction of the gender pay gap can lead to more financial resources for women, as a consequence of major earnings, and thus more affordability for digital technologies and opportunity to develop digital skills at higher job positions. To clarify, the first barrier is the costs of devices such as computers, tablets or mobile phones, and data rates, which does not only prevent the Internet usage, but also to use the Internet at its full extent. As technological sophistication and functionality grows and with the cost of ownership, the digital gender divide can be found to widen even more. The second barrier is the educational gap, hence, the inequalities in access to education and digital skills. Illiteracy lessens women ability to access online services. Nearly 83% of women across the world are literate, compared to 90% of men, and illiterate women seem to make mainly use of online platform services that are more familiar to them or easier to access and use[66]. The digital gender divide is also enhanced by digital illiteracy, which is often related to a lack of comfort in using digital technology, as a result of education, employment status and income level. Even women with high educational level appear to be less confident in the technological and scientific sphere. The differences in performance in these fields do not derive from innate differences in capabilities, but rather from individual confidence in them. This ultimately leads to women's self-censorship and lower engagement in tech-related fields that are socially associated with masculinity.

To take advantage of the benefits that come with digital growth, adequate digital skills are required. Employers now demand digital skills since more and more economic sectors have undergone a significant digitization process in recent years. Figure 1.12. shows that there are a lot of women in the European Union who have low levels of digital literacy. Only Finland and Norway, two states with among the greatest levels of investment in education and gender equality, have scores below 20%. High levels of digital proficiency across the population, but notably among women, are crucial for fostering inclusive digital development. Women need strong digital skills to be able to adapt to the new demands of the job market and take advantage of the opportunities provided by new technologies[67].

[65] International Labor Organization (2019). *Women in Business and Management: Understanding the gender pay gap*. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_735949.pdf

[66] World Bank (2022). *Literacy rate (% of people ages 15 and above)*. Retrieved from https://data.worldbank.org/indicator/SE.ADT.LITR.ZS

[67] *Supra*, note 61.

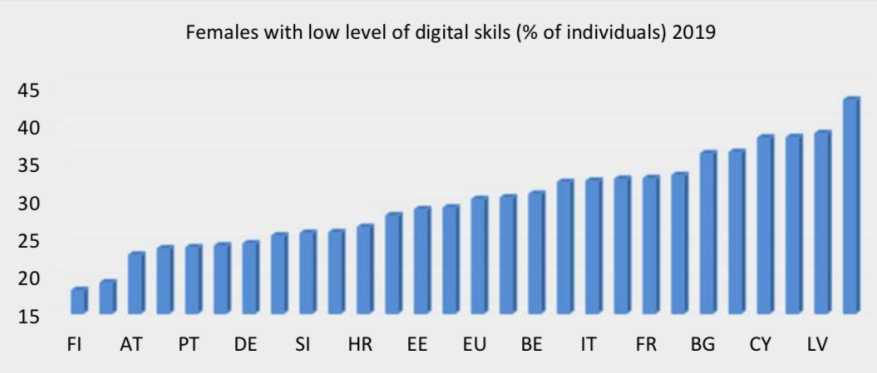

Fig. 1.12. *Females with low level of digital skills (% of individuals)*.
Source: European Commission, 2019.

Women's access to economic prospects is restricted by low levels of education and competence as well as care obligations and sociocultural norms; this tendency is expected to continue in the future of employment. Inequities against women, such as salary disparities and occupational segregation, are also replicated and exacerbated in the digital age[68]. Men make up the great majority of ICT specialists working in the EU (Fig. 1.13.). Men represented 81% of the workforce in ICT in 2021, which was 2.1 percentage points less than it had been in 2012. In 2021, men accounted almost 90% of all ICT specialists in the Czech Republic (90%), Hungary (86%) and Slovakia (85%). In the majority of the remaining EU Member States, males made up roughly 8 out of every 10 ICT specialists, while Malta (74%), Romania (74%) and Bulgaria (72%) were the only Member States where the ratio of men was less than 75%[69].

[68] Cook, C., Diamond, R., & Hall, J. (2018). *The Gender Earnings Gap in the Gig Economy*. Palo Alto: Stanford University.
[69] Eurostat (2022). ICT specialists in employment. Retrieved from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=ICT_specialists_in_employment#ICT_specialists_by_sex

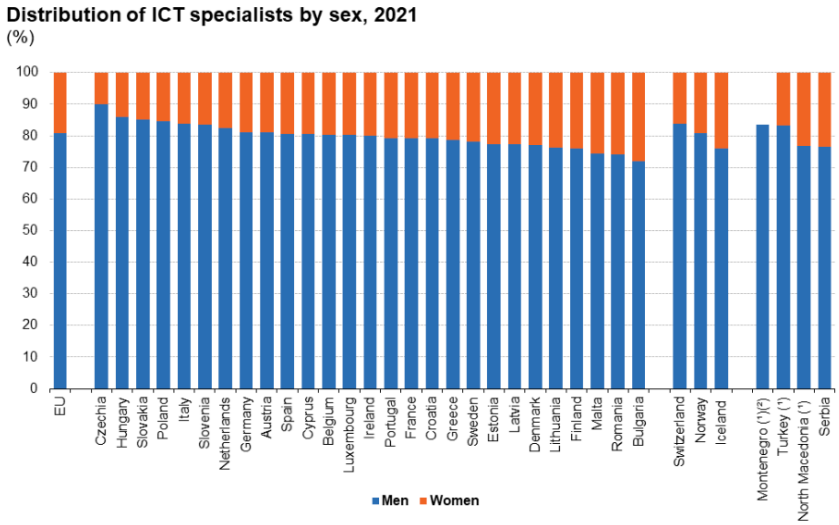

Fig. 1.12. *Distribution of ICT specialists by sex*.

Source: Eurostat, 2021.

Last but not least, the most stringent barrier that encompasses all the others is the social and cultural environment, which leads women to be discouraged from having a life online because of misogynistic and patriarchal social norms. The Alliance for Affordable Internet report 2021 on the costs of women's exclusion in the digital world estimates that countries have missed out on 1 trillion dollars in GDP as a consequence of the digital gender gap. In 2020, the loss to GDP was 126 billion dollars. This economic and productivity loss consists of billions in lost taxes that could be invested to improve other relevant fields such as education, health and housing and translates to a missing 24 billion dollars in tax revenues annually for governments, on the basis of current tax-to-GDP ratios[70]. Women's economic empowerment and investment in women's economic independence are crucial not only for the achievement of gender equality, but also for the achievement of a more inclusive economic growth and the eradication of poverty and social exclusion.

Apart from the United States as concerns the mere access to the Internet and possession of digital tools which is almost half and half among the population based on gender, although intersections of gender with age, ethnicity, income and disability turn out to increase the gender gap, the latter is narrowing or widening differently within and across countries in the rest of the world.

[70] *Supra*, note 59.

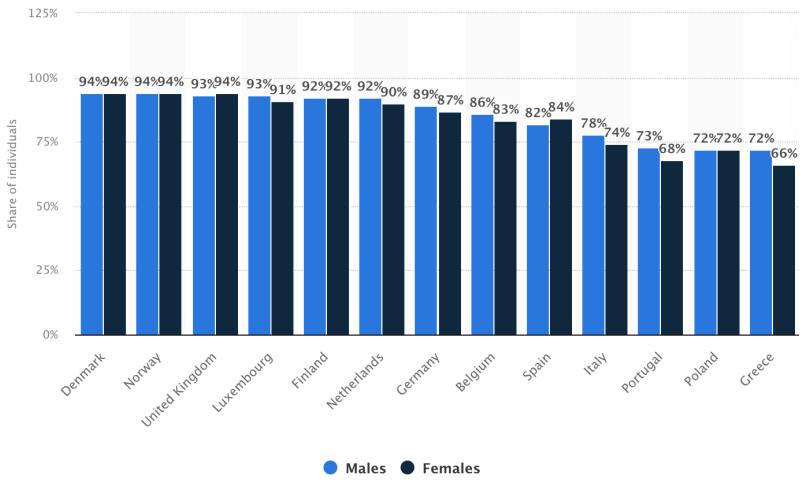

Fig. 1.14. *Share of daily Internet users in selected European countries according 2020, by gender*. Source: Eurostat, 2020 (Statista, 2021).

The European questionnaire on Information and Communication Technologies Data has found out that there is a gender disparity in the European population's Internet usage, whose severity differs widely across the European countries. While Denmark (94:94), Norway (94:94), United Kingdom (93:94). And Finland (92:92) had almost the narrowest gap of daily Internet users between men and women in 2020, Greece (72:66), Portugal (73:68) and Italy (78:74) had the widest gap of daily Internet users between men and women[71].

Outside Europe, despite the increase in Internet penetration and the proliferation of smartphones, inequalities in the Arab World remain strong, rather it seems that they even have exacerbated. Data from the latest Arab Barometer surveys indicate that shares of Internet usage differ significantly along demographic lines. On average, it indicated that socially disadvantaged groups such as women, the elderly, the less educated and lower income population are less likely to use the Internet than men, younger, higher educated and higher income counterparts[72]. According to the ITU, in comparison with other world regions, the digital gender gap with respect to the Internet penetration rate was widest across Arab States in 2020 (56:68), together with Africa (24:35)[73]. The digital divide across MENA region does not exist only within countries, but also across countries, and is proportionally correlated to variables like gender, age, education, income and place of residence. The

[71] Statista (2021). *Share of daily Internet users in selected European countries according 2020, by gender.* Retrieved from https://www.statista.com/statistics/1245973/europe-Internet-users-use-accessed-Internet-daily-gender/
[72] Raz, D. (2020, 25 September). The Arab World's Digital Divide. *Arab Barometer*. Retrieved from https://www.arabbarometer.org/2020/09/the-mena-digital-divide/
[73] *Supra*, note 35.

statistical graph below shows that, taking into account the variable of gender, the digital gender divide differs considerably across the region (Fig. 1.15.).

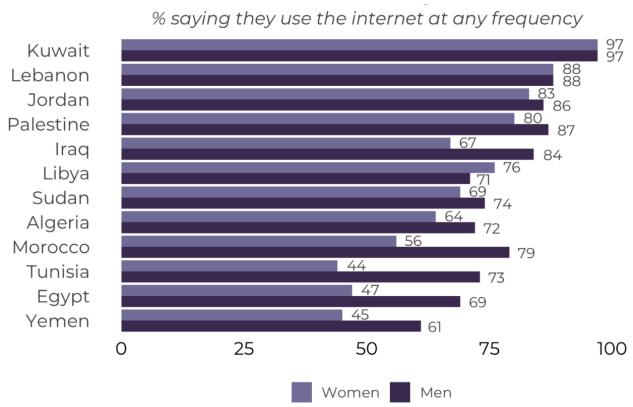

Fig. 1.15. *Internet Usage across MENA region*.

Source: Arab Barometer, 2020.

The difference in the severity of the digital gender gap among MENA region countries notably stands out by comparing Kuwait and Lebanon's percentages of Internet usage by gender with all the other countries, especially Morocco (56:79), Tunisia (44:73), Egypt (47:69) and Yemen (45:61), where the gap is much accentuated. On the whole, across the twelve countries part of MENA region, it is estimated that there is a 56% decrease in the probability of being an online user for women, contrary to men[74]. The former face several barriers to full and safe participation in the digital world, which are very similar to those already existing in the physical world, starting from social norms and gender biases that prevent women from accessing the Internet, gaining digital literacy and participating in the digital economy or society. Educational levels, age and income are also significant predictors in correlation to gender, inherently leading to the decrease in the propensity of women to be online in developing countries. In addition to barriers hindering Internet access and usage, marginalized groups are often more vulnerable than their counterparts once they are online, as well as they already are offline, particularly in countries with a low global gender gap. Around the world, women are 27 times more likely than men to face online abuse and it was found out that those with lower levels of education and income are more likely to believe and share misinformation online. It is quite clear that media literacy and privacy consciousness are essential for promoting healthy Internet usage and ensuring equal opportunity to benefit from being online. In developing nations, where the vast majority of women reside, discrimination based on gender is frequently more severe than it is there.

[74] *Supra*, note 72.

While this is true, the promise of ICT to empower women is considerably bigger in the poor countries because of the lower starting position and higher potential gains[75].

With attention to mobile ownership and mobile Internet use, low- and middle-income countries remain the most affected as well. Besides a slight reduction in South Asia, the gender gap in mobile ownership remained quite unchanged across low- and middle-income countries, where women are 7% less likely than men to own a mobile phone[76]. It is no surprise that countries with the lowest levels of mobile ownership tend to have also the widest gender gaps in mobile ownership and mobile Internet use. In all countries surveyed by the GSMA, the gender gap in mobile ownership is smaller than the gender gap in mobile Internet use that, instead, appears to be substantial. Furthermore, both gaps tend to be greatest in rural areas and among people with lower literacy levels, low incomes, disabilities or over the age of 55. This means that women with these characteristics are likely to be even more disadvantaged. Although there has been a considerable reduction in the gender gap for mobile Internet use from 25% to 15% during the time period from 2017 and 2020, on average women are still 16% less likely to use mobile Internet than men across low- and middle-income countries, with just 1% increase from 2020 to 2021[77]. The gender gap in mobile Internet use varies across regions, with the widest gaps in South Asia and Sub-Saharan Africa, even though the former's gender gap has narrowed constantly from 67% to 36% during the time period from 2017 to 2020, except from 2020 to 2021 with 5% increase[78]. The reversal after consecutive years of progress underlines the importance of constant efforts and renewed investment across regions to ensure women's digital inclusion.

In the Arab world, environmental and personal factors might be categorized as Internet usage barriers for women. The biggest obstacles to Arab women using digital media are environmental ones, specifically societal and cultural restraints, in addition to access to digital technologies and a lack of pertinent content for women. On the other hand, the personal factors, which are more related to the abilities or skills of female social media users themselves, are also seen as barriers, including education level, digital literacy, comfort using digital media as a communication tool and level of trust in online security and privacy. This means that rather than tackling the personal restrictions by

[75] Hilbert, M. (2011). Digital gender divide or technologically empowered women in developing countries? A typical case of lies, damned lies, and statistics. *Women's Studies International Forum*, 34(6), 479-489. Retrieved from https://www.sciencedirect.com/science/article/pii/S0277539511001099
[76] GSM Association (2022). *The Mobile Gender Gap Report 2022*. Retrieved from https://www.gsma.com/r/gender-gap/
[77] *Ibid*.
[78] *Ibid*.

concentrating on correcting the women's solutions, efforts to close the digital gender gap will need to be made to overcome the obstacles by tackling discriminatory attitudes and cultural restraints on women[79]. In the political, social and economic spheres of the Arab world, gender disparity is prevalent outside of the virtual world. Although digital media is frequently seen as a tool for empowerment, the main offline obstacles to women's emancipation might not be overcome by relying solely on digital technologies. Online engagement may be a starting point for women's empowerment, but it may not always transfer into actual participation in societally accepted political, civic and public spheres. It is important to recognize and address the actual obstacles present in these settings in order to advance gender equality in the area[80].

Beyond focusing on identifying gaps and differences with the risk of overcoming fundamental issues, more recent research on gender and digital inequalities explores and uncovers the mechanisms that underpin the latter and the consequences for outcomes such as building social capital, employment opportunities and educational attainment. To explain, digital inequalities intersect with gender through the gendering of skills and content production patterns and through gendered labor market processes associated with jobs involving technology[81]. First, behavior online should be understood as an extension of broader social roles and gender expectations present in the offline world. Indeed, gender stereotypes existing in society can appear in even more exaggerated and rigid forms in online spaces, especially as concerns the physical aspect idealized in the offline world. Second, women are more likely to underestimate their online skills and abilities compared to men, even among those Internet users who acquire high skills. Even if it is self-perception, this can have real repercussions on online behavior. Third, although in developed countries the women's Internet usage is not that different from that of men, the latter still widely outnumber women in the field of technological development and design. Where women are not fully integrated into the workforce, gender divides in usage tend to be wider. Due to the influence of socio-cultural norms, women were found to believe that digital technologies were not appropriate for them, particularly in developing

[79] Salem, F. & Mourtada, R. (2012). Social Media in the Arab World: The Impact on Youth, Women and Social Change. *European Institute of the Mediterranean*. Retrieved from https://www.iemed.org/publication/social-media-in-the-arab-world-the-impact-on-youth-women-and-social-change/

[80] Badran, M. F. (2017). Bridging the gender digital divide in the Arab Region. *International Development Research Centre*. Retrieved from https://www.researchgate.net/profile/Mona-Badran-2/publication/330041688_Bridging_the_gender_digital_divide_in_the_Arab_Region/links/5c2b725b92851c22a3535465/Bridging-the-gender-digital-divide-in-the-Arab-Region.pdf

[81] Robinson, L. et al. (2015, January). Digital inequalities and why they matter. *Information, Communication & Society*, 18(5), 569-582. Retrieved from http://dx.doi.org/10.1080/1369118X.2015.1012532

countries, where negative social perceptions associated to the Internet use and family expectations in relation to gender are more rigid.

Safety-related issues are frequently a major reason for families to oppose to the Internet use or the ownership of a mobile phone for women in developing economies. For instance, in China and Mexico, gender-based harassment is among the main barriers to own and use a mobile phone, since women and young girls can be exposed to additional risks, like online harassment, cyberstalking or sexual trafficking[82]. Several research and surveys, that will be reported and analyzed in the next chapter, have found that women are significantly more likely than men to be victim of cyber violence, especially at a young age.

Ultimately, the opportunity of women to get digital access can be directly and indirectly affected by market-related factors including investment dynamics, regulations and competition, especially in rural areas where the investment and installation of digital infrastructures is scarce because of less economic profits. Women in developing countries can be disproportionally affected as they appear to be more often located in rural areas, compared to working age men who tend to be mainly located in urban areas, and experience further structural barriers, such as higher likelihood of dropping out of school than boys. They typically work more in agriculture in rural areas and their labor is frequently underpaid or seen as a contribution to the family. In comparison to men in rural areas or those living in urban areas, women in rural areas typically have shorter-term, more risky jobs and are less safeguarded. This finally translates into being constrained in technologically underdeveloped locations where using digital technologies is challenging, if not impossible, and into having limited resources available to use for online access[83].

Policies can be only effective if they also address the underlying factors that prevent women and girls from fully participating in the digital transformation and from enjoying the benefits it offers. This in turns calls for the need to address normative barriers and beliefs and to overcome stereotypes and biases[84]. Enabling women's full participation in the digital sphere requires addressing the underlying factors that hinder and prevent women and young girls to be active online users and developing structural responses to gender-based violence to increase online safety, as being one of the main

[82] OECD (2018). *Bridging the digital gender divide: include, upskill and innovate*. Retrieved from https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf
[83] OECD (2019). *The Role of Education and Skills in Bridging the Digital Gender Divide*. Retrieved from https://www.oecd.org/sti/education-and-skills-in-bridging-the-digital-gender-divide-evidence-from-apec.pdf
[84] International Monetary Fund (2018). Gender Equality: Which Policies Have the Biggest Bang for the Buck? *IMF Working Paper*, No. 18/105.

reasons for families' opposition to the owing of a mobile phone or using the Internet. Overall, as will be argued in the next chapters, safe access to digital technology is essential for women and girls in both developed and developing countries to stay connected, in addition to take advantage of education and economic opportunities[85].

1.4. The importance of intersectionality in demographic research

Understanding and measuring gender inequality require reliable, impartial and unbiased data analysis. A traditional demographic analysis in which the entire population is investigated as one does not show the potential inequalities and social challenges that societal subsets within the population might face. Assessing how opportunities and responses vary according to different demographic and socioeconomic characteristics can help to comprehend the extent of inequality based on gender and its interactions with other forms of inequality. Individuals have multiple demographic and socioeconomic characteristics for which they may be disadvantaged, like gender, age, class, ethnicity, sexuality, disability, religion and these identities often interact so that the outcome of interactions can determine social status and power as well as the type of experiences an individual might have within society, especially those related to disparities. In the past decades, the concept of intersectionality has gained much attention in academic spheres, transforming feminist theory, and influenced the manner in which research is conducted in most of the social sciences. However, few studies have analyzed the relationship of multiple demographic variables to the overall severity of disparities and discrimination an individual can face. The concept of intersectionality gives the opportunity not only to tackle discrimination and social inequalities from a systemic and structural perspective, but also to capture discrimination patterns that tend to be disregarded in social and demographic research[86].

Rather than relying only on single-axis frameworks, focusing on one dimension of discrimination at a time, intersectionality allows to uncover the whole multidimensionality of people's experiences and identities within society and observes the intersection between various social categories on multiple and simultaneous levels. For instance, within the social category of 'women', migrant women, black women and disabled women might be at a higher risk of systemic discrimination and tend to be taken

[85] Yadav, P. (2022) Intercorrelation between Digitalization and Women Empowerment. *British Journal of Multidisciplinary and Advanced Studies*, 3(1) 1,1-18. Retrieved from https://doi.org/10.37745/bjmas.2022.0005

[86] Potter, L. et al. (2019). The Intersections of Race, Gender, Age, and Socioeconomic Status: Implications for Reporting Discrimination and Attributions to Discrimination. *Stigma and Health*, 4(3), 264-281. Retrieved from http://dx.doi.org/10.1037/sah0000099

into account only under the main dimension of gender and then excluded in policies addressing gender inequalities. Existing literature mostly examines social stereotypes attributed to the macro categories of men or women, without specifying social identities such as age, sexual orientation, ethnicity or religion. This approach risks generalizing all non-prototypical minority subgroups within the broader gender category. An intersectional approach examines the intersections of the three most important global systems of domination: racism, capitalism and misogyny, along with their by-products of classism, homotransphobia and other forms of racism. The systemic injustice and social inequality are led by discrimination arising from these mutually reinforcing identities.

Intersectionality was introduced in the late 1980s by the scholar Kimberlé Crenshaw as a legal concept in response to the invisibility and exclusion of the experiences of black women from the mainstream white feminist movement[87]. During the last twenty years, intersectionality has evolved from being conceived as a legal theory in the United States into a cross-disciplinary and international approach that aims at deconstructing narratives on ethnicity, gender and class. In this regard, the experiences of individuals should not be characterized by prioritizing only one aspect of their identity and ignoring important within-group variability in experiences and inequalities. In fact, the multiple socioeconomic categories that feature individuals are interdependent and their interaction contributes to the inequalities experienced. Nonetheless, intersectionality should not be interpreted as if that social inequalities experienced by people with multiple discriminated identities can be characterized by their collective impact. Inequalities are not additive in such a way that discrimination associated with multiple identities can be summed, rather, scholars argue that the intersectionality perspective is based on the idea that "*multiple identities construct novel experiences that are distinctive and not necessarily divisible into their component identities or experiences*[88]". Multiple sociocultural factors interact fluidly, such that one aspect of identity, that could be gender, might intensify the inequalities faced because of other aspects of identity, that could be ethnicity and sexuality. Henceforth, it is the interaction between gender, sexuality and ethnicity that contributes to the overall complex inequalities experienced by a black lesbian woman, to whom social stereotypes are attributed as such. Consequently, it is argued by intersectionality research that some individuals with multiple identities might experience both advantages and disadvantages according to the reference group.

[87] Center for Intersectional Justice (2019). Intersectional discrimination in Europe: relevance, challenges and ways forward. *European Network Against Racism*.

[88] Parent, M. C., DeBlaere, C., Moradi, B. (2013, April). Approaches to Research on Intersectionality: Perspectives on Gender, LGBT, and Racial/Ethnic Identities. *Sex Roles*, 68, 639-645. DOI 10.1007/s11199-013-0283-2

Embracing the theory of intersectionality means acknowledging that power hierarchies not only affect two supposedly homogenous groups, like 'women' and 'men', but they are also present within those groups themselves whose experiences may be undermined by a loss of information due to similar treatment to a diversity of subjects. Conversely, intersectionality draws attention both on the broader social and economic context and individual level heterogeneity within any particular context. On the whole, demographic research would benefit from the examination of more complex relationships between factors that may influence the experiences of multiple minorities in order to face modern social challenges at best[89].

[89] Sigle, W. (2016) Why demography needs (new) theories. In: Mortelmans, Dimitri and Matthijs, Koenraad and Alofs, Elisabeth and Segaert, Barbara, (eds.) *Changing Family Dynamics and Demographic Evolution: The Family Kaleidoscope*. Edward Elgar Publishing, Cheltenham, UK, 271-233.

2. Defining Gender-based Cyber Violence

For women and other marginalized groups, the Internet holds both challenges and opportunities. On one side, individuals can use the internet for exercising their own freedom of expression and for discussing issues pertinent to their lives and experiences; whereas, on the other side, the world wide web also exposes them to those people who may wish to curtail their appropriation of digital spaces and silence their online participation. The internet is a reflexive phenomenon that is by nature a social product and a site of social interactions, hence, digital spaces mirror the offline power relations and dynamics of everyday life, often in an intensified or reformulated manner. Accordingly, it is no surprise that power structures and hierarchies, ever-present features of society, as much as discrimination based on gender, sexuality, ethnicity and others arising from it, are reflected in the cyberworld. Through the use of gender as a lens, scholars and activists have concluded that not only access to digital technologies can be highly inequal, but also being online itself can be experienced differently, in terms of advantages and disadvantages. Thereby, certain types of threats to the individual or collective well-being and safety are directed at specific targets and present a new manifestation of an already well-established phenomenon in the physical world. One of the greatest dangers, although undermined, that is faced by certain social categories and that hinders or even prevents them to use safely the internet is online violence. In particular, the latter is highly spread against women and young girls. As seen in the previous paragraph, gender is recognized to be a social factor determining access to power and conditioning experiences of discrimination and socio-economic disadvantages, even in relation to the digital media. Given the increasing use of digital technologies and social media platforms, gender-based cyber violence is a constantly growing phenomenon that directly impacts women at the individual, social and economic level, ranging from psychological repercussions and limited ability to participate in public discourses to physical harassment and significant security threats motivated by misogyny. Online gender-based violence should be understood in the context of a broader picture of violence against women, which can be perpetrated through multiple forms that comprise a sort of continuum between offline and online. Fundamentally, this form of violence should not be underestimated by in so far as it is recognized by several institutions and scholars as a major daily threat to women's physical safety and mental well-being. The development of the Internet shows how the benefits of digital media technologies frequently serve to duplicate and maintain the social injustices that already exist in society. The Internet's fundamental design incorporates preconceived notions about social distinctions, which ultimately serves to reflect and maintain existing inequities. In the first subparagraph, I will analyze the widespread issue of gender-based cyber violence, constantly growing alongside the rise in the digital technologies' use. In the second subparagraph, I will focus on the

common demographic characteristics among respectively victims and perpetrators of gender-based cyber violence. In the third paragraph, I will highlight the role of technology in facilitating the perpetration of violence as a consequence of dehumanization of certain social groups strengthened through digitalization. In the last subparagraph, I will indicate the multiple threats faced by women online and the repercussions on their quality of life and safety, provided that this kind of cyber violence should be commonly understood as a continuum of abusive behaviors against women from offline to online and, vice versa, its normalization can lead people to commit acts in the physical world.

2.1. The spread of online gender-based violence

With the use of digital media constantly growing, more and more women and young girls, while online, experience online violence such as cyber harassment, stalking and other kinds of threats that inevitably turn out to have an impact on their internet usage. In general, online violence is defined as the use of digital technologies to engage in activities that can harm other individuals at the physical, psychological or emotional level. Violence sometimes does not only take place in digital spaces, but it might be complemented by offline threats leading to physical harassment, thus online and offline violence mutually reinforce each other. Recently, online violence has received quite attention by media and international institutions, which have often described it as a new phenomenon posing new social challenges that should be dealt primarily by the criminal justice system and social media platforms. Since national boundaries are not clear-cut and offline interaction do not exist, people from all the world can get internet access and therefore can be both potential perpetrators as well as targets of gender-based online violence. Women, young girls and LGBTQ+ people are among those categories most often targeted by perpetrators of online violence, due to existing social norms of discrimination and inequality that are further legitimized and spread by gender-based online violence[90]. There is strong evidence that violence against women and girls is so far from being exceptional to the extent that it impacts the everyday life for many of them. Although the justice system has struggled to recognize gender-based violence in the past, several forms of gender violence are legally banned and deemed as human rights violations, conversely from gender-based online violence that currently lies in a legal grey zone and is not sufficiently criminalized and acknowledged. For this reason, online violence is much underreported by the victims themselves and countries do

[90] Deutsche Gesellschaft für Internationale Zusammenarbeit (2022). *The influence of gender-based violence on political and societal participation of women and girls*.

not uniformly tackle it at the legal level. The under-reporting of cyber-harassment and cyberstalking is explained by the stigma or cultural attitudes applied to the reporting for abuse offline. Women who report lower levels of gender-based cyber violence in some countries might do so because they are unwilling to report incidents or because they conceive narrowly what can constitute cyber violence. Gender-based online violence can be described as an interaction between cyber violence and gender-based violence, in other words, as the continuation of offline gender-based violence in the digital world, with short or long-term psychological and physical health effects on the victims. The increasing spread and use of digital technologies have led to the manifestation of new forms of gender-based violence. Characteristics of gender-based violence online include barriers of space and time, anonymity and transnationality hindering the prosecution of perpetrators, the difficulty to easily remove data from the internet and the rapid spread of information[91].

As declared by the Council of Europe Commissioner for Human Rights on the International Day for the Elimination of Violence against Women of 2020, cyber violence is increasingly and disproportionally affecting women in Europe, especially those who are particularly exposed, such as feminist activists, journalists, politicians and public figures[92]. The Commissioner declares that if states do not take actions and combat cyber violence seriously, then online freedom of expression is threatened, and Internet will not be an open, safe and free platform to exchange ideas. Similarly, in June 2021, calling upon states to protect women's rights and prevent inherent violations, the United Nations Secretary-General included among the forms of violence against women online harassment, inasmuch as it threatens women's security, causing them psychological violence and inciting misogynist behavior online as well as offline[93].

Currently, it has been argued by the European Parliamentary Research Service that no distinct definition of gender-based cyber violence exists, neither at EU nor at national level, since it is an issue constantly evolving due to its complexity and the continuous changes in the use of digital technologies and related behavior. Nonetheless, multiple actors like institutions and committees concerning cyber violence, violence against women and/or specifically online gender-based violence, attempted to provide a commonly accepted definition of the phenomenon, namely "*an act of gender-*

[91] *Ibid*.
[92] Council of Europe – Commissioner for Human Rights (2020, 25 November). *Stop cyberviolence against women*. Retrieved from https://www.coe.int/en/web/commissioner/-/stop-cyberviolence-against-women-and-girls
[93] United Nations – Secretary- General (2021, 28 June). *A global model to tackle violence against women*. Retrieved from https://www.un.org/sg/en/content/sg/articles/2021-06-28/global-model-tackle-violence-against-women

based violence perpetrated directly or indirectly through information and communication technologies that results in, or is likely to result in, physical, sexual, psychological or economic harm or suffering to women and girls, including threats of such acts, whether occurring in public or private life, or hindrances to the use of their fundamental rights and freedoms[94]". Therefore, it should be understood as a '*continuum of violence against women*[95]', stemming from and encouraging several forms of offline violence. Cyber violence against women and young girls can take many different forms including cyber stalking, cyber harassment, cyber bullying, hate speech, trolling, image-based sexual abuse, non-consensual pornography and doxing. Existing forms of cyber violence and, specifically, gender-based cyber violence are continuously evolving and new forms are emerging over time. The UN Special Rapporteur on violence against women claimed that new technologies "*will inevitably give rise to different and new manifestations of online violence against women*[96]".

In detail, violations of privacy include image-based sexual abuse or exploitation, that means accessing, using and/or sharing private images or video content without consent through targeted communication or on social media platforms; doxing, that refers to the research, manipulation and publication of private information about an individual without their consent; impersonation, that means the theft of someone's identity to threaten or intimidate them or with the aim to discredit or damage their reputation; hacking, that relates to the interception of private communications and data, including via webcams; cyber-stalking, which refers to the spying or compiling of information about someone online and communicating insistently with them against their consent[97]. In addition, forms of harassment include cyber-bullying, that is repeated behavior using textual or graphical content with the objective of intimidating and degrading someone's self-esteem or reputation; threats of violence, such as rape or death threats or incitement to physical violence; sharing of sexual material without consent; mobbing that is targeted at someone to bully or harass through a hostile mob deployment, sometimes including hundreds or thousands of people; 'deepfake' pornography, that refers to the manipulation of digital images by including the faces of people who are not in the original image[98]. Lastly, hate speech include sexist/gender-based hate speech like expressions promoting or

[94] EPRS | European Parliamentary Research Service (2021, March). *Combating gender-based violence: Cyber violence, European added value assessment*. Retrieved from https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662621/EPRS_STU(2021)662621_EN.pdf
[95] *Ibid*.
[96] UN General Assembly (2018, 18 June). Report of the Special Rapporteur on violence against women, its causes and consequences on online violence against women and girls from a human rights perspective A/HRC/38/47, *Human Rights Council*, Thirty-eighth session. Retrieved from https://documents-dds-ny.un.org/doc/UNDOC/GEN/G18/184/58/PDF/G1818458.pdf?OpenElement
[97] *Supra*, note 57.
[98] *Supra*, note 57.

justifying hatred based on gender or on multiple characteristics such as gender and sexual orientation; posting and sharing of violent content by portraying women as sexual objects or targets of violence; using of sexist and insulting comments and public shaming when women express their own opinion and reject sexual advances. To conceptualize better imputed intentions, hatred in terms of gender-based violence is driven by bias or prejudices and gender hostility. It does not necessarily follow that all misogynistic offences are characterized in such terms, rather victims who reflected on their experiences of gendered abuse as a form of hate speech, considering the nature of intersectional identity, also noticed that not only their gender was connoted in the language and terminology used, but also their ethnicity or perceived sexuality[99].

The Economist Intelligence Unit revealed, through a survey[100] conducted in 45 countries across all age groups (18-64 years), that there are considerable regional differences in the spread of online violence against women. Specifically, women in Europe and North America experienced significantly less cyber violence (between 74% and 76%), compared to women in Asia Pacific (88%), Africa (90%) and Latin America (91%). The highest prevalence of gender-based online violence was found in the Middle East (98%).

According to the European Parliament, it is estimated that in 2020 cyber harassment and cyber stalking were the prevalent forms of gender-based cyber violence. In detail, 1 to 3% of women in EU experienced cyber stalking and 4 to 7% experienced cyber harassment in 2020, whereas 11% of women, 1 in 10, experienced one of the two scenarios in their lifetime since the age of 15[101]. Moreover, 90% of non-consensual pornography cases affected women. Online gender-based violence is expected to increase even more in the next years, mainly among young women. As mentioned in the analysis of EU Kids Online 2020, 22% of young girls is already exposed to non-consensual sexting, which can turn into cyberbullying, leading to 10% of suicides as a consequence of online hate speech[102]. In many different forms, violence and online abuse against women are an extension of violence and abuse against women offline. In this category, direct and indirect threats of violence,

[99] Lumsden, K., Harmer, E. (2019). *Online Othering: Exploring Digital Violence and Discrimination on the Web*, Palgrave Macmillan.
[100] Economist Intelligence Unit (2021). *Measuring the prevalence of online violence against women*. Retrieved from https://onlineviolencewomen.eiu.com
[101] EPRS | European Parliamentary Research Service (2021, March). *Combating gender-based violence: Cyber violence, European added value assessment*. Retrieved from https://www.europarl.europa.eu/RegData/etudes/STUD/2021/662621/EPRS_STU(2021)662621_EN.pdf
[102] Smahel, D., Machackova, H., Mascheroni, G., Dedkova, L., Staksrud, E., Ólafsson, K., Livingstone, S., and Hasebrink, U. (2020). EU Kids Online 2020: Survey results from 19 countries. *EU Kids Online*. Retrieved from https://doi.org/10.21953/lse.47fdeqj01ofo

such as physical or sexual threats, are included, given that they can have repercussions offline as well. Furthermore, the COVID-19 pandemic lockdown and restrictions considerably increased the risk of online gender-based violence, facilitated by the increasing use of digital tools and communication. The COVID-19 pandemic has led to significant increases in internet usage and consequently further increased women's vulnerability to online violence. The pandemic is associated with the emergence of new threat tactics, such as Zoombombing, that is a type of cyber-harassment in which an individual or a group of uninvited and undesired users interrupt online meetings over the Zoom video conference app without the host's permission, often for malicious purposes, such as sharing pornographic or hate images or shouting offensive language[103]. Since its outbreak, the COVID-19 pandemic has given evidence to intensify violence against women and girls, especially intimate partner violence, leading UN Women to define gender-based violence concern as the '*shadow pandemic*[104]'. At the same time, gender-based cyber violence has reached disturbing levels, although there were already high concerns before the pandemic. While the world's attention was focused on mitigating the rapid spread of COVID-19 and its socio-economic implications, the so-called 'shadow pandemic', that includes cyber violence against women, continued to grow exponentially, broadly exacerbated by the restrictive measures put in place worldwide. The similarities between online and offline gender-based violence extend to attempts to sexually degrade and disrespect women and girls. Indeed, levels of physical and sexual violence are correlated with gender-based cyber violence. As levels of physical and sexual violence increase, cyber-harassment and cyberstalking tend to increase as well. This suggests that countries featured by high levels of gender-based violence also tend to have higher levels of gender-based cyber violence, due to socio-cultural issues legitimizing physical and sexual violence, including incidents of gender-based cyber violence[105] (Fig. 1.13).

[103] Il Post (2020, 4 April). "Gli "Zoombombing" stanno diventando un problema, Internet. Retrieved from https://www.ilpost.it/2020/04/04/zoom-videochiamate-zoombombing/
[104] UN Women (2020). *The Shadow Pandemic: Violence against women during COVID-19.* Retrieved from https://www.unwomen.org/en/news/in-focus/in-focus-gen- der-equality-in-covid-19-response/violence-against-women-during-covid-19
[105] *Supra*, note 101.

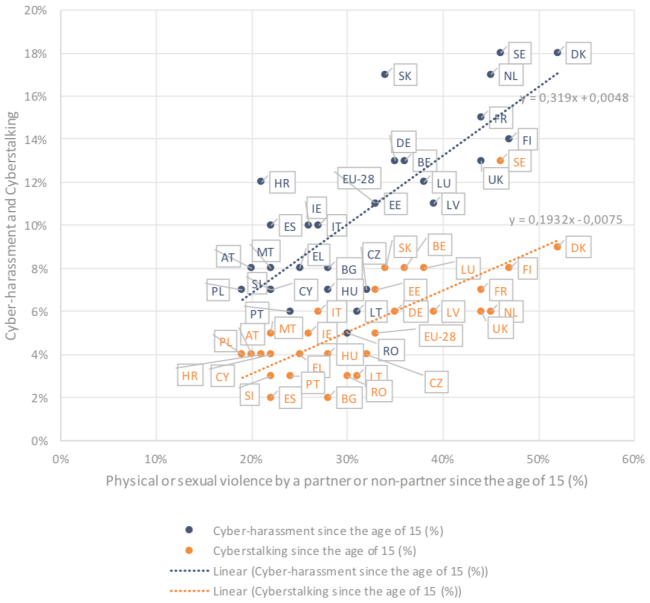

Fig. 1.13. *Physical and sexual violence vs. Cyber-harassment and Cyberstalking.*
Source: European Agency for Fundamental Rights, 2012 (EPRS, 2021).

The data from the survey conducted by the European Union Agency for Fundamental Rights' reveals a correlation between physical and sexual violence, psychological violence and cyber violence from a partner or ex-partner. Abuse of online dating is correlated with sexist views and justifications for violence. Digital technologies, by giving users access to the Internet, social networks and communication apps anywhere and at any time, have turned into a means of expressing sexist attitudes, including traditional stereotyped views of women and enforcement of control and power over them as a group[106]. Basically, this indicates that digital development can facilitate abusers in perpetrating psychological violence, alongside violence based on gender, reproducing the offline gender hierarchy, not only through digital gender gaps in terms of Internet access and usage, but also through domination and abuse of power. Girls and women are especially vulnerable to reputational harm when personal data, photos or videos are shared online, and this has turned into a point of power for offenders as social media platforms increase their capacity to harass and degrade partners[107].

[106] Peterson, J. & Densley, J. (2017). Cyber violence: What do we know and where do we go from here? *Aggression and Violent Behavior*, 34, 193-200. Retrieved from https://www.sciencedirect.com/science/article/pii/S1359178917300277?via%3Dihub#s0055

[107] Dragiewicz M., Burgess, J., et al. (2018) Technology facilitated coercive control: domestic violence and the competing roles of digital media platforms. *Feminist Media Studies*, 18(4), 609-625. DOI: 10.1080/14680777.2018.1447341

Gender-trolling[108] is another form of online violence that consists of using gender-based insults and pejorative terms against others based on their gender identity, often through the participation coordinated of numerous people, vicious language and rape or death threats. It is aimed at silencing women online or preventing them from being vocal on social media that has much in common with other offline forms of violence against women such as sexual harassment at workplace and street harassment, that have the objective to maintain control on women. The targeting of certain women reveals that hatred is addressed selectively towards women who step outside the expected social norms of traditional femininity. Hence, a key similarity between online and offline gender-based violence is the attempt to silence women and limit their active participation in public spaces, as a way of communicating to women that they do not belong in certain environments. There is additional concern that major exposure to gender-based cyber violence can normalize sexual harassment and gender violence, affecting the understanding of gender roles perpetuated by the former. Women often report that they almost consider cyber harassment and gendered hatred as an ordinary part of being online which can lead them to self-censorship in order to avoid potential abuses. Addressing and improving societal and cultural attitudes towards women online can reduce the amount of violent content. As well, there is the urgent need to take measures to prevent these forms of gender-based violence to reduce the risk of suffering online violence, rather than focusing on victims and holding them responsible.

2.2. Victims and perpetrators

Women and young girls, even more with intersecting identities, are the main targets of cyber violence and hate speech online. Particularly, women who express their viewpoints in digital spaces and women in power or within an environment stereotypically inconsistent with the female gender role are also much at risk of being victims of online abuse. Gender-based cyber violence and hate speech online have long-lasting psychological, physical and economic effects on the victims, their families and communities, affecting their agency, privacy, trust and integrity. On the other side, perpetrators are mostly men on social media and half of them are known to their victims. The FRA's European Survey on Violence Against Women[109] indicate that some forms of online abuse are primarily gender-, sexuality-, and age-based, with young girls being overrepresented as victims.

[108] *Supra*, note 99.
[109] European Union Agency for Fundamental Rights (2015). *Violence against women: an EU-wide survey*. Retrieved from https://fra.europa.eu/sites/default/files/fra_uploads/fra-2014-vaw-survey-main-results-apr14_en.pdf

Younger age groups are categories at higher risk of cyber violence, provided the prevalence of cyber harassment from which 20% among women aged 18 to 29 suffered, compared with 13% among women aged 30 to 39. Therefore, cyber-grooming is one of the most widespread cyber violence against underage women who are more likely to be victims than boys because it was found out that women, especially when they are adolescents and there are risk factors such as loneliness and low self-esteem, tend to use social media more intensively, chat more frequently with and trust strangers[110]. To point out, cyber-grooming means the attempt to establish a trust-based relationship between minors and usually adults using digital media with the aim to systematically solicit and exploit the victims for sexual purposes. The perpetrators exploit the need for attention and affection of their victims, along with the emergence of a natural puberty interest in sexuality and imbalance of power. For this reason, they choose to use social media platforms and chat rooms that are mainly popular by adolescents to get in contact easily with them. Adults target and manipulate minors into submitting explicit photos, which are then used to coerce the minor to provide additional explicit photos.

According to the Pew Research Center, among adults who declared to have been harassed online, almost half of women (47%) suffered from online harassment in 2021[111]. Considering other demographic differences, it follows that black (54%) and Hispanic (47%) people are more likely to be targets of online harassment due to their ethnicity, compared to white people (17%), and likewise people belonging to the LGBTQ+ community (50%) have been harassed online because of their sexual orientation and are more likely to report online harassment because of their gender, differently from people that do not belong to it (17%).

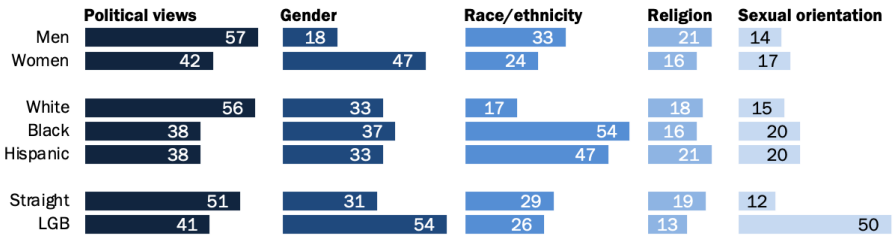

Fig. 1.14. *Among the 41% of U.S. adults who have personally experienced online harassment*

Source: Pew Research Center, 2021.

[110] Wachs, S., Wolf, K. D., Pan, C. (2012). Cybergrooming: Risk factors, coping strategies and associations with cyberbullying. *Psicothema 2012*, 24(4), 628-633.

[111] Pew Research Center (2021, January). *The State of Online Harassment*. Retrieved from https://www.pewresearch.org/internet/2021/01/13/the-state-of-online-harassment/

Taking into account the intersectional dimension in gender-based cyber violence, it is noteworthy to observe the 'multiplicative effect' of discrimination and violence online, that can be inevitably stronger towards non-heterosexual and transgender women, as well as women from ethnic minority or different religious groups, damaging their social integration. Based on a recent study by Plan International[112], 42% of LGBTQ+ people, especially lesbian, bisexual and transgender women, interviewed globally indicated they have experienced harassment because of their gender or sexual orientation. Substantially, the more gender norms and traditional beliefs are challenged by individuals, the more likelihood to be experience online hate speech and attempt to be silenced in the digital world.

Even though both women and men can be victims of cyber violence, women and people belonging to social minority categories are more likely to be targeted for specific forms of digital violence, that stem from socially and constructed beliefs and cultural attitudes concerning gender and sexuality, including victim blaming[113]. Cyber violence significantly impacts women from ethnic and racial minority groups. Race and gender are not merely issues of representation and performance; they are also closely related to social power systems. The latter that put certain people in positions of authority and oppresses others is maintained by patriarchy and white supremacy. It is suggested also from international research[114] that women from different religious communities are also more likely to experience forms of discrimination and violence online, due to a limited representation online that lead to silence them and erase their online participation to discussions. Cyberspace is constructed in a way that gives dominant groups more power over less privileged social groups based on factors such as gender, color, religion and ethnicity, which is similar to how society structures in physical space are structured. Users' profiles are shaped by digital technology to represent their ideologies and interests and to limit the amount of information they see. Thus, they will inevitably establish links with like-minded individuals online because digital spaces and networks frequently gather individuals who have a similar viewpoint. This causes the users' virtual environment to narrow as they surround themselves with other individuals that share the same ideologies and end up engaging in intergroup comparison and competition, identifying with ingroups, based on a variety of factors such as gender, religion, ethnicity and so on. As the social environment in which the Internet was developed was

[112] Plan International (2020). *Free to be online? Girls' and young women's experiences of online harassment*. Retrieved from https://plan-international.org/publications/freetobeonline

[113] It occurs when the victim of a crime or any wrongful act is held entirely or partially at fault for the harm that befell them.

[114] Amnesty International (2020). Chapter 2: Triggers of Violence and Abuse Against Women on Twitter, *Toxic Twitter.*

heavily influenced by androcentric and exclusionary ideologies, technological advancements have led to the creation of a new area for interaction and communication known as the cyber space, which offers new ways for the spread of hate and prejudices, alongside the reproduction of social hierarchies already existing in the physical world.

Furthermore, it is not necessary for victims of online abuse to be active internet users as they can be the object of depiction, through the non-consensual sharing of private materials or online sexual trafficking. Given that young adults aged between 18- and 29-years old the demographic groups to experience that is the most targeted for online harassment at least once (65%), young women aged between 18- and 24-years old not only are more likely to be victim of online harassment, but they are also more likely to experience specific severe types of cyber violence at disproportionately high levels, such as cyber stalking and online sexual harassment[115] (Fig. 1.15.).

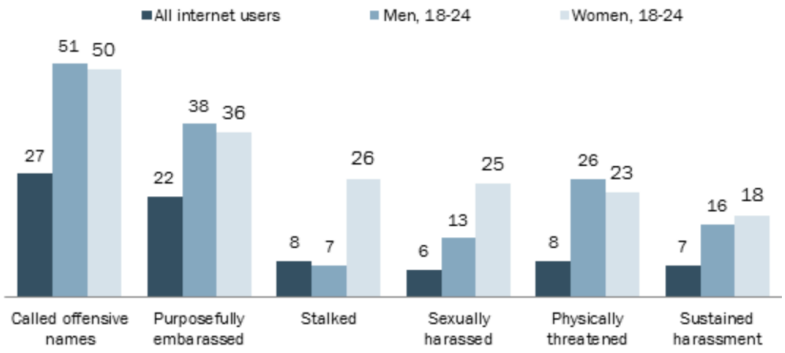

Fig. 1.15. *Among all internet users, the % who have personally experienced specific types of online harassment by gender and age*.

Source: Pew Research Center, 2014.

In general, the prevalence of sexual harassment decreases with age, with the lowest rate of occurrence among women aged 60 years old or over, probably due to more experiences during their lifetime and social stereotypes degrading older women. At the same time, the younger the age is, the more likelihood to make use of various digital media and to spend more time online, increasing the probability to be exposed to harassment. Young people and adolescents are at the forefront of the adoption of new technology. Once a large part of the population has access to the digital dialogue everywhere with anyone, using digital practices increases the possibility of being exposed to cyber interpersonal violence. The use of digital tools helps teenagers' social interactions in a variety of

[115] Pew Research Center (2014, October). *Online Harassment*. Retrieved from https://www.pewresearch.org/internet/2014/10/22/online-harassment/

ways, but it also exposes them to more interpersonal intrusion, increasing their risk of online harassment, cyberdating abuse, cyberstalking and other forms of cyber violence.

According to the data collected by FRA[116], in the majority of cases of sexual harassment experienced by women since the age of 15, the perpetrator turns out to be an unknown person (68%), followed by someone closer to the victim (35%) or from the employment context (32%). Indeed, the most common forms of sexual harassment committed by an unknown perpetrator since the age of 15 are indecent exposure (83%) and cyber harassment (73%) including inappropriate advances on social media platforms or sexually explicit emails and messages. However, there is still little-known concerning their common demographic characteristics because of the nature of harassment that allows anonymity and low traceability, apart from the fact that the majority of victims of online sexual harassment since the age of 15 (71%) indicated that the perpetrators were usually lone men or groups of men with a public and performative scope[117]. Moreover, there are also commonalities between the characteristics of those who commit both offline and online violence. As is generally known that violence against women is often committed by known perpetrators to the victims, showing existing risks in both public and private settings, victims stated that their attackers were known to them or members of their online community, even via anonymity. As a matter of fact, most forms of online harassment occur on social media platforms. Conforming to the Pew Research Center survey 2021[118], 75% of targets of online abuse revealed that they have experienced harassment on social media, compared to smaller shares of online forums, texting or messaging apps, online gaming, personal email account or a dating site or app. In all, 41% of targets of online harassment declared that their most recent experience of harassment occurred in multiple online locations.

Abuse of women is considerably more likely to occur if they have cognitive or intellectual disabilities. Inadequate protections and support for women from technology businesses and other digital entities contribute to their exclusion, as does the use of technology to harm women with intellectual and cognitive disabilities[119]. Women lost faith in platforms, online platforms and services when technology is weaponized in ways that makes them feel threatened. Because of their worries about potential behaviors, risks or threats, many women simply stop using digital technologies. As a result, technology-enabled abuse served to limit women's access to a variety of venues and media while also

[116] *Supra*, note 109.
[117] *Supra*, note 109.
[118] *Supra*, note 111.
[119] Woodlock, D. & Harris, B. (2022) 'You have to be really careful': technology and the abuse of women with intellectual and cognitive disabilities. *Disability & Society*. DOI: 10.1080/09687599.2022.2114886

limiting their ability to navigate, interact with and enjoy those spaces and media. Male partners and ex-partners were the most common abusers reported by practitioners and women, in keeping with other research on technology-facilitated abuse. However, abusers could also be parents, kids, friends, caregivers, service providers and strangers. For women with cognitive or intellectual disabilities, there are numerous and major obstacles to safety. Limited smartphone use and poor internet connectivity have been especially noted as having an influence on people with cognitive disorders. There is yet little proof of the appropriate assistance that would allow them to engage in the digital society freely and safely.

The most relevant demographic factor found out and highlighted by research underlying the risk to be exposed to cyber violence is gender and its social dynamics. For what concerns other factors such as educational attainment and age, the correlation with perpetration of cyber violence and victimization of online abuses is regarded to be not strong enough. By the way, it was found out that educational attainment can be considered as a predictor of sexist beliefs, hence, the more educated, the less likely to endorse sexist beliefs[120]. More research should be done on demographic factors, especially regarding perpetrators, and intersection between gender and other demographic characteristics as concerns the victim. Thereby, traditional gender norms may enhance the likelihood that women would experience violence. Exploring cyber victimization reveals the gender inequalities in online experiences more clearly. Young women are under pressure to conform to social norms once they join social media platforms, which includes perception of their appearance and activities online[121]. Women are frequently portrayed in digital media as sexual objects. As they are socially associated with the duty of giving men sexual pleasure by their physical attractiveness and sexual accessibility, they end up also being perceived as sexual objects. In the instance of female sexual objectification, women are diminished to individuals whose sole purpose is to satisfy the sexual desires of males. Men's perceptions of women become increasingly objectified as they are exposed to more objectifying representations and this dehumanized view of women subsequently promotes and shapes attitudes about violence against women[122]. As a result, in the world of social media, women must deal with gender norms of privacy and publicity that draw attention to the uniqueness of their look and expose them to criticism and condemnation from the general public. The rise of

[120] Glick, P., Lameiras, M. & Rodriguez Castro, Y. (2002). Education and Catholic Religiosity as Predictors of Hostile and Benevolent Sexism Toward Women and Men. *Sex Roles,* 47(9/10).
[121] Bailey, J. (2015). A perfect storm: how the online environment, social norms, and law shape girls' lives. In J. Bailey and V. Steeves (eds). *eGirls, eCitizens*. Ottawa: University of Ottawa Press.
[122] Wright, P.J., Tokunaga, R.S. (2016). Men's Objectifying Media Consumption, Objectification of Women, and Attitudes Supportive of Violence Against Women. *Archives of Sexual Behavior,* 45, 955–964. Retrieved from https://doi.org/10.1007/s10508-015-0644-8

sexual harassment and abuse, gender trolling, misogyny and other violent behaviors directed at women points to a repetition of existing gendered power dynamics in online environments. Thus, social media reinforces gender inequality that exists offline as power dynamics established in face-to-face interactions and other offline settings are reflected in digital technology (i.e., representations in the mass media, work-place hierarchies, romantic relationships, harassment). Online abuse is considered to be a continuation of oppressive power structures, such the systemic gender disparity in society. Feminist online activists and other women in the workforce who are visible on social media must deal with these power structures' digital manifestations. Because of the dominance of men in the public arena, which carries over to online areas, women bloggers appear to endure significant amounts of online harassment and abuse. The reproduction of power dynamics between men and women is thus demonstrated through backlash effects against women in online spaces. According to recent study on online communication[123], these backlash effects happen when women speak out in semi-public or public settings, such as when they are journalists or scholars, or when they act agentic or dominant in online dialogues.

As the foundation for cultural norms, which are the different fundamental everyday social guidelines for appropriate behavior in society, it is usual practice for people to passively accept ordinary societal beliefs and activities as standard. Cultural norms, on the other hand, are biased and gendered, with different norms that apply depending on the person's gender category. For instance, each of the gender categories of men and women has its own gendered norms that are based on the social constructs of masculinity and femininity, respectively. To properly comprehend and explain how gender-based violence is promoted and allowed in society as well as how to address the issue from a social, as opposed to an individual, perspective, cultural norms shall henceforth be referred to as gendered cultural norms[124]. The socialization process, which entails establishing the various gendered cultural norms for appropriate conduct while tolerating abusive behavior, is the foundation for the maintenance of gendered cultural norms. A variety of significant socialization agents play a role in influencing, changing and regulating a person's behavior. In addition to providing for a child's fundamental needs, parents are the first and most crucial persons with whom a child interacts because they lay the groundwork for gender-appropriate behavior[125]. By acting aggressively and dominating other boys and girls, young boys learn what it means to be a man, which frequently leads to the

[123] Wilhelm, C. (2021). Gendered (in)visibility in digital media contexts. *Studies in Communication Sciences*, *21*(1), 99–113. Retrieved from https://doi.org/10.24434/j.scoms.2021.01.007
[124] Ryle, R. (2012). *Questioning gender: a sociological exploration*. California: Sage Publications.
[125] Adams, M., & Coltrane, S. (2005). Boys and men in families: the domestic production of gender, power, and privilege. In M.S. Kimmel, J. Hearn, & R. Connell (Eds), *Handbook of studies on men and masculinities*. California: Sage Publications.

rejection of aggressive conduct as "boys will be boys". Since aggression and dominance are not seen as negative attributes and some men believe they will not be punished, the "boys will be boys" perspective of violent male conduct continues into later life when males sexually abuse women. Young girls, on the other hand, are taught to pay attention to their beauty and accept that the gender-based limitations imposed on their independence are in place to protect them[126]. The process of socialization continues throughout all of the different social contacts and circumstances that people come into contact with throughout their lifetime. It does not terminate when children reach adulthood. Individuals perform gender in social contexts and hold each other responsible for transgressions of gender norms and expectations through the ongoing process of gender formation and participation. Accountability for compliance takes the form of humiliation, mockery and insults, and, in some cases, it also involves using physical force or threatening to use it.

Women and men face distinctly gendered stresses, and these forces are gendered. Participation and interactions in both real and virtual spaces involve "performing gender" and obligation to follow particular gendered standards. A hierarchical divide exists between the gendered cultural standards of "masculine" and "feminine", with the attributes of the former being viewed favorably and conferred higher status than the latter. Fundamentally, male identities are created in opposition to feminine traits and are required to include qualities such as independence, assertiveness and dominance[127]. Young men may become aggressive toward other young men and violent toward women as a result of the various threats to their masculinity. The fear of losing one's manly status due to criticism from other male peers is a component of informal social control evident in challenges to masculinity. Abuse and control prevent status loss and such acts of dominance and control over women frequently receive group support and a solid masculine status[128]. Rape myths play a significant role in the so-called "rape culture", which encourages and justifies various forms of male violence against specific women as "normal" and "expected" and which also serves a controlling purpose by implying that specific women are to blame for male sexual aggression and can anticipate being victimized if they do not adhere to particular gendered rules[129]. It is suggested in the literature on controlling women's behavior that male violence against women is committed as a patriarchal weapon to uphold control and domination over women. Fear can be used to subtly regulate the

[126] Kimmel, M.S. (2000). *The gendered society*. New York: Oxford University Press.
[127] Messerschmidt, J.W. (2005). Men, masculinities, and crime. In M.S. Kimmel, J. Hearn, & R. Connell (Eds), *Handbook of studies on men and masculinities.* California: Sage Publications.
[128] DeKeseredy, W.S., & Schwartz., M.D. (2013). *Male peer support and violence against women: the history and verification of a theory*. Boston: Northeastern University Press.
[129] Lonsway, K. A., & Fitzgerald, L. F. (1995). Attitudinal antecedents of rape myth acceptance: A theoretical and empirical reexamination. *Journal of Personality and Social Psychology, 68*(4), 704-711.

conduct of women in such a way that those who dread sexual assault are more prone to adopt preventative avoidance strategies, like refraining from engaging in social and public spaces and restricting activities within areas regarded as safe[130].

Similar to physical space, men in cyberspace feel pressured to make sure they are presenting a proper masculine identity. However, unlike physical space, cyberspace provides new opportunities for known and unknown people to subject others to methods of informal control, such as harassment and threats. The gendered expectations and institutions that exist online mirror those that exist in physical space when it comes to displaying aggressive behavior. Numerous aspects that affect how people perceive gender violence have been identified by research. The scholars Temkin and Krahé divided them into four categories: situational factors, like the type of previous relationship between aggressor and victim, variables related to the victims, such as transgression of traditional gender roles, attractiveness or clothing, characteristics of the perpetrator, such as reputation or physical appearance, and variables of the perceiver or person who makes the judgement, like sexist attitudes[131]. Given the significance of social views in how people respond to gender violence, sexist attitudes are the result of a set of views about the traits, roles and actions that are appropriate for men and women. They frequently place the onus on the victim, defend the attacker and downplay the psychological harm caused by aggression. In this regard, sexism has been linked to acts of gender violence in both youth and adulthood and may lead to justify and promote cyber violence against women.

With respect to the digital gaps based on gender mentioned in the previous chapter, it is important to mention that the lower level of digital literacy among women prevents them from adequately defending themselves or decreasing the likelihood to be exposed to cyber violence through major awareness of risk factors. At the same time, the risk to be exposed to cyber violence and the experience itself of suffering from it do not help to fulfill the digital gaps, as the main targets' sociodemographic profile mostly consists of social minority groups that have already been left behind and, additionally, are refrained from fully participating to online spaces and benefiting from them, while the perpetrators' profile correspond to the dominant social groups who had the advantage to follow the path of technological development.

2.3. The facilitated-technology effects on gender-based violence

[130] Ging, D. & Siapera, E. (2018) Special issue on online misogyny. *Feminist Media Studies*, 18(4), 515-524. DOI: 10.1080/14680777.2018.1447345

[131] Temkin, J., & Krahé, B. (2008). *Sexual assault and the justice gap: A question of attitude.* Hart Publishing.

Since violence is used to preserve and strengthen the dominance of the male position over the female one in social institutions, cyber violence against women, when considered in the context of gender-based violence, shares characteristics with other forms of violence against women. Henceforth, some characteristics may be noted to emphasize the particularity of this kind of violence against women and girls. First, it is important to recognize the easy access to anonymity made possible by the increased use of digital tools. Second, abuses can be committed by anyone, whether an acquaintance or a complete stranger, without a physical presence being required. Thirdly, individuals are facilitated to commit online abuse as they do not need to own any technological expertise to check the victims' mobile phones and monitor or limit their social media activities, infringing their right to privacy[132]. The ability to assault women from a distance makes it easier for offenders to perform online violence with fewer chances of being caught and prosecuted than if they had committed violence offline. Disseminating harmful and misogynistic information about women is easy to do and frequently has no particular risks to the perpetrators. The last characteristic of this new form of violence is its digital permanence, which means that both the removal of offensive content online and the detection and prevention of its further dissemination are practically impossible. Furthermore, since it is difficult to remove abusive content from the Internet permanently, victims will certainly suffer long-term repercussions due to the information that is published online potentially compromising their present and future status in both their personal and professional lives. Substantially, digital technologies by their nature itself have several advantages that make them ideal for serious offences[133]. From a distance, it becomes considerably more difficult to identify the harasser and to take action against them because anonymity might increase a victim's stress level and remove direct accountability for actions. Anyone owing a mobile phone can photograph, upload, and share pictures or videos, that can be freely replicated, saved and republished, even by means of automated services. Additionally, some technologies are capable of capturing information about a person's precise location. Most of the time, people are unaware of how to defend themselves from such violations. Software developers, internet service providers, and telecommunications firms should all safeguard the security, privacy, and safety of their customers, as well as governments must make sure that laws and policies address these emerging types of violence. A perpetrator can easily keep track of a victim’s movements or to distribute explicit photos of a partner thanks to the conveniences provided by advances in technology, which make them affordable and enable automated services, like GPS location tracking, facial recognition and so on. Domestic abusers also monitor, track, threaten and inflict violence through the use of digital tools, implying that cyber

[132] Hubbert, J. (2022, February). The Rise of Dehumanization on Social Media, *The Peace Project*. Retrieved from https://thepeaceproject.org/the-rise-of-dehumanization-on-social-media/
[133] Cyber Safe (2020). *Cyber Violence against Women & Girls Report*.

violence can coexist alongside physical violence and escalate to it if it is not addressed at an early stage. A continuation and extension of these and other types of violence against women in abusive relationships is considered to constitute cyber violence. As a result, victims end up feeling permanent stress and extreme emotional exhaustion in their daily lives. The issue of facilitated-technology effects is concerning not because these activities necessarily result in new damages, but rather because they are deceptive and challenging to address due to their scope, nature and endurance as well as the current limitations in victims' access to legal remedy.

Important to realize, although being socially active has many advantages for an individual, it can also affect how other individuals are perceived. Being socially connected to close others satisfies the need for social connection, while alienating from people who are more distant. Despite of having a strong sense of social connection, people may be less tolerant of those who are more socially distant from them. People who need to feel connected to others turn out to be less likely to attribute humanlike mental states to members of different social groups, especially those who are distant from them compared to those who were close to them, and they are more likely to take actions for harsh treatment for those who are dehumanized. Mass violence and hate crimes have a long history of being associated with dehumanization, and modern media, where anything can be spoken and distributed with the press of a button, has permanently transformed the way dehumanization is spread. Dehumanization can be covert when negative stereotypes about a group are used, or it can be overt when a group is fully deprived of all human characteristics and labeled as animalistic or inhuman. When one group feels threatened and thinks its beliefs, resources, or identity are in danger from another group, dehumanization of that group frequently occurs. Spreading offensive words, images, and concepts is now simpler than ever. Negative stereotypes, language and ideas have been conveyed quickly and effectively through social media. In this regard, the sense of identity of an individual and social media can be exploited to dehumanize entire social groups. Online networks like Twitter, Tik Tok, Facebook, 4chan and Reddit have all been used to promote dehumanizing language, beliefs, and attitudes. It happens in online message threads, comments and status updates. There are many more factors contributing to the rise of dehumanization on social media in addition to the absence of moderation on social media platforms. The ubiquity of echo chambers[134] online and the feeling of anonymity that a social media platform can offer are two of the most relevant. As most people are aware, social media platforms employ algorithms to provide an appealing and engaging experience for the user. These algorithms look at the content that gets the most likes, comments, and viewing

[134] It is an environment in which a person encounters only beliefs or opinions that coincide with their own, so that their existing views are reinforced, and alternative ideas are not considered.

time. The items you are most likely to see frequently are the things you like and comment on the most. As a result, there are now social media groups with similar opinions, convictions, and ideals, or the so-called echo chambers. People may feel more at ease using racist, homophobic, or violent words in an online echo chamber because they are likely to have a large number of supporters and viewers and will not likely experience negative reactions[135]. The widespread use of degrading language is also largely due to the anonymity of social media, where users can disguise their real name, face and other biographical information. By distancing themselves from it, this enables people to commit online harassment without worrying about the repercussions.

Thereby, real-world repercussions also result from the dehumanization that is rapidly spreading on social media, leading to more risk of suppression of and violence for the targeted groups. Dehumanization in public discourse is frequently solely associated with its behavioral effects, such as hostility, rather than with its distinctive psychological characteristics. Psychologically speaking, it is the absence of core human attributes, relating to others in a way that assumes they are incapable of higher-level thought or conscious knowledge and experience[136]. In addition, people dehumanize others by denying them their secondary emotions, which are the ones that call for higher order mental abilities like self-reflection, retrospection and prospection, and conceiving them as objects. According to the objectification theory, women can be objectified when their uniqueness and personality are downplayed, and they are seen as goods or objects to be used as a means of production, which makes it a unique sort of dehumanization. It was shown that the majority of sexually objectified women experience dehumanization and sexual abuse[137]. Women who are objectified are denied humanity and moral standing, and both men and women are capable of participating in this practice. The dehumanization of sexually objectified female targets is positively connected with both women's ambition to seem beautiful to males and the internalization of societal beauty standards, and both linkages were mediated via self-objectification. De-mentalization, or failing to understand others' mental states, is a component of objectification. Dehumanization is a subtle form of bias in which members of the ingroup are seen as having full human rights while members of the outgroup are seen as having fewer rights. It has been found to sometimes have tragic outcomes such as incentivizing and legitimizing violence and harassment, even more by taking advantage of the distance through

[135] Harel T.O., Jameson, J.K., Maoz I. (2020, April). The Normalization of Hatred: Identity, Affective Polarization, and Dehumanization on Facebook in the Context of Intractable Political Conflict, *Social Media + Society*. Retrieved from doi:10.1177/2056305120913983
[136] Waytz, A., Epley, N. (2012). Social connection enables dehumanization, *Journal of Experimental Social Psychology*, 48, 70-76. Retrieved from DOI: 10.1016/j.jesp.2011.07.012
[137] Boccato, G., Trifiletti, E., Dazzi, C. (2015, September). Machocracy: Dehumanization and Objectification of Women, *TPM*, 22(3), 429-437. Retrieved from doi:10.4473/TPM22.3.8

digital technology. Women are objectified when their bodies are treated as commodities and their thoughts are ignored, which is one way in which they are dehumanized in the various media.

2.4. The threats of cyber violence to young girls and women's well-being and safety

Provided that online forms of gender-based violence stem from socially constructed beliefs and stereotypical behaviors in relation to gender and sexuality and the willingness of perpetrators to exercise power and control, digital technologies serve as a means to perpetrate forms of gender-based violence, with different implications and effects, encouraged by the possibility of anonymity, the shortcomings of regulations, the speed and wider reach of the internet connection. Indeed, technology-facilitated gender-based violence refers to a series of behaviors related to the use of digital tools facilitating both online and offline sexual harassment. Digital communication can have an amplifying effect on online harassment through the increase in the visibility of content within social media platforms that widens the reach of the audience who might engage in negative attitudes. Websites enabling anonymity and pseudonymity also facilitate the *online disinhibition effect*, according to which people tend to separate their 'real" identity from their online behavior and correspondent negative actions[138].

However, the persistence of online harassment against women has several impacts on their daily physical and mental safety, especially in the case of public sharing of sensitive content, whose spread cannot be controlled and might be instrumentalized to perpetrate misogynist behavior through the labelling of women with pejorative terms and the blaming of the victim of such actions. Cyber violence has a direct impact on the victims that goes beyond the digital world, starting from psychological repercussions such as stress disorders, depression, discomfort with their body image and high levels of anxiety[139]. A form of sexual harassment referred to as image-based abuse has been linked to significant degrees of discomfort, despair, substance abuse, and PTSD symptoms in its victims. What was once transmitted to a limited group now achieves an unpredictable, far broader range immediately by posting it online, according to the authors, who claim that social media platforms like Facebook, Instagram, etc. Online abuse has substantial effects, much like offline

[138] Henry, N., Powell, A., (2018). *Technology-Facilitated Sexual Violence: A Literature Review of Empirical Research. Trauma Violence Abuse*, 19(2), 195-208. Retrieved from doi:10.1177/1524838016650189
[139] UN Women (2021). *Online and ICT facilitated violence against women and girls during COVID-19*. Retrieved from https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2020/Brief-Online-and-ICT-facilitated-violence-against-women-and-girls-during-COVID-19-en.pdf

violence. Both can, at their worst, cause PTSD symptoms, especially if the victim has had previous abuse that is triggered. The abuse's impact is characterized by its frequency. According to scholars[140], victims of high-frequency abuse are more likely to describe it as traumatic, indicating that far than lessening the severity of its consequences, frequency actually makes them worse. Even though coping mechanisms may cause women to talk of it as inconsequential, the systematic, everyday nature of online harassment means that for some women, it accumulates to feel like the '*wallpaper of sexism'* adding to its harm.

Furthermore, impacts can be regarded as both social and economic: from withdrawal from public debate to costs incurred for legal research and health care, the impact on the labor market in terms of reduced labor presence, the risk of job loss or lower productivity and reduced quality of life due to issues of mental health. Some of these impacts aggravate other forms of discrimination faced by women, such as the gender pay gap in the labor market, the deprivation of liberty and privacy and, in worst cases, the continuum of offline abusive actions or of online abusive actions leading to the attempt or committing of sexual harassment in public spaces[141]. Thus, online gender-based violence has become a new security threat with regard to the safety and inclusion of women in the cyber space, which sometimes can also be extended to the intimate partner violence.

Compared to the European Parliamentary Research Service's study, Plan International widened the survey area, revealing a much worse general picture of 2020: 58% of the women surveyed, almost 3 out of 5, distributed in several continents, suffered at least one of the types of cyber violence[142]. The majority was attacked on social media platforms such as Facebook (39% of cases), Instagram, WhatsApp, Snapchat, Twitter, Tik Tok. About 1 in 5 women have stopped attending social media or have profoundly changed the way they use them[143]. Given the crucial importance of internet platforms for social and working life today, women have found themselves at a considerable disadvantage in security within digital environments on the basis of gender. Rising levels of online violence can restrict or alter women's use of digital platforms and access to online services. Accordingly, it has been shown that social media users experiencing online gendered hate speech have progressively decreased interactions and content sharing, particularly when related to feminism or non-compliance with traditional gender norms as well as when performing activities within or speaking about domains socially attributed to and traditionally dominated by men, such as politics, journalism, sports,

[140] *Supra*, note 99.
[141] *Supra*, note 101.
[142] *Supra*, note 112.
[143] *Ibid*.

cybersecurity, foreign policy and so on[144]. As a result, the increase in gender-based cyber violence tends to produce a silencing effect on women's active participation in online public discourse by frequently leading them to self-censorship[145]. The global impact of such online abusive behaviors poses a democratic and national security challenge in so far as they involve a risk not only for the achievement of gender equality, but also for the health of democracy itself. The main targets of social media platforms are female journalists, activists, scholars and politicians whose gender stereotypes happen to be exploited by adversaries, inducing them to be less prone to choose to participate in public debate and discussion and, at the same time, promoting misogynist beliefs that continue to be perpetrated offline. In 2020, it has been found out by UNESCO that 20% of women journalists have experienced physical abuse and assault linked to online attacks that they received. Consequently, 17% of women belonging to the main targets victimized online reported they had started to feel physically unsafe due to online attacks and a small percentage even reported that started to miss work as a result of the risk of digital attacks potentially leading to physical abuses[146]. The threat to be subjected to the latter has also led many targeted women to increase their physical security, decrease their involvement in politics and public discourse and even withdraw their research after getting threats for doing so on particular subjects, unfortunately maintaining gender inequality in representation in several public fields. This not only invalidates a woman's contribution to a crucial field, has an impact on their reporting, and increases public mistrust of the media. The diversity of voices covering these problems may be impacted by the potential exclusion of women from journalism or from reporting particular issues.

In addition, it has been acknowledged the existence of a nexus between gendered and sexualized harassment and disinformation online, whose use against nation states, politicians and racial minorities can be regarded as a weapon of political influence, as was the case of misleading information against women candidates to U.S. Presidential elections like Hilary Clinton, or of malign foreign actors, such as Vladimir Putin, that take part in organized campaigns aimed at discrediting women and discouraging them from participating freely and working in the public sphere. Deep-fake, fabricated and non-consensual pornographic images and videos are mainly used as a means to

[144] Döring, N., Rohangis, M. (2020). *Gendered hate speech in YouTube and YouNow comments: Results of two content analyses*. Studies in Communication and Media, 9(1), 62-88. Retrieved from https://www.researchgate.net/publication/340309950_Gendered_hate_speech_in_YouTube_and_YouNow_comments_Results_of_two_content_analyses

[145] *Supra*, note 139.

[146] Posetti, J., Aboulez, N., Bontcheva, K., Harrison, J., & Waisbord, S. (2020). Online violence Against Women Journalists: A Global Snapshot of Incidence and Impacts. *UNESCO*. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000375136

manipulate public opinion concerning female public figures and to cause silencing and permanent withdrawal from certain online communities[147].

In order to protect their loved ones or avoid disclosing any embarrassing information, victims may choose to distance themselves from their friends and family. The influx of insults and abusive language from both Internet users and their peers can make victims feel alone and make it more difficult for them to ask for aid from others. Non-consensual pornography survivors reported having problems with trust, PTSD, anxiety, sadness, loss of control and low self-esteem. In order to cope with their feelings of grief and despair, many women also developed unhealthy coping strategies, such as binge drinking, denial, fixation with the occurrence, and self-medication. Contrary to non-consensual pornography, doxing does not always require the publication of graphic photographs or videos on open forums. However, revealing personal information online can still make a victim vulnerable to trolling, cyberstalking and other negative effects. Doxing victims may experience severe anxiety when they wonder who has access to their information and when they face harassment or abuse as a result of the revelation. Once an abuser confesses to knowing the victim's home address, other victims could decide to physically retreat. Avoiding leaving one's house can significantly lower one's productivity at job or in school. The FRA research indicates that the effect of cyber-violence on a person's capacity for concentration is more severe. According to the Amnesty International report[148], 56% of respondents from eight different nations said that cyberbullying had interfered with their ability to concentrate. According to the FRA survey, 12% of victims of physical abuse and 21% of victims of sexual assault by a partner had trouble concentrating.

Besides, women tend to be targeted for criticism when they voice their thoughts on discussion sites. Existing studies support the idea that women withdraw from public spaces to protect their safety, a phenomenon known as the 'silencing effect'. For instance, Amnesty International observes that social media platforms have expanded many people's access to information while also serving as a key area for individuals to practice the right to freedom of expression. On the other hand, while participating in these places, women and marginalized groups frequently experience severe abuse, which discourages them from interacting with other users or exercising their right to free speech. In

[147] Jankowicz, N., Hunchak, J., Paviluc, A., et al. (2021). Malign Creativity: How Gender, Sex, and Lies are Weaponized Against Women Online. *Wilson Center*. Retrieved from https://www.wilsoncenter.org/publication/malign-creativity-how-gender-sex-and-lies-are-weaponized-against-women-online

[148] Amnesty International (2017). *Amnesty reveals alarming impact of online abuse against women*. Retrieved from https://www.amnesty.org/en/latest/press-release/2017/11/amnesty-reveals-alarming-impact-of-online-abuse-against-women/

a research conducted by Amnesty International, almost 76% of the women who reported experiencing online harassment said they had altered how they used social media, with 32% saying they had ceased publishing their opinions on particular topics. Given that 24% of these women reported feeling threatened for their family's safety due to the violence, it is possible that some women self-censor to keep others safe. In addition, according to EIGE data[149], 51% of young women and 42% of young people are unwilling to take part in online discussions because they have experienced harassment. This suggests that the targeted harassment of women in online spaces is excluding them from some conversations, which in turn affects the distribution of voices using online platforms. Since sexist stereotypes continue to influence how people view power, the distribution of labor, sexuality, families, and other facets of society, when women express their opinions online, use technology to change the way they live their personal and professional lives, engage in politics, or simply use the Internet for pleasure, they are upending a long-standing system of repression.

Nonetheless, there is a lack of material made by women to engage other women and motivate them to stay online and create content themselves since fewer women feel comfortable online, which makes them less likely to create content. On the grounds of research already conducted, women may be discouraged from participating in democratic life as a result of online harassment. According to a number of studies, women who actively engage in public life are twice as likely to experience harassment than their male counterparts. The Inter-Parliamentary Union published a study[150] in October 2016 to gauge the level of sexism, harassment, and violence experienced by female lawmakers. Parliamentarians who participated to the study indicated that social media was increasingly where they were exposed to violence meant to undermine their psychological well-being. In line with the Inter-Parliamentary Union research, women who fought for women's rights in nations where those rights were not completely realized were the targets of the abuse the most frequently. Based on the survey, 80% of those who experienced harassment said that it made them more dedicated to their jobs and did not prevent them from running again. However, the research qualifies this conclusion by citing other national researches that have come to the exact opposite conclusion. It draws attention to a Swedish survey that found that one-third of Swedish local-level female politicians said they wanted to resign because to these incidents. The third relates to the use of technologies, whether by means of deception, false identity or other strategies, to recruit and arrange for a third party to sexually abuse a person.

[149] EIGE (2018). *Cyberbullying restricts young women's voices online*. Retrieved from https://eige.europa.eu/news/cyberbullying-restricts-young-womens-voices-online

[150] Inter-Parliamentary Union (2016). *Sexism, harassment, and violence against women parliamentarians*. Retrieved from http://archive.ipu.org/pdf/publications/issuesbrief-e.pdf

Lastly, there are also a number of negative economic effects associated with these types of violence, which can be categorized into three main categories: the cost of seeking help, which includes legal and healthcare expenses; labor market effects, such as decreased employment and productivity; damage to careers, including through the negative effects of social media withdrawal; and decreased quality of life as a result of poor mental health. The immediate costs of seeking assistance and protection include legal fees, medical expenses, but they may also include moving expenses and the cost of digital protection devices if personal information is disseminated abusively. A deterioration in mental health has an influence on work productivity and absences, and victimization by cyberviolence can also have an impact on women's employment and labor market involvement. Non-consensual pornography is one prominent example, which can harm women's employment prospects or result in their termination from their current positions. This has proven to be a problem, especially for instructors and in hiring situations when companies regularly conduct online searches on potential employees. The use of social media by business owners and professionals for networking, marketing and other purposes can have negative financial effects, together with the removal of users from platforms out of fear of cyber-violence.

3. From online to offline: Gender-based cyber violence in the case study of the Western Area

Experiences in using digital technologies to connect and interact with people are considerably shaped by sociotechnical affordances of web platforms; correspondingly, online gender-based harassment behaviors also evolve with digitalization and technological innovations. This is the case of the developing phenomenon of the '*manosphere'*, namely, the collection and use of websites, online forums, public group chats and blogs glorifying masculinity and misogyny and strongly opposing to feminism, including communities of so-called men's rights activists, involuntary celibates (Incels), red pill conspirators[151] and anti-feminist websites (i.e., Men Going Their Own Way[152]). The mentioned online communities, mostly linked to far-right and alt-right ideologies, have been seriously accused of not only encouraging misogyny and online harassment against women, but also of radicalizing lonely and marginalized men into misogynist beliefs and the promotion of gender-based violence[153]. In even more extreme cases, manosphere-based radicalization has been linked to mass shootings based on misogynist or male supremacist terrorism aimed at punishing women, especially in response to non-compliance with gender expectations, and taking down feminist movements. Several perpetrators of mass shootings and violent attacks motivated by misogyny have been found out to belong to Incel forums and communities, characterized by the promotion of misogynist beliefs according to which women themselves and movements for their liberation are blamed for the inability to find a partner. Social media played a significant role to create Incel communities online to promote the development of Incels as a hate group since it allowed for communication and offered a setting for radicalization. While some people may have continued to hold Incel views, without social media they would not have had the means to interact with one another, establish an ideological organization and become radicalized at such rate. Thereby, social media was not only essential in the formation of the Incel group, but it has also been a major factor in motivating members of the community to engage in violent behavior offline. Elliot Rodger's assault is one of the major examples that gave Incels legitimacy as a hate group with violent, real-world representatives and his aggression was glorified and encouraged favorably within Incel communities. The threat posed by Incel violence, together with other misogynistic crimes including rejection

[151] Ideology based on the idea of the choice between the willingness to learn a potentially unsettling or life-changing truth (red pill) or remaining in ignorance (blue pill). It usually promotes the belief that men, in reality, live in a world socially, economically and sexually dominated by women's power and desires.

[152] An anti-feminist, misogynistic, online community advocating for men to separate themselves from women and from a society which they believe has been corrupted by feminism.

[153] Farrell, T., Fernandez, M., Novotny, J., Alani, H. (2019). Exploring Misogyny across the Manosphere in Reddit. In *WebSci '19 Proceedings of the 10th ACM Conference on Web Science*, 87–96. Retrieved from DOI: https://doi.org/10.1145/3292522.3326045

killings and sexual assault, can be seen as a component of the same wave of hatred. The usage of social media by members of the Incel community plays a significant role in their continued growth and rise in violence. In the first subparagraph, I will focus on the development of the Manosphere and sociodemographic factors from the viewpoint of perpetrators of online gender-based violence that contribute to the offline continuum of the latter. In the second subparagraph, I will underline the dangers and threats in the physical world resulting from the online radicalization through the Manosphere communities.

3.1. The Manosphere and sociodemographic factors contributing to its development

In the past ten years, there has been an increase in the number of online forums and communities, largely frequented by men, where topics like gender roles, sexuality and the definition of masculinity are discussed. The term '*Manosphere'* has been used to describe this phenomenon, which manifests itself within a heteronormative framework. *The Manosphere: A New Hope for Masculinity*, a self-published book in 2013 by Ian Ironwood, is where the sentence first appeared in a 2009 Blogspot entry. The Manosphere includes toxic masculinity, misogyny and rigid heteronormative gender norms as elements of rape culture, which include victim-blaming[154], sexual objectification, slut-shaming[155], denying the existence of rape and sexual assault, and downplaying the suffering caused by these crimes. Although the Manosphere has received minimal scholarly attention in the realm of criminology, several academics have studied the topic, investigated the frequency of sexually violent attitudes in well-known Manosphere online communities and written how the dynamics of the Manosphere may radicalize site visitors and users[156]. The Southern Poverty Law Centre has labelled the Manosphere as a '*key site for misogyny[157]'*. Men's rights activists (MRA), pick-up artists (PUA), Men Going Their Own Way (MGTOW), traditional conservatives and Incels are among the groups generally accepted to make up the Manosphere. For instance, pickup artists are males who teach other men how to swindle women into having sexual relationships with them, while

[154] It occurs when the victim of a crime or any wrongful act is held entirely or partially at fault for the harm that befell them.
[155] It is the practice of criticizing people, especially women and girls, who are perceived to violate expectations of behavior and appearance regarding issues related to sexuality.
[156] Cannito, M., Crowhurst, I. et al. (2021). Doing masculinities online: defining and studying the manosphere, *International journal of gender studies*, 10(19), 1-34. Retrieved from DOI: 10.15167/2279-5057/AG2021.10.19.1326
[157] Southern Poverty Law Centre, (2018, April). *"I laugh at the death of normies": How incels are celebrating the Toronto mass killing.* Retrieved from https://www.splcenter.org/hatewatch/2018/04/24/i-laugh-death-normies-how-incels-are-celebrating-toronto-mass-killing

Men Who Go Their Own Way encourage independence from women by forgoing all romantic interactions with them. Men's Rights Movement (MRM), or men's rights activists, emerged as a countermovement to the Women's Liberation Movement in the 1970s, and they play a significant role in this context. People who label themselves as *Incels*, or involuntarily celibates, are those who cannot engage in sexual activity or have romantic relationships. The term was coined in 1997 by a young Canadian woman as a label for her own single status and as part of an effort to find and connect with similarly lonely people. Today, nearly all people who define themselves as Incels are men and constitute a major part of the Manosphere.

Connell's theory of masculinity[158], which she describes as a dominant kind of masculinity called hegemonic masculinity, is the foundation for numerous assessments of the Manosphere. According to Connell's conceptual theorization of hegemonic masculinity[159], males are divided into a number of conflicting hierarchies in society. The hegemonic masculine subject, an ideal man whose identity and social position are formed of all the privilege-accruing characteristics (white, upper-class, able-bodied, etc.), is at the top of the hierarchical model. Below it, there are groups of increasingly compromised body-subjects that have characteristics like disability, homosexuality and race. The scholar Connell identifies men who are not hegemonic but benefit from male dominance (complicit masculinity), men who are subordinated by dominant groups (subordinated masculinity) and men who occupy socially marginalized groups as other forms of masculine practice that are placed in relation to hegemonic masculinity (marginalized masculinity). Connell's theory puts an emphasis on change and flexibility in hegemonic acts, but it still holds that the subjection of women is what characterizes hegemonic masculinity at most. The use of violence and sexuality in performances and the formation of masculinity are, indeed, crucial. The social capital of bodies, the dominance of masculinity over feminine and the placement of those bodies within a hegemonic hierarchy are all closely related to each other. The ideal hegemonic masculine subject contains sexual ability and prowess and possesses the capacity to commit acts of violence against other bodies. Following from valuing sexual prowess, using the bodies of women in sexual relations can help men build their social and masculine capital[160]. As seen by numerous masculine sexual acts, the bodies of women are frequently used as resources or tools in the pursuit of such capital. Violence is frequently used to establish relative hierarchical positions, to punish deviant or “improper” masculinities and bodies, or

[158] Connell, R. (1995). *Masculinities*. Cambridge: Polity Press.
[159] Connell, R. (1987). *Gender and power: Society, the person and sexual politics*. Allen & Unwin.
[160] Witt, T. (2020) ‘If i cannot have it, i will do everything i can to destroy it.' the canonization of Elliot Rodger: ‘Incel’ masculinities, secular sainthood, and justifications of ideological violence, *Social Identities*, (26)5, 675-689. DOI: 10.1080/13504630.2020.1787132

to directly exercise power or control over bodies, and, thus, to acquire, exercise or demonstrate masculine dominance[161]. Incel settings have highly essentialized understandings and conceptions of masculinity that often uphold hegemonic masculinity's ideals and, consequently, the potential for violence. Based on that, Van Valkenburgh contends that men exhibit hegemonic tendencies on Reddit's The Red Pill forum[162], while the scholar Nagle contends that extending hegemonic masculinity theory to Incels is erroneous and tautological in contrast because a large portion of their behaviors defies hegemonic categorization in discussions on social media platforms like 4Chan.org[163]. It is stated that Incels' apparent 'Beta' masculinity leans toward hegemony despite the fact that they may not see themselves as 'Alpha' or as beneficiaries of male dominance because they believe that new technologies lead to sexual marketplace distortions that unfairly distribute men and women. Hence, they argue that modern technologies expose and amplify gender norms that influence women's attraction to a particular subset of desirable men and frame their experiences as symbolic of the escalating social issues that males are now experiencing. In fact, the issues that Incels emphasize have some supporting data. For instance, men's participation in postsecondary education and reported sexual activity is declining, while social isolation among men is rising. Nonetheless, their explanations for not engaging in sexual or romantic relationships with women tend to let some of them maintain the belief in the superiority of men and take part in the denigration, humiliation and subjection of women. They often end up positioning themselves as the victims of new social forces and defend their misogyny by focusing on technology and dating[164].

Although the literature has given some attention to men's rights organizations, it is crucial to remember that men's rights activists, more than any other group in the Manosphere, concentrate on fighting for the suppression of the 'feminist agenda' and defending men's legitimate position as the dominant gender. The research that has already been done on the subject has shown that early iterations of the organization focused on exposing the sexism that males suffered rather than attempting to diminish sexism against women. The men's rights movement is still important today because it works to support male supremacy as well as it does to undermine women and the feminist movement. A great extent of so-called Incels, according to Marwick and Caplan, are a modernized

[161] Pascoe, C. J. (2007). *Dude, you're a fag: Masculinity and sexuality in high school*. University of California Press.
[162] *Supra*, note 156.
[163] Nagle, A. (2016, March). The new man of 4chan, *The Baffler*. Retrieved from https://thebaffler.com/salvos/new-man-4chan-nagle
[164] Preston, K. Halpin, M., Maguire, F. (2021). The Black Pill: New Technology and Male Supremacy of Involuntarily Celibate Men, *Men and Masculinities*, 24(5), 823-841. Retrieved from DOI: 10.1177/1097184X211017954

version of the men's rights activists of the 1970s, and despite significant differences, some of them share the same ideological beliefs[165]. They fundamentally believe in the devaluation of men's rights and the dismantling of patriarchal society, while they want to remove women from public settings out of concern for female encroachment and to obstruct the implementation of the feminist agenda. Other areas of research in the topic examine the ideologies and pseudoscientific theories embraced by manosphere groups, as well as the many actions they uphold and support, that include the development of gender relations that objectify and dehumanize women; the emergence of a subcultural language reliant on rape references, hate speech and acronyms that use violent words, like the widespread use of the term '*misandry*[166]' which has increasingly assimilated into the discursive practices of these sub-cultures, reflects the unifying antagonism to feminism among relatively disparate manosphere organizations; the development of masculine hierarchies that set apart men who participate in the manosphere from those who do not. Based on preconceived concepts of masculinity, the latter are stigmatized accused of being insufficient, feminized and subordinate to women. The construction of such online communities that maintain and blur the borders of hegemonic and legitimate masculinities through these actions and discourses serves to strengthen the process of men's hegemonic dominance over women. However, internal hegemonies among males are also constructed, which can result in coalitions rooted in common experiences of victimization and a sense of betrayed masculinity[167].

Essentially, the Manosphere consists of online environments populated mainly by men who perform misogynistic actions. It has become the dominant arena for the communication of men's rights in Western culture to the point that the MRA discourse has gained popularity on the Internet and been integrated with common speech. The main idea that unites them is the *theory of the Red Pill*[168], which claims that there is a crisis of masculinity caused by feminism, for this reason many women who actively participate online expressing their opinion on social issues are insulted and directly assaulted on their social accounts. The various societies within the manosphere are being brought together by the narrative that portrays males as the victims and women as the offenders and its basic tenet is the Red Pill (TRP) nomenclature, which supports rape culture and anti-feminism. The analogy is based on the scene in the movie The Matrix where the main character Neo has to decide between two pills:

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[165] Laskovtsov, A. (2020). Navigating The Manosphere: An Examination Of The Incel Movements' Attitudes Of Sexual Aggression And Violence Against Women, *Online Theses and Dissertations*, 662. Retrieved from https://encompass.eku.edu/etd/662

[166] It is the hatred of, contempt for, or prejudice against men.

[167] Sugiura, L. (2021). *Incel Rebellion: The Rise of the Manosphere and the Virtual War Against Women*, 15–36.

[168] Wiklund, M. (2020). *The misogyny within the manosphere: a discourse analysis in a Swedish context*.

taking the Red Pill exposes you to the unpleasant truth of life, in this case, be aware of feminist misandry and brainwashing, while taking the Blue Pill allows you to continue living in a fantasy world where everything is pleasant.

The manosphere should be understood as a transnational place and, as a result, there are overlaps between local, regional and global configurations of practice. The technological affordances of social media allow for the erasure as well as the intensification, if necessary, of the social embodiment processes crucial to the project of hegemonic masculinity. Anonymity frees participants from physical constraints by allowing them to construct fictional personas or avatars. Moreover, it encourages aggressive and frequently criminal displays of masculinity, which would not be tolerated in face-to-face settings, but are almost uncontrollable online. Unsurprisingly, the growth and widespread dissemination of extremist beliefs across a number of online platforms has been significantly influenced by the Internet and the spread of what Arntfield commonly refers to as '*deviant cybercommunities*[169]*'* and the hate speech that goes along with them. The environment it offers for people to socialize and participate in deviance with others who share and propagate similar vile attitudes makes new online areas an essential part of Incel identifiers. Members of such communities are also likely to feel powerful by adhering to the online group's ideology and collective identity, which may ultimately result in the propagation and normalization of their extreme beliefs in the online environment. Hence, online groups allow users to connect with others anonymously and without regard to their location, creating a virtual environment where violent views can spread and there is less responsibility. Regardless of location, having access to the Internet significantly reduces the expenses of communicating and accessing information and individuals acquire the potential to interact and organize based on shared interests because they are not restricted by physical proximity. These discussions may occur in public spaces like open forums or blogs as well as more private ones like closed social media groups or private communities. Group polarization, which serves as a haven for extremists and could even jeopardize social stability, is the main result of enclave debate. Here, the scholar Sunstein underlies his worry that "*through the mechanisms of social influence and persuasive arguments, members will move to positions that lack merit*[170]". This might occur either because the group's homogeneity limits the number of potential arguments or because people are more likely to speak a view that is shared by the majority of the group members in order to win over as many supporters as possible. Numerous laboratory studies have shown that people who engage in

[169] Arntfield, M. (2020). Cybercrime & cyberdeviance, in R. Linden (Ed.), *Criminology: A Canadian perspective 9th edition*. Nelson Education.
[170] Sunstein, C. R. (2018). *#Republic: Divided Democracy in the Age of Social Media*. Princeton: Princeton University Press.

homogeneous discussion groups tend to take more radical stances after deliberating with their like-minded colleagues[171]. Diverse groups, on the other hand, frequently outperform similar groups in problem-solving, despite the lower average aptitude of their members. This dynamic, according to Sunstein, is what has led to an increase in the number of hateful and extreme online networks. There has been very little research on the structure of the present Incel identity and community, including the recruiting and radicalization process, even though the fundamentals of Incel psychological traits have existed for some time. The misogynistic Incel ideology holds that feminism is destroying Western society and that a violent gender uprising is necessary to restore male and White superiority.

Concerning demographic factors, there is not much research about this recent phenomenon yet. Nonetheless, some data has been collected through surveys conducted by scholars and websites themselves. According to a survey[172] conducted in 2020 by the research center of the Anti-Defamation League, Incels are typically thought of as young, white men. This profile is mainly supported by the poll's findings: 82% of respondents identified themselves as being between the ages of 18 and 30. Between the ages of 18 and 21 made up the greatest share (36%) of the population. 27.9% of the second-largest group identified as being between the ages of 22 and 25. Most concerningly, about 8% of respondents claimed to be under 17. Several self-identified Incels who have turned violent in recent years, notably Scott Beierle and Alek Minassian, have led to the widespread perception that the Incel community is primarily white or white presenting. This assumption is partly the result of these incidents. A majority of respondents, around 55%, identify as white or Caucasian, while the remaining 45% are evenly split among a variety of ethnic groups, including Black, Latino, Asian, Indian and Middle Eastern. Incels are not restricted to any one nation or continent and reflect a variety of ethnicities. Nearly 43% of survey participants are from Europe, 38% are from North America, and smaller percentages are from Central and South America, Asia, Oceania and Africa. The Pew Research on the use of social media in 2019 confirms that one of the websites most populated by the Incel community such as Reddit includes mainly white people in U.S. (73.4%), compared to the black (3.4%) and Hispanic people (18%)[173]. Further, a study of the PhD Scholar Karolin Grunau indicates that Incels tend to be student, employed fulltime or unemployed,

[171] Barberá, P. (2020). Social Media, Echo Chambers, and Political Polarization, in *Social Media and Democracy*, 34-55.

[172] Anti-Defamation League (2020, September). *Online Poll Results Provide New Insights into Incel Community*. Retrieved from https://www.adl.org/blog/online-poll-results-provide-new-insights-into-incel-community

[173] Pew Research Center (2019, April). *Share of U.S. adults using social media, including Facebook, is mostly unchanged since 2018*. Retrieved from https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/

and mainly owing a middle-class income[174]. Online polls of Incels offer a partial, wholly self-reported insight into the core of this online subculture. It was found that they are mostly young men who live with their parents, have never been intimate or had any kind of serious relationship with a woman, on a March 2020 study[175] of incels.co forum users. More than 80% of respondents were from the North and Europe, among whom the majority was white. Despite belonging mainly to the middle- and upper-class socioeconomic situations, half never attended college. Incels can also show signs of mental disease, severe trauma or emotional anguish. Over a quarter of respondents who self-identified as autistic and nearly 70% of respondents who claimed to have depression. All these demographic characteristics collected by now can partially explain the promotion of white supremacism within some Incel communities and the frustration resulting from the research for social mobility in their life to reach a higher social position that may help them to face their insecurities. The greater presence of demographic factors such as young age and gender within Manosphere online spaces indicates the impact of the crisis of masculinity and gender roles in recent times from which, according to the APA researchers, young adult males are the most likely to suffer and whose outcome is a widespread increase in violence, both offline and online, along with mental health issues[176].

In 2021, even the European Commission started to bring attention to the danger of the Incels phenomena at the societal level and highlighted the research that has been made in recent times[177]. It turned out that Anglophone Incel communities, which have a high prevalence of aggressive speech, have been the main subject of published research. European residents who live in Anglophone Incel communities contribute accounts about their personal encounters with Inceldom. Incels view their inceldom as context-dependent, with some countries being more difficult to exist in than others, according to members of the Incel community. The majority of Manosphere study focuses on the US or, less frequently, other Western anglophone nations like Australia and Canada. With some exceptions, the phenomenon is still not well studied in Italy. The Incel cybercommunity can be classified as a hate group since it exhibits traits that are comparable to those of other radical and extremist organizations. Regarding hate groups more generally, research among 18 to 25-year-olds

[174] Grunau, K. (2020). *Involuntary Celibacy: Personality Traits Amongst Misogynistic Online Communities*. Retrieved from http://essay.utwente.nl/81904/1/Grunau_BA_BMS.pdf
[175] Incels.co (2020, March). *Survey results – March 2020*. Retrieved from https://incels.co/threads/survey-results-march-2020.188748/
[176] Wong, Y.J., Ho, M.R., Wang, S., & Miller, I.S.K. (2017). Meta-Analyses of the Relationship Between Conformity to Masculine Norms and Mental Health-Related Outcomes, *Journal of Counseling Psychology*, 64(1), 80 –93. Retrieved from https://www.apa.org/pubs/journals/releases/cou-cou0000176.pdf
[177] European Commission (2021). Incels: A First Scan of the Phenomenon (in the EU) and its Relevance and Challenges for P/CVE, *Radicalization Awareness Network*. Retrieved from https://home-affairs.ec.europa.eu/system/files/2021-10/ran_incels_first_scan_of_phenomen_and_relevance_challenges_for_p-cve_202110_en.pdf

in six countries found that the majority of those who had been exposed to Internet-based hate speech did not actively search for the content but had instead stumbled upon the website. This finding highlights how easily accessible such hateful online materials are and how the link between online-disseminated hate and offline violence is becoming more and more likely. Another recent study[178] by Gaudette confirms the importance of the Internet in the radicalization to violence process. It points out that, since the Internet gives users access to information and like-minded others, exposure to violent ideologies and groups has increased. Devastating offline violence can result from the promotion of hateful ideals through online deviant cybercommunities and the several violent forms of overt misogyny within such communities. It is particularly concerning because the manosphere has stoked a rise in hate crimes against women, including the justification of rape and extreme violence as a form of retaliation for perceived rejection. Generally, Internet communications may exhibit the '*online disinhibition effect*[179]', when the risk of hostile speech and behavior is increased by anonymous communication and the recipient's lack of sight. An online Incel discussion forum's 50,000 Incel messages were compared to 50,000 random, more neutral messages from the Manosphere in a recent linguistic analysis, for instance, and three major themes emerged: negative discourse about being labeled as an Incel; offensive discourse targeting attractive women and men; and intragroup rivalry for in-group status. It is hardly unexpected that a significant amount of Incel talk includes hate speech with overtly homophobic and misogynistic sentiments. There are some Incel adherents who openly advocate for committing rape and physical harm and many of these threats appear to be seriously considered, nevertheless, it is noteworthy to remind that that specific Incel attitudes can vary more than may be commonly assumed because there is no unified definition and self-identification is the key critical component of considering oneself part of the Incel community. The majority of Incels on forums do indeed seem to be depressed, lonely and peaceful. The Incel model is founded on the self-definition of men as 'beta men', who are isolated, ugly, poor and melancholy and who see themselves as oppressed and miserable, while the Alpha man, who is powerful, virulent, charming and a leader with a good job, is the perfect representation of dominant masculinity. If this dominant model is attainable for the Redpilled person, it is merely an unreachable ideal for the Incel.

Therefore, groups that openly identify as 'Red Pill' reclaim a hierarchical power structure between genders based on flimsy pseudoscientific theories that employ questionable interpretations of

[178] Gaudette, T., Scrivens, R., Venkatesh, V. (2020). The role of the Internet in facilitating violent extremism: Insights from former right-wing extremists, *Terrorism and Political Violence*. Retrieved from https://doi.org/10.1080/09546553.2020. 1784147

[179] It is the lack of restraint one feels when communicating online in comparison to communicating in-person.

biological evolutionism. The subordination and marginalization of women are essential to the construction and performance of hegemonic masculinity, especially feminists are disliked for promoting women's rights that hinder or at the very least interfere with men's right to be and act as alpha males. In these situations, the rhetoric of the crisis of masculinity is based on often violently expressed demands for revenge and vindication against women and feminists[180]. Even while the forum currently gives people a sense of acceptance, comprehension and a place to vent, it also appears to increase in depression, suicidal thoughts and misogyny, the latter of which were associated with support for aggressive attitudes and actions. While each of these qualities can be extremely advantageous for a person's mental health and psychosocial wellness, they can also have a compounding effect by reiterating previously held attitudes, such as worsening misogyny[181]. At the same time, the forum could encourage resentment at receiving into helplessness and despair about sexual exclusion, as opposed to searching for effective remedies or replacements that produced fulfillment in other ways. Online homosocial situations have made the use of violent language directed towards women, or '*e-bile*[182]*'*, an acceptable and essential aspect of masculinity. This has aided in the gradual acceptance of rape and other sexist threats directed against women and worked as a strategy for enhancing and maintaining male homosociality in the Manosphere.

To conclude, it is important to highlight the generalized sense of emotional fragility that is shown by the analysis of the Manosphere. The latter developed initially as a relatively innocent expression of real issues faced by men in society. However, such vulnerability is considered to be a unique experience and is met with resentment, which is regarded as a legitimate sentiment and reaction for a man, whether expressed online or offline[183]. This feature illuminates the manosphere as a forum for sharing that might aid its users in coping with experiences of insecurity resulting from changing gender norms and economic insecurity. Even in their 'softer' manifestations, victimization, misogyny and antifeminism spread online in the Manosphere ultimately overlook their social and cultural roots. The language employed is getting more and more sexually explicit, aggressive, racist and homophobic and the new communities that emerge are more malignant and misogynist than their predecessors. Particularly, online networks and virtual platforms have given Incels and other manosphere groups the ability to spread their shared hostility on an unprecedented scale, facilitating

[180] Ging, D. (2019). Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere, *Men and Masculinities*, 22(4), 638-657. Retrieved from DOI: 10.1177/1097184X17706401
[181] Stijelja, S. (2021). *The Psychosocial Profile of Involuntary Celibates (Incels): A Review of Empirical Evidence*. Retrieved from https://orcid.org/0000-0003-2086-3359
[182] Jane, E.A. (2014), "You're an Ugly, Whorish, Slut": Understanding E-bile, *Feminist Media Studies*, 14(4), 531-546.
[183] *Supra*, note 156.

the growth of '*networked misogyny*[184]'. Aside from the manosphere, as the first paragraph illustrates, cyberspace has long been perceived as a male-dominated and -controlled environment that is hostile to women. Women played a role in the development and early adoption of the Internet, but their involvement and contributions were not always recognized. This reflects the attitude that women do not belong and are not welcome in many online places. In fact, there are many instances of sexual violence and harassment in the online world, as well as abuse and anger directed at women simply for being online. Whether or whether it should be accessible to others, the outrageously misogynistic material shared by some people belonging to the Incel online community constitutes an act of gendered hate online. Even when women are expressly mentioned in posts, they are rarely addressed directly and, when they are, the remarks are usually directed at or at about the women in question. It is clear that this does not lessen the harms being spread, not just to the individual in question, but to all women as a result of this and other sexist posts. Manosphere online spaces are normalizing male violence against women and conveying to women that they are despised, that they have every right to be afraid of males and that they should refrain from speaking up against established hierarchies and power systems.

A well-known example of adapting online gender-based violence to the sociotechnical affordances of digital platforms is the use of the instant messaging platform 'Telegram' providing the possibility to anonymity and the presence of encrypted chats which can lead users to be more likely to engage in negative behaviors. At the beginning of April 2020, it was found out that an Italian group chat, amounting to 50.000 members, was used to share non-consensual or falsified pornographic photos and videos. The shared images were published without the consent or awareness of the victims who became objects of a sort of collective virtual sexual violence that was glorified through sexually offensive and abusive comments on random girls' photos, which did not necessarily recall sexuality at all. Sometimes, these photos and videos were sold in exchange for money, sometimes they were shared freely to take revenge against former partners. Frequent was also the case of men sharing pedopornographic materials, which sometimes included secretly taken pictures of the chat member's own daughters or sisters[185]. Although this episode does not imply a physical abuse on women, it enhances the internalization and expansion of male superiority, that sexually objectifies women's bodies, to the point that those imaginary violent actions might threaten women's security in the physical world. Besides, multiple similar Telegram group chats have been created since then and even

[184] Banet-Weiser, S., Miltner, K.M. (2016). #MasculinitySoFragile: Culture, Structure, and Networked Misogyny, *Feminist Media Studies*, 16(1), 171-174.
[185] Fontana, S. (2020, 3 April). Dentro il più grande network italiano di revenge porn, su Telegram. *Wired Italia*. Retrieved from https://www.wired.it/internet/web/2020/04/03/revenge-porn-network-telegram/

started to contain the spread of sensitive data, such as name, surname, home address, mobile number and social profiles, concerning victimized women who are chosen as a target and experience a sort of bombing of hate speech content and sexually abusive, threatening and offensive messages or pictures[186].

3.2. From online radicalization to misogynist terrorism

The power of Manosphere came to the public's eye after a series of recent mass killings seemed to link their beliefs to terrorism activities. The Incel community differs from other hate organizations in that their activities were only made feasible by the development of social media[187]. This not only raises concerns about the unrestricted ability to spread hatred online, but it also renders this group largely unmanageable in the rapidly developing internet space. Thus, it is crucial to comprehend the fundamental causes that motivate Incels to spread hate online. Looking for support and a place to express their frustration, Incels frequently visit specific Incel forums. These websites have overflowed with users who support men's rights, have extreme opinions or are sexist throughout time. As a result of breaking the rules and codes of conduct of these services, the majority of Incel websites and subreddits have been deleted. In addition to the hatred shown online, Incels also appear to have become more aggressive offline. Numerous violent incidents and mass murders, often known as "*rejection killings*[188]", have been connected to their misogynistic ideology. Elliot Rodger, then 22 years old, shot at six people going on a murderous rampage by car through the coastal town of Isla Vista in 2014. Rodger was found to have previously posted a number of monologues and confessionals to YouTube in which he intimated that an attack against 'sexually active' Americans was likely to occur in response to the rejection of women toward him. In his autobiographical manifesto *My Twisted World*, that is regarded to be at the core of Incel ideology, he wrote that "[..] *women are flawed. There is something mentally wrong with the way their brains are wired, as if they haven't evolved from animal-like thinking. They are incapable of reason or thinking rationally. They are like animals, completely controlled by their primal, depraved emotions and impulses.* [..] *Women should not have the right to choose who to mate with. That choice should be made for them by civilized*

[186] Zorloni, L. (2020, 25 November). Su Telegram sono triplicati i gruppi dove si scambiano foto e video intimi. *Wired Italia*. Retrieved from https://www.wired.it/internet/web/2020/11/25/telegram-revenge-porn-gruppi-italia/

[187] Young, O. (2019). *What role has social media played in violence perpetrated by Incels?* Retrieved from https://digitalcommons.chapman.edu/cgi/viewcontent.cgi?article=1000&context=peace_studies_student_work

[188] *Ibid*.

men of intelligence[189]*".* Following this writing, there have been at least seven independent instances of acts of multiple murder that specifically mention the Incel ideology or mention and idolize Rodger by name, resulting in close to 50 murders of primarily female victims. These include the most horrific elementary school shooting in American history based on the number of victims, which occurred on in 2018, at Stoneman Douglas High School in Parkland, Florida. Nikolas Cruz, an outspoken supporter of Incel ideology, declared online shortly before the attack that Rodger would not be forgotten, resulting in 17 fatalities and an additional 17 injuries. Moreover, the April 2018 van attack in Toronto ended in the deaths of 10 female victims and the injuries of another 16 two months after the Parkland event, as Incel rampages continued to rise sharply in the wake of Rodger's atrocities and his being hailed as a hero by blackpilled Incels. Rodger served also as an inspiration for Alek Minassian, a 25-year-old Incel who in 2018 drove into pedestrians and killed ten people, eight of whom were women. The online community has celebrated and idolized the assaulters, who were mostly radicalized Incels, for their crime; in some cases, they have even been referred to as "hERoes" with Elliot Rodger's initials capitalized[190]. The motivations behind participating in these misogynistic online forums and, particularly, performing violent acts are still up for debate.

Some researches[191] indicated that Incels may feel more threatened by their masculinity or have a propensity to victimize themselves in general, while other studies[192] have claimed that Incels may be more susceptible to radical beliefs and hate groups as a result of frustration or mental health issues. Incels constantly present out-groups as negative, such as Chads/alpha males, normies, and women, while the in-group is generally portrayed as favorable. The scholar Torok claims that the key to radicalizing people is to create group polarization, and frequent comparison of the in-righteousness group's or goodness to that of the out-group reinforces group homogeneity[193]. As a result of the group's collective outburst of frustration and rage, this deepens the relationships between its members. Incels represent the in-group as morally superior and rational, while the out-group is portrayed as selfish and animalistic. This group identity is further reinforced by frequent calls for extreme violence against members of other groups found in Incel forums. The development of a communal black-pilled

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[189] Rodger, E. (2014). Manifesto. *Counter Extremism Project*. Retrieved from https://www.counterextremism.com/content/elliot-rodger-2014-manifesto-0

[190] Baele, S. J., Brace, L., Coan, T. G. (2021). From "Incel" to "Saint": Analysing the violent worldview behind the 2018 Toronto attack, *Terrorism and Political Violence*, 33(8), 1667-1691. Retrieved from https://doi.org/10.1080/09546553.2019.1638256

[191] Scaptura, M. N., Boyle, K. M. (2019). Masculinity threat, "Incel" traits, and violent fantasies among heterosexual men in the United States. *Feminist Criminology,* 1-21. Retrieved from https://doi.org/10.1177/1557085119896415

[192] *Supra*, note 187.

[193] Torok, R. (2013). Developing an explanatory model for the process of online radicalisation and terrorism. *Security Informatics* **2**, 6. Retrieved from https://doi.org/10.1186/2190-8532-2-6

identity[194] is built in highlighting a common experience of sorrow and estrangement. As a result, there seems to be a sense of group cohesion among Incel forum participants, which fosters violent threats towards other groups. Many of them blame women who are typically portrayed as being cruel, insensitive, and having simplified emotions when they are unable to find sexual partners. The Incel community often refers to women as '*femoids*', a combination of female and humanoid, to compare them to robots for their cold behavior with men. Dehumanization is a psychological requirement for violence and misogynistic attacks by casting the out-group as the cause of Incels' collective victimization and inspire those who may use violence in the future. The communal experience of portraying themselves as victims of women and feminism is what discursively links these digitally connected networks throughout the acts of emotional storytelling of suffering[195].

Even though this community is known for its violent and misogynistic attitudes, some members of the Incel community oppose violence and hate against women. By refusing to tolerate violence in their support network, some Incels try to separate themselves from the toxic community. Thus, it is important to use caution when making generalizations about Incels being violent. However, the majority of studies have discovered solid proof of Incels' misogynistic inclinations, tying physical violence, anti-feminism and sexual violence to Incel forums. The primary focus of many of the violent and terroristic acts planned by the Incel community is masculinity. They are often a masculine response that operates independently of any other ideologies, religious principles, or beliefs. Men are more likely to support traditional gender roles when their gender identity is in danger, overcompensating to show their manhood. Displays of hardness, hostility, lack of empathy, undervaluing of women, demand for respect, competition and homophobia are examples of this type of acceptance threat. People may emphasize their membership in a group when they feel that the group as a whole is at danger. The *masculine overcompensation thesis*, which contends that men who believe their status or place in society is threatened would respond with exaggerated displays of masculinity, is tested by Willer and other scholars[196]. Men 'hyper-conformed' to in-group qualities as a result of feeling as though their standing threatened their in-group identity. For many years, feminist researchers have used ideas about masculinity to analyze gender-based violence. There are several socially created types of masculinity, and while they are all praised and viewed as hegemonic, not all of them are. It takes 'doing gender' to be masculine, which involves constantly demonstrating

[194] Black pill theory promotes the idea that *people born unattractive cannot improve themselves*.
[195] *Supra*, note 191.
[196] Willer, R., Rogalin, C. L., Conlon, B., Wojnowicz, M. T. (2013). Overdoing Gender: A Test of the Masculine Overcompensation Thesis, *American Journal of Sociology*, *118*(4), 980–1022. Retrieved from https://doi.org/10.1086/668417

and seeking affirmation of one's manhood. Men respond to societal circumstances or encounters that cast doubt on their gender identity when their masculinity is questioned or endangered. To react to these threats, men use what Messerschmidt refers to as *masculine resources*, for instance showing hypersexuality and objectifying women. For understanding the connection between masculinity, entitlement to women, and mass violence, mass violence academics provide a paradigm. The term '*aggrieved entitlement'* was coined by Kalish and Kimmel, who defined it as a gendered sense that the male mass shooters were entitled, or even expected, to take revenge on all people who had hurt them while they need to feel justified[197]. In the misogynistic Incel community, Rodger's self-justification for murder serves as the cornerstone of a social movement doctrine that elevates personal wrong to a systemic injustice based on male sexual entitlement.

Provided that since 2014 at least 8 mass murders have been perpetrated by men defining themselves as part of the manosphere or sharing content related to the extremist Incel ideology[198], Incel communities spread misogyny online and radicalize members through extremist and violent views to the point that this phenomenon has been regarded by the International Centre for Counterterrorism as a misogynist terrorism threat[199]. Terrorism that has a misogynist ideology targets women in an effort to punish them. The policing of women's adherence to patriarchal gender standards is a severe kind of misogyny. Mass indiscriminate violence is used in misogynist terrorism in an effort to exact revenge for failing to live up to expectations or to support the notion that men are inherently better. Male supremacist or misogynist ideology has been classified and monitored as an emerging terrorist threat by counterterrorism organizations since 2018. These violent crimes are also referred to as misogynistic extremism and male supremacist terrorism. Violence against civilians committed by self-declared Incels in the name of inceldom or the Incel cause is referred to as '*Incel-inspired terrorism'*. It is crucial to make it clear that not all acts of violence committed by Incels constitute terrorism because many of them lack the essential ideological explanation or motivation.

[197] Kalish, R., & Kimmel, M. (2010). Suicide by mass murder: Masculinity, aggrieved entitlement, and rampage school shootings, *Health Sociology Review, 19*(4), 451-464. Retrieved from https://www.tandfonline.com/doi/abs/10.5172/hesr.2010.19.4.451

[198] Hoffman, B., Ware, J. & Shapiro, E. (2020) Assessing the Threat of Incel Violence*, Studies in Conflict & Terrorism*, 43(7), 565-587. Retrieved from DOI: 10.1080/1057610X.2020.1751459

[199] DiBranco, A. (2020, 10 February). Male Supremacist Terrorism as a Rising Threat. *International Centre for Counter-Terrorism.* Retrieved from https://icct.nl/publication/male-supremacist-terrorism-as-a-rising-threat/

Sociologists such as D.J. Williams, Michael Arntfield and other scholars looked into the demographics of attacks following Rodger. In their investigation[200], seven perpetrators were examined; all were male, 71% were White, and ranged in age from 17 to 48 at the time of the offence, with an average age of 29.3 years. The results of the current research showed that 71% of the sample were under the age of 40 at the time of the incident, which is similar to the findings published by Donnelly and others[201] who found that 63% of the Incels in their sample were between the ages of 18 and 34. Along with one that happened in Canada and another in England, the majority of the incidents were performed by perpetrators in the United States. While some murderers made indiscriminate killing attempts, others only targeted women. There were two times as many female victims as male victims overall. The target choice is strongly connected to the concept of hegemonic masculinity and its potential of violence against women to comply with dominant masculine norms and compensate the lack of adherence to them. Depending on the exact location of the attack, the demographic profiles of the victims also varied. For instance, two incidents happened on American college campuses and most of the victims there were between the ages of 19 and 25. Due to one incident happened in a significant Canadian metropolis, the victims' ages, ranging from 22 to 94, and nationalities were diverse. Additionally, a significant portion of the victims appeared to have completed or were pursuing a college degree.

The violent manifestations of the Manosphere have shown to be dangerous for women's safety in active participation in online spaces and should be considered seriously within the context of gender-based cyberviolence, beginning with addressing the marginalization of young men who found their personality in crisis with the traditional concept of masculinity and exploit the already existent hatred against a social category as a scapegoat. In this regard, Hoffman raises awareness of the similarities of online radicalization within the Manosphere with the modern Islamist extremists[202]. As well as the latter, Incels gather online, looking for ever-more-private, better-encrypted platforms to spread and discuss their extremist ideologies. Online environments and dynamics deepen frustrations and drive closer to violence, aggravating and accelerating the Incel threat. Following various violent episodes, the perpetrators of Incel violence are frequently lauded in forums and hailed as "saints" and "heroes". Extremist groups benefit from online mobilization in several ways, not the least of which is that it

[200] Williams, D.J., Arntfield, M., Schaal, K., Vincent, J. (2021). Wanting sex and willing to kill: Examining demographic and cognitive characteristics of violent "involuntary celibates", *Behavioral Sciences Law,* 39, 386–401. Retrieved from DOI: 10.1002/bsl.2512

[201] Donnelly, D., Burgess, E., Anderson, S., Davis, R., Dillard, J. (2001). Involuntary celibacy: A life course analysis, *The Journal of Sex Research*, *38*(2), 159–169. Retrieved from https://doi.org/10.1080/00224490109552083

[202] *Supra*, note 198.

makes Incels more approachable to curious minds around the world who now only need an Internet connection to become radicalized. Social media brings together diverse people from different backgrounds and locations by creating ideologically compatible echo chambers and by providing a networked universe and a shared goal that can lead to carry out real-world violence. Similar to jihadists, violent Incels have created a culture of martyrdom in which the murderers of the past are admired by admiring present-day people. On Incel forums, Elliot Rodger, the most significant martyr for the group, is praised as a hero. Last but not least, Incels have also shown a readiness to emulate Islamic State strategies as suicide assaults tend to be deadlier in order not to plan how to get away after the operation.

4. From offline to online: Gender-based cyber violence in the MENA Region

The 2011 protests marked the beginning of a decade of online activism in the Middle East and North Africa, when blogs, social media and technology were used by individuals who had previously been marginalized, including feminists and women in general, as means of resistance and free speech. Even though this advancement brought new opportunities, it did not entirely address fundamental injustices. One the one hand, gender inequality still exists and has resonance in what has expanded into the public sphere. However, authoritarian and illiberal governments in the area regulate and monitor online information to prevent the growth of popular and revolutionary movements. Forms of online violence have grown as they take up more and more space in our daily lives, and their use has increased recently, particularly during the COVID-19 crisis. While all users and participants in digital interactions, especially on social media platforms, are affected by online violence, women are typically more specifically targeted. Because of their overlapping identities, women who belong to certain groups, such as activists, female human rights defenders, and those who identify as part of the LGBTQ+ community, are kind of overexposed to abuse online. Women's rights and feminist movements have been a vital force for social change in the Middle East and North Africa despite the harsh realities of the region, actively promoting the fight against gender-based violence, fighting against discriminatory laws and social norms, creating alternative and safe spaces for women and marginalized groups to strengthen solidarity. On the negative side, as civic space in the region is shrinking at a worrisome rate, the fight for gender justice is continually hampered by growing restrictions on civil society and freedom of assembly and expression. Markedly, the scope and complexity of the problem of online abuse against women and girls in the MENA region have not received much attention yet. In the first subparagraph, I will describe the overall scenario of gender-based violence in the MENA countries and how it replicates from offline to online spaces. In the second subparagraph, I will focus on the repercussions that already existing gender-based violence in the MENA region has on the digital world, to which women are increasingly accessing and actively participating, and how it serves as a tool by state actors themselves to silence women’s voices challenging cultural taboos and traditional conventions.

4.1. Digitalization and gender inequality in the MENA countries

The condition of women and girls between the Arab States, the Middle East and North Africa is still quite unsolved. Young women in particular have been generally limited to gender roles and kept out of public settings in the MENA region, whether by forced isolation or various types of harassment, abuse and silencing. Gender disparities continue to exist in all spheres of life as a result

of the patriarchal backdrop and restrictive gender norms of the region. Their personal liberties are severely restricted, and the region continues to have some of the lowest levels of involvement in the world's economies, politics and other public spheres. Seven of the ten lowest-scoring nations in the world are located in the MENA region, which had the lowest overall score in the Global Gender Gap Index (61.1%), according to the Global Gender Gap Report 2020[203]. Likewise, MENA had the lowest political empowerment score and the second-lowest economic participation and opportunity score. Both UN Women and the Economic and Social Commission for West Asia found out that nearly 40% of women in Arab States say they have experienced some kind of violence in their lives, although data suggests that the actual number is substantially higher[204]. The 2018/2019 Arab Barometer study shows that sexual harassment is a systemic issue in the Arab world[205]. According to the study, sexual harassment was more prevalent in Egypt (44%) and Sudan (38%) than in Libya (20%) and Tunisia (15%). It has been confirmed by both UN Women and the Demographic Center that in Egypt almost all women and girls experience harassment or are liable to be harassed in public spaces such as educational institutions, workplaces and transportation, at unprecedented levels, regardless of clothing, age, social class, occupation, marital status and appearance[206]. Women's lives, bodies and minds are systematically restricted, monitored and exploited by the state and society in a region with deeply ingrained patriarchal societal norms and brutal totalitarian governments. Authoritarian systems prioritize the subjugation of women and, in order to maintain their own power, they reinforce and maintain patriarchal social norms[207].

Despite these circumstances, there has been proven incremental progress, but the rate is modest and does not represent the pledges made to Agenda 2030, the Sustainable Development Goals, or seriously tackling the region's issues. Gender-related indicators in fields like education and health have significantly improved and in some MENA countries specialist programming supporting

[203] World Economic Forum (2020). *Global Gender Gap Report 2020*. Retrieved from http://www3.weforum.org/docs/WEF_GGGR_2020.pdf
[204] UN Women Arab States (2020). *Facts and Figures: Ending Violence against Women and Girls*. Retrieved from https://arabstates.unwomen.org/en/what-we-do/ending-violence-against-women/facts-and-figures
[205] Bouhlila, D. (2019). *Sexual harassment and domestic violence in the Middle East and North Africa*. Tunis: University of Tunis El Manar. Retrieved from https://www.arabbarometer.org/wp-content/uploads/Sexual-Harassement-Domestic-Violence-Arab-Citizens-Public-Opinion-2019.pdf
[206] UN Women, Demographic Centre in Egypt, Egyptian National Planning Institute, Safe Cities in Cairo, European Union (2013). *Study on ways and methods to eliminate sexual harassment in Egypt*. Retrieved from https://web.law.co- lumbia.edu/sites/default/files/microsites/gender-sexuality/un_womensexual-harass- ment-study-egypt-final-en.pdf
[207] Oxfam International (2020). *Claiming and Reclaiming the Digital World as a Public Space: Experiences and insights from feminists in the Middle East and North Africa*. Retrieved from https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621103/dp-claiming-digital-public-space-mena-24112020-en.pdf

women's and girls' rights and empowerment has accelerated[208]. On the one hand, governments have substantially increased their efforts to make sure that they uphold their obligations under the law relating to gender-based human rights, on the other hand, it is also important to draw attention to the growing involvement of civil society, especially women's and young feminist civil society, in promoting and securing improvements. However, an extent of the recent improvement is at risk of regressing because gender inequities in the region still exist and are not adequately addressed. Most compelling evidence, they are made worse yet by global and regional catastrophes like the COVID-19 pandemic, violence, occupation, political and economic instability. Progress has also been hampered by governments' growing hostility towards civil society since the Arab revolutions more than ten years ago, particularly against women's rights and young feminist organizations. Another element that contributes to gender inequality and human rights abuses in several of the region's nations is conflict. Additionally, governments' persistent patriarchal nature continues to hinder efforts to advance gender equality, which in turn strengthens the structural injustices inherent in harmful socio-cultural norms and behaviors through laws, justice systems and socio-political institutions. Many countries in the region continue to support such attitudes and practices that limit the rights of women in comparison to men and restrict access for women and girls to specific rights education and other significant empowerment programs. Gender-based violence still exists in many forms throughout the region and in almost all stages of a woman's life. The risk of being exposed to violence is increased in conditions of armed conflict and occupation, as well as among women and girls who are severely marginalized. Besides the shame and worry of reprisals, there is, nevertheless, a lack of information and documentation on violence against women and girls. Crises can intensify preexisting weaknesses and risk factors, increasing the likelihood of gender-based violence, abuse and neglect as well as making it harder for survivors to receive care and support resources. A girl growing up in the MENA and Arab States may be particularly vulnerable to female genital mutilation, underage marriage and domestic labor, all of which have some of the highest rates in the world. In detail, one in five girls in the area marry before becoming 18 years old. The MENA and Arab States region has the highest rates of collective violence against children of any region in the world. While boys are disproportionately affected, girls also experience high levels of collective violence, especially in areas where there is armed conflict. Online violence is another key rising issue that works as a continuum of offline violence. In the COVID-19 era, where the Internet usage has spread in many towns around the region and become a part of daily life, this issue has become extremely pressing, particularly for young girls, whose offline harm is more intensively replicated in online spaces. Existing research

[208] UN Women (2021). *Situational analysis of women and girls in the MENA and Arab States Region*. Retrieved from https://arabstates.unwomen.org/en/digital-library/publications/2021/11/situational-analysis-of-women-and-girls-in-the-mena-and-arab-states-region

indicates that slightly more than a third of women in the MENA and Arab States region are likely to experience intimate partner violence and, depending on the context, the rate is likely to be even higher[209]. Temporary abusive marriages, human trafficking and non-partner sexual violence are additional dangers associated with violence against women.

It is important to remember, nevertheless, that there are significant regional differences in the frequency of certain types of violence against women. For instance, rates of child marriage are very low or nonexistent in Algeria, Tunisia and Qatar, compared to an estimated third of all girls being married as infants in Somalia, Yemen and Iraq. Similarly, while the practice is nearly nonexistent in Morocco, Algeria and Tunisia, it is quite common in Somalia, Egypt and Sudan. In addition to cultural standards, demographic variables like wealth, education and state stability have an impact on the frequency of different types of violence against women. To demonstrate, child marriage and female genitalia mutilation are often less common in metropolitan regions, especially those with higher levels of education and income. Unfortunately, conflict can make violence against women worse. Sexual assault has been deployed against female political activists in Libya and Somalia, while armed forces have employed it as a strategy of war in Sudan and Iraq[210]. Serious risk factors for violence against women, such as sexual exploitation, underage marriage, and displacement, are also created. In some MENA and Arab States countries over the past ten years, access to justice for survivors of gender-based violence has improved through statutory systems, supported by nearly equal representation of men and women in the judiciary in nations like Lebanon, Tunisia and Algeria, as well as rising female participation in the legal profession[211]. To obtain justice in both formal and informal institutions, many women and girls in the region still encounter impediments. Many nations continue to enforce discriminatory gender standards through family or personal status legislation, thus codifying inequality. In addition to the fact that many laws and policies in the area discriminate against women and girls, discriminatory norms also prevent women and girls from accessing the justice system for other reasons, such as the male-dominated nature of the legal and justice system, socio-cultural practices that discourage, stigmatize, and even put women and girls who fight for justice, particularly gender justice, at risk, and a lack of services that adequately challenge these norms. In the MENA area, laws that discriminate against women, including labor and inheritance laws and legal frameworks are in line with traditional gender norms that place a premium on “family honor”, or the

[209] *Ibid*.
[210] *Supra*, note 204.
[211] *Ibid*.

idea that women and girls need to have their reputations protected[212]. According to the International Men and Gender Equality Survey[213], the majority of men in Egypt, Lebanon, Morocco and Palestine who were polled agreed that women should prioritize taking care of the home. Men's control over women's bodies has also been a result of the patriarchal system, as evidenced by the prevalence of early marriage and violence against women and girls.

Despite years of civic engagement, international activism and formal and unofficial political participation, women's participation and leadership in the MENA and Arab States region have generally been hidden. Besides, over the last 10 years, women's formal engagement has drawn more attention and support, frequently bridging the invisible divide between the public and private realms. Women's activism in the MENA region is diverse and extensive, both in terms of the causes advocated and the forms of group action used. They include political activism, such as pro-democracy movements against oppression and inequality, nationalist women's rights campaigns, welfare and charitable endeavors and environmental activities. Women activists had a significant role in the recent revolutions, as well as the seizure of public spaces in Tunisia, Egypt and Yemen[214]. Nonetheless, the COVID-19 pandemic has enlarged gaps between men and women in terms of employment, caregiving, perceived family obligations and, in some cases, actively restricted women's access to the public sphere. Participation in civil society at the local and national levels continues to be a crucial pathway for women to assume leadership roles, but female youth is still constrained by both conservative societal standards and a lack of participation possibilities. Women and girls have been prominent in protest movements since the upheavals over ten years ago, and their official political participation is now more documented, despite globally low rates of participation in the region. Notably, the violence and harassment have also risen as a result of the increased attention.

In the past, the state has been named as a major cause of violence in the MENA area. Political opposition and dissent have been suppressed by authoritarian nations and dictatorships through force, including arrests, torture, and executions. This has frequently included sexual violence against women as a means of retaliation and to discourage their participation in political opposition. In the

[212] ESCWA, UNFPA, UN Women and UNDP (2019). *Gender Justice & Equality before the law. Analysis Progress and Challenges in the Arab States Region*. New York: United Nations Development Programme.
[213] UN Women (2017). *Understanding masculinity: Results from the International Men and Gender Equality Survey (IMAGES) - Egypt, Lebanon, Morocco and Palestine*. Retrieved from https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2017/IMAGES-MENA-Multi-Country-Report-EN.pdf
[214] Adra, N., Al-A, N., Farhat, S., Joly, D., Larzillière, P. et al. (2020). *Women, violence and exiting from violence with a gendered approach: MENA region and diaspora*. Retrieved from https://hal.archives-ouvertes.fr/hal-02498142

MENA region, non-state actors have also grown to be significant causes of violence. The so-called Islamic State and other Islamist terrorist organizations, which are well-known in Syria, Iraq, and Libya, are currently the most visible perpetrators of violence, notably gender-based violence. Although the scope and intensity of the brutality committed by ISIS are unprecedented, given the long history of gender-based violence committed by Islamist organizations, the violence committed by ISIS is not an isolated incident. Moreover, prevalent and accountable for several instances of gender-based and sexual violence, including as forced prostitution, trafficking, harassment and rape, are militia, armed and criminal gangs[215].

Another key point to mention, according to the International Labor Organization, women's labor force participation is among the lowest in the Middle East and North Africa region[216]. Only 20% of working-age women in the region are employed or actively seeking employment on average, which consists of less than half the percentages seen in other emerging nations including those in Latin America, Europe and Central Asia. Typically, variables including gender roles, economic structure, disparities in the law based on gender, a lack of childcare options and access to safe transportation are the driving forces behind this phenomenon. As a matter of fact, the main drivers of the low female labor force participation in MENA are usually identified with the role of social norms, traditional values and religion, alongside the structure of the economy and the existence of skills mismatches. Although in most regions women's educational attainment is closely correlated with labor force participation and employment, increases in employment opportunities did not keep pace with increases in women's educational attainment in MENA. The low levels of female labor force participation could also be explained by obstacles to the adoption of new technology[217]. The impact of technology adoption by gender is often overlooked, even though empirical studies find, in general, that internet access has positive impacts on labor outcomes. Slower growth in female employment has been observed in nations where internet use has only slightly grown since 2000. Indeed, the emerging trend toward technologization, digitalization and the development and adoption of information and communications technologies, present in almost all modern societies, has been also affected by the widespread offline gender violence in MENA countries, especially in terms of digital access and online safety[218]. The fact that access to information, exposing users to less conventional

[215] *Ibid*.
[216] International Labor Organization (2017). Promoting women's empowerment in the Middle East and North Africa. *Technical Report 9*.
[217] Klasen, S. (2019). What explains uneven female labor force participation levels and trends in developing countries? *The World Bank Research Observer*, 34(2), 161–197.
[218] Viollaz, M. & Winkler, H. (2022). Does the Internet Reduce Gender Gaps? The Case of Jordan. *The Journal of Development Studies*, 58(3), 436–453. Retrieved from https://doi.org/10.1080/00220388.2021.1965127

viewpoints, might help reshape social norms and alter bargaining power within the household demonstrates how existing inequalities are amplified through different aspects. Taking into consideration the variable of internet adoption as a potential driver for gender inequality in MENA, it is found out that having access to the internet has a considerable and statistically significant impact on labor force participation among women. Women's labor force participation rises with every percentage point increase in internet access, whereas men are not that much affected. When demographic categories are disaggregated, female labor force participation rises in all ages and educational levels. However, employment rates rise for older women and those with greater levels of education (i.e., those who have at least completed high school). Last but not least, the effects on women's labor outcomes are accompanied by a deterioration of traditional social standards among married women as well as a decline in fertility and marriage rates among those who are not married. Evidences such as increase in female wage employment as a result of increase in mobile coverage across South Africa prove that information technologies have larger impacts on women than on men.

'*Pandemic of online gender-based violence*' has been used to describe the phenomenon of the digital environment amplifying existing inequities and negative attitudes and behaviors, provided that women are disproportionately affected by crises[219].Technology-facilitated violence is widespread and can take many different forms, such as hate speech, hacking, identity theft, online stalking, human trafficking and the sex trade. Given the widespread use of technology worldwide, including in the Arab world, the United Nations report "*Cyber Violence Against Women and Girls: A Worldwide Wake-Up Call*" called for a global awakening to combat cyber violence against women and girls[220]. In the Arab world, several examples of gender-based cyber violence have recently attracted attention, but the lack of data makes it challenging to comprehend the intricacies of this phenomena. More than half of Jordanian youth surveyed said they had experienced internet bullying at least once[221]. Additionally, the Arab Center for the Development of Social Media and the Swedish "Kvinna till Kvinna Foundation" used social media and the internet to research gender-based violence in Palestinian communities. Six focus groups in all were conducted in the Galilee, the West Bank,

[219] Brudvig, I., Chair, C., van der Wilk, A. (2020). Covid-19 and increasing domestic violence against women: The pandemic of online gender-based violence. *World Wide Web Foundation*.Retrieved from http://webfoundation.org/docs/2020/07/WWWF-Submission-COVID-19-and-the-increase-of-domestic-violence-against-women-1.pdf

[220] UN Broadband Commission for Digital Development Working Group on Broadband and Gender (2015). *Cyber violence against women and girls: A worldwide wake-up call*. Retrieved from https://www.unwomen.org/ ~/media/headquarters/attachments/sections/library/publications/2015/cyber_violence_gender%20report.pdf?v=1&d=20150924T154259

[221] UNICEF (2020). *Cyberbullying: What is it and how to stop it*. Retrieved from https://www.unicef.org/jordan/stories/cyberbullying-what-it-and-how-stop-it

Jerusalem, Haifa and the Gaza Strip. One of the study's key findings is that a third of young Palestinian women, out of a sample of more than 1200 Palestinian women aged between 15 and 35, experienced online sexual harassment[222]. Data on the frequency of violence against women in the 12 regions of Morocco were gathered through the second National Survey, whose findings indicated that 54% of women between the ages of 18 and 64 were victims of assault in 2018; also, more than 13% of the women polled reported having been harassed online, among which 46% had advanced university degrees and 30% were between the ages of 18 and 25[223]. Exclusive data from the Internal Security Forces in Lebanon show that more than 100 allegations of online violence are received each month, with the bulk of these reports involving young women and a notable rise in reports of cyberviolence since the pandemic's inception. The NGO Fe-Male asserts that these cybercrimes come in a variety of forms, including harassment as well as sextortion[224], extortion, defamation and identity theft[225]. Women in Tunisia and Lebanon have witnessed an increase in violent and misogynistic online content, including calls for harassing and raping them on social media platforms while curfews were established, when the streets were empty and the courts were closed too, through the proliferation of "clickbait" links that promised rape videos and the growth of "tracking apps" that made it easier to monitor and exercise control over women's lives.

Throughout COVID-19, the first significant pandemic of the social media era, the state of cyber violence degraded. Women and girls began accessing the internet more regularly during the worldwide pandemic, despite the fact that there is still a digital gender difference, with the Arab region having the greatest levels. For business, school and social activities, both men and women as well as girls and boys used the internet. The rise in internet usage as a result of self-isolation policies and quarantine precautions during lockdown was closely related to a rise in online violence, especially among less digital-skilled users. Since the Arab world has the highest digital gender divide, it turns out that Arab women and girls are at a higher risk for these types of assault[226].

4.2. From offline harassment to the digital repression of women's voices

[222] Odeh, S. (2018). *Gender-based violence against Palestinian: Women in virtual space*. Stockholm: Kvinna till Kvinna.
[223] MFSESD (2019). *The second national study on the prevalence of violence against women in Morocco*. Retrieved from http://www.social.gov.ma
[224] Sharing an individual's private photos and data without their consent.
[225] Fe-Male (2020). *Fe-Male Launches "Screens Do Not Protect" National Campaign*. Retrieved from https://www.fe- male.org/archives/13108
[226] International Telecommunication Union (2020). *The digital gender gap is growing fast in developing countries*. Retrieved from https://itu.fo- leon.com/itu/measuring-digital-development/gender-gap/

Although it is becoming more common in the field, online violence against women is still a relatively young area of study with no accepted definition or conceptualization. Young and educated women who have easier access to the Internet appear to be more susceptible to cyber abuse, especially on social media. Furthermore, intersecting identities and discriminatory practices can exacerbate violence against women online and its effects on victims. This means that certain types of online violence are more likely to target women who are breaking conventional gender norms, such as LGBTQ+ women, women who are out in public and unmarried women. It seems that men and the State are the primary perpetrators of online violence in almost all MENA countries[227]. To ascertain the specific forms of online violence for each victim profile, the sociological characteristics of those who commit acts of violence online and the relative scope and impact of the problem across various social groups and ages, more research is required. Contextual variations can be seen throughout the nations, particularly in Syria and Palestine, where the occupation worsens the effects of gender-based violence in the digital sphere and where online violence is directly linked to the combat environment. On the other hand, similar patterns can be found to serve as a basis for additional study or for new action plans at the national, regional, EU and international level. The gender aspect, and more specifically how the new environment is affecting women, has been frequently hidden in discussions of the development and use of information and communications technology in the MENA region.

Recently, some research has been done at least in Egypt and the Arab States with regard to the sociodemographic factors influencing the exposure to cyber violence. A study[228] focused on the issue of cyber violence against women among the Egyptian population revealed that approximately three quarters of respondents (72.8%) reported being exposed to cyber violence through social media, and the majority of victims (92.6%) reported that the perpetrators were unknown. In 2020, 41.6% of the participating females reported being exposed to cyber violence, and 45.3% of the victims had multiple experiences[229]. Sending photos or symbols with sexual content, insulting emails or messages and offensive posts or comments were the most prevalent types of violence. Additionally, none of the cases in the study were reported to the police because victims were afraid of having their reputations damaged by reporting the crimes to the police or were not aware of the laws that forbid cyber violence. In 10 cases, the perpetrators were identified as male, either current or ex-partners, or the victim's

[227] EuroMed Rights (2021). *Spaces of violence and resistance: women's right and the digital world, the scenario in the MENA Region*. Retrieved from https://south.euneighbours.eu/wp-content/uploads/2022/07/Online-gender-violence-in-MENA-region-1.pdf
[228] Hassan, F.M. et al. (2020). Cyber violence pattern and related factors: online survey of females in Egypt. *Egyptian Journal of Forensic Sciences*, 10(6). Retrieved from https://ejfs.springeropen.com/articles/10.1186/s41935-020-0180-0
[229] *Ibid*.

family members, coworkers or friends. The majority of exposed females reported psychological impacts such as anger, concern, fear and suicidal thoughts, while 13.6% reported social effects such as withdrawal from online engagement and suffering from loneliness[230]. Results from an analysis of the effects of sociodemographic factors on the exposure rate to cyber violence showed that neither age, education, place of residence, occupation, nor daily Internet use had an impact on that rate of exposure. The only significant finding was marital status, with married women being less likely to experience it. Married women are predicted to use social media less frequently and to be more cautious when interacting with others, which reduces their risk of being exposed to cyber violence. Although the study has some limitations, it is regarded to be a relevant contribution to the limited research on the subject and serves as a basis for deeper investigations into women's online safety across MENA countries.

With respect to the Arab States, UN Women collected data on the prevalence, impact, and consequences of online violence on women in the Arab States through a major survey[231] conducted on male and female Internet users over the age of 18 in Iraq, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia and Yemen. Women who use the Internet in Arab States reported feeling unsafe because of online harassment in nearly half of cases, especially among human rights advocates and women activists. Reduced civic space has serious effects on the work of all civil society groups and movements, but those focusing on women's rights and feminist problems frequently see the harshest effects, according to a 2018 report by the women's rights organization Kvinna Till Kvinna[232]. For instance, many Bahraini women who advocate for human rights presently reside in exile as a result of persistent threats to their safety. In Egypt, civic space is highly constrained, particularly for rights-based organizations and activists. Basically, organizations accepting foreign money are subject to bans and harsh punishments and activists are subject to defamation campaigns and arrests. Political groups, state actors and non-state actors that uphold damaging social norms threaten women human rights defenders in Iraq, Jordan, and Palestine, limiting their freedom of expression and endangering their lives[233]. Feminist movements have had to develop new and modified tactics to unite and fight for social justice in light of this reality, frequently using digital tools and platforms. The latter have,

[230] *Ibid*.
[231] UN Women (2021). *Violence against women in the online space: Insights from a multi-country study in the Arab States*. Retrieved from https://arabstates.unwomen.org/en/digital-library/publications/2021/11/violence-against-women-in-the-online-space
[232] Wassholm, C. (2018). Suffocating the Movement – Shrinking Space for Women's Rights. *Kvinna Till Kvinna*. Retrieved from https://kvinnatillkvinna.se/wp-content/uploads/2018/03/kvinna-till-kvinna-suffocating-the- movement-report-eng-2018.pdf
[233] *Ibid*.

in fact, played a significant role in responding to these challenges during times of health and economic crises, fragmentation, occupation, and armed conflicts, as well as shrinking civic space, by providing an alternative space for discussions, mutual learning and support, as well as solidarity and resistance through building collective power. Suhair Faraj described "online armies" those people who are prepared to attack, disparage and threaten women in general and feminist activists in particular whenever they are active online. Attacks can take the shape of defamation campaigns, identity theft, the creation of phony accounts using personal data belonging to women or the creation of content and linking it to their names[234] For instance, the Gulf Centre for Human Rights expressed concern in a statement in October 2019 about women human rights advocates being the target of "deepfake" technology that manipulates their images, audio, video and text, putting them at serious risk[235]. Moreover, attacks can also consist of attempts to silence women who are trying to expose abusers, whether by overt and obvious retaliation, public defamation campaigns or widespread calls for the removal of Internet content, especially if the violent offenders are powerful individuals.

In the Arab States, nearly half of the women who suffered online violence in 2021 said it was the first and only time they had ever experienced it, while the other half has been victim of online harassment more than once. Further, getting unwanted images or symbols with sexual content, unpleasant phone calls, improper or unwanted communications and receiving rude and/or hostile messages were found to be the three most prevalent types of online violence. Men who responded to the survey reported engaging in online violence at a rate of 27%[236]. Younger people, particularly young men, are more likely to commit acts of online violence. Specifically, one third of men between the ages of 18 and 24 claim to have engaged in some form of online violence, with a prevalence of male students and unemployed men and men who have only completed primary school rather than those who have completed university or college. The majority of offenders said that they engaged in online violence because they feel entitled to do so as their primary motivation or because it was entertaining for them, whereas another group stated that it is women's fault to display their photos and videos that can be used against them. The latter motivation reflects the traditional culture of gender roles that still remains consolidated within MENA countries. On the victims' side, online abuse does pose a major risk to the physical and mental health of women and did not stop in the digital realm for 1 in 3 women. In fact, 33% of female victims of online assault report that some or all of their encounters have shifted

[234] Tarawnah, N. (2020). Sextortion, harassment, and deepfakes: How digital weapons are being used to silence women. *IFEX*. Retrieved from https://ifex.org/sextortion-harassment-and-deepfakes-how-digital-weapons-are- being-used-to-silence-women/
[235] GCHR (2019). *Deepfake poses a threat to human rights defenders in the Middle East*. Retrieved from https://www.gc4hr.org/news/view/2227
[236] *Supra*, note 231.

offline[237]. The majority of women who report experiencing online violence from anyone they knew offline say that the incident went offline after they reported it. Additionally, after reporting the occurrence to family members, 13% of women who had suffered online violence said they had been the victims of domestic violence. There is evidence that the lack of help provided to women who experienced online assault led to their self-censorship or complete removal from online communities. Given the recent spike in Internet violence, 22% of women who suffered online assault end up deactivating or deleting their accounts and 26% said they were more cautious about what they posted online[238]. Women who reported deactivating or deleting their accounts, missing class or work as a result of the incident were more likely to do so than women whose online abuse incident did not take place. According to qualitative findings from civil society organizations in the area, women are targeted because of their greater presence online and may feel forced to silence or even ban them from online places if they are present there, especially if they are perceived to have violated societal norms. Therefore, the offenders are often attempting to dominate and control women as they tend to hold different religious beliefs, be unwilling to address the survivors directly and instead choose to remain anonymous, feeling entitled to their actions. Women and girls who express themselves online and talk about women's issues are attacked as a result of the replication of misogyny and social conventions that exist offline. Families may also take action by restricting or banning the use of digital technology by women, who are further marginalized and denied accessing to information, growth in technology, and freedom of expression.

Social media is where the majority of online assaults against women and LGBTQ+ people in the MENA area takes place. On one side, such assaults may originate from either the State or an individual, on the other side, social media and technological firms have a part to play in shielding users from dangerous content including cyberbullying, hate speech and violent extremism. Although governments are increasingly interested in supervising social media platforms through ad hoc agreements or particular statutes, social media platforms often adjust their rules to each area and region and rely on self-governance with massive repercussions for journalists, human rights advocates and feminist groups in particular. Such agreements or bills frequently grant the State the authority to monitor Internet content and request technological corporations to remove “illegal” content or block websites. A key point is that self-censorship is a common response to cyber violence. Since women are afraid of social or family judgment, are unaware of their rights, or are aware too well that the legal system in their country is insufficient to protect them and/or prosecute gender-

[237] *Ibid*.
[238] *Ibid*.

based violence perpetrators, women and girls who are victims of violence often choose not to speak up[239]. Theoretically, women and activists have a unique chance to change social norms, offer alternative narratives, unite and empower women through the use of digital tools and platforms. In reality, the digital domain represents a relatively free place for women and girls within authoritarian or conflict-affected countries characterized by constrained environments. The COVID-19 lockdown in 2020, when girls needed computers to access education and victims of abuse turned to the Internet to seek support services or helplines made it even more clear. Finally, it is crucial that steps should be taken to fight the trivialization of online violence and spread awareness of the importance of respecting women's access to public areas, including the Internet. MENA countries have almost all seen how the Internet space has been exploited as a site for feminist resistance and solidarity, enabling for the dissemination of emerging counter-narratives on gender equality and women's empowerment, despite historical and sociopolitical disparities. Online gender-based violence is perpetrated and perceived differently depending on regional, political, social and economic conditions, even though digital risks are analogous worldwide. In this specific situation, technology-enabled communications enable civil society organizations, including women activists, to gather and exchange information on the many war crimes and human rights violations, for example committed against Syrians in general and Syrian women in particular. Although information and communication technology give women a variety of opportunities, they can also lead to online backlash in the form of hate speech, trolling, harassment or mobbing, which can prevent women from using the Internet and further reduce the space available for feminism-focused civil society organizations.

Cybersecurity and the idea of gender-based violence in the digital sphere have gained traction throughout the Middle East and North Africa during the past ten years. The 2011 protests marked the beginning of a decade of online activism, during which blogs, social media and technology were used by individuals who had previously been marginalized, including feminist activists and women in general, as tools of resistance and free speech[240]. The Arab Spring did not usher in the beginning of the region's civic movements, political conflicts or women's political participation, but increased Internet accessibility and the emergence of social media platforms in English and Arabic. Moreover, rising public awareness of change has created a more favorable environment for women's political activities and, as a result, for a broader expansion of what is considered the “sphere of the political”. Social media offered a way for many civil groups to cooperate during the Arab Spring. The networks

[239] *Supra*, note 227.
[240] Sreberny, A. (2018). Women’s Digital Activism: Making Change in the Middle East. In Zayani M. (eds.), *Digital Middle East: State and Society in the Information Age*. Oxford University Press. Retrieved from DOI: 10.1093/oso/9780190859329.003.0005

of activists who had a common goal resisted attempts by the authorities to limit and suppress their activity. Different groups were able to share their experiences and plan joint actions by creating a collective protest narrative. Groups needed a strong unifying factor to keep them together in their shared commitment and the development of a unified civil resistance supplied that. Activists were able to quickly shape the mainstream rhetoric of Arab resistance against the old regimes thanks to social media. Governments lost their monopoly on information control as soon as the Arab Spring began, as digitally skilled youth used social media to spread their message. Digital technologies actually serve as alternative media for dissenting and opposing voices in places like the Middle East where traditional media are still heavily regulated and censored by the government[241].

The Middle East has witnessed the significant growth of blogging in the twenty-first century, becoming an important aspect of the area's political and cultural landscape. Bloggers, mostly young men and women in Iran, Egypt, Lebanon, Bahrain, Kuwait, Algeria, Syria and Jordan have transformed the way politics is practiced by establishing news spaces for "mediated politics", developing new forums for political discourse and subverting state control of the media through an independent news organization[242]. Arab bloggers have arranged public rallies and demonstrations, collected signatures on petitions and encourage societal groups that have not often had access to political forums. Thus, the Arab public sphere has become more inclusive thanks to new technologies, which have made discussion participation more accessible. In digital environments, the lines separating private and public spaces are blurred, if not crossed, with key implications for young Arab women. The latter who are part of this new global period and are breaking cultural and traditional conventions by regularly putting themselves out there are aided by the tension between exposing oneself to public scrutiny and preserving their privacy. Ten years after the Middle East and North Africa upheavals and popular protests, nearly two years after the popular protests in Lebanon and a year after the COVID-19 outbreak in the region, feminist activists in the MENA region find themselves tackling many demons at once. Some of these battles date back to the early feminists' activity at the turn of the 20th century, while others are the result of contemporary reality, such as conflicts that are currently raging or just beginning and the use of the internet as a virtual arena for activism. Many forms of oppression, some of which older feminists have been battling for decades, are still being fought by younger feminists.

[241] Gheytanchi, E. & Moghadam, V.N. (2014). Women, Social Protests, and the New Media Activism in the Middle East and North Africa. *International Review of Modern Sociology*, 40(1), 1-26. Retrieved from https://www.jstor.org/stable/43496487

[242] Elsadda, H. (2010). Arab Women Bloggers: The Emergence of Literary Counterpublics. *Middle East Journal of Culture and Communication, 3,* 312–332. DOI 10.1163/187398610X538678

In the widespread social mobilizations of 2010–2011, many women participated in and became involved, and they have continued to do so, along with others. There was no clear preference for one social media site over another when it came to digital engagement as the local customs and preferences came together, online pages and websites, Twitter, Facebook and YouTube were used both individually and together. Based on certain feminist researchers, there is a difference between the first and second waves of Arab popular revolutions.[243] Women participated actively in both waves, strongly tying their feminism to the broader battle. Though the first wave of protests frequently featured female activists who belonged to political organizations at the vanguard, the violent gendered repression by the state, the scarce support from men and the spread of fundamentalism all caused serious defeats to the hopes for gender equality. In Sudan, Libya, Algeria and Lebanon, the second wave was distinct from the first. Carefully created feminist slogans reflected the variety of identities and viewpoints held by women themselves as well as explicit feminist demands from the outset. The second wave of MENA revolutions featured a new narrative in which the upheavals reflected feminist calls for freedom, inclusion and equality for women, LGBTQ+ people, immigrants and refugees, as well as women with disabilities and other marginalized or at-risk groups. As is the case with feminists from Egypt and Iraq, for example, some of whom were specifically targeted and simply eliminated, many strong feminist activists in the region sacrificed their freedom and lives. The other leadership element that has arisen is that it embraces women in all of their diversity and is not just limited to educated women from middle-class backgrounds. It also employs an intersectional perspective to comprehend and confront all types of oppression and, fundamentally, the expansion of the virtual public sphere made it possible to explore gender roles and criticize governments that impose rigid gender norms.

Women still engage in a significant amount of national-specific Internet activity, with particular attention paid to Egypt, Iran and Tunisia. It is clear that some of these actions are carried out and supported by groups that could be roughly referred to as Middle East diasporas based in Europe, the U.S. and other places. Although funding from numerous international and non-local NGOs does support initiatives around women empowerment and equality, online engagement appears to be mainly locally driven. The Internet creates fragile boundaries, blurring the lines between inside and outside, native and foreign, and fostering the establishment of transnational links among the women in the area. There were and still are numerous individual women activists engaged in the Arab protests

[243] Qazzaz, H. (2021). Fighting all demons: feminist voices on popular protests in Lebanon and the Middle East and North Africa (MENA) region. *Gender & Development*, 29(2-3), 431-446. DOI: 10.1080/13552074.2021.1978726

as of the 2011 uprisings. With Iranian and Saudi women bloggers investigating a wide range of topics and finding a written voice where options for oral expression and physical participation have not been as available, blogging has become increasingly popular throughout the region. The political landscape has undoubtedly changed, even though it is unclear whether the emergence of new voices in the virtual world can result in tangible improvements. Before, throughout, and after the 2011 Arab uprisings, social media platforms and digital technologies were actually crucial to political mobilization, sparking scholarly and popular ideas of the internet as a "liberation technology" that will ultimately undermine the foundations of authoritarian nations[244]. As authoritarians have found inventive ways to leverage on digital technologies for repression and control, the naive belief that the internet necessarily will act as a liberation technology has been dispelled after 2011. Since internet infrastructures are so pervasive, they have made it easier for new types of digital authoritarianism to emerge through surveillance, manipulation, censorship, deception and intensely targeted repression. Activists in authoritarian environments and democracies today face a significant problem due to the deployment of such instruments by state and non-state actors. Not only activists, but also autocrats want to harness and manipulate digital communications for their own ends as they became more aware of its power. Middle Eastern regimes began to see social media as a significant potential danger and, as a result, substantially invested in methods to regulate, monitor and manipulate online behavior. The push for digital authoritarianism manifests itself in a variety of ways, including the colonization of the online public through manipulation, utterly false activity and influence operations, surveillance of the online public through big data analysis, spyware, tracking apps and the silencing of the online public through deplatforming, content moderation and targeted repression of influential voices[245]. Indeed, the legal, political and social backlashes against women's rights in the wake of the Arab Spring are considered part of a clear example of "reverse democracy" as their active participation in the series of uprisings has been met with high levels of violence, repression, exclusion and marginalization in the post-revolutionary contexts[246].

If women are subjected to repression, discrimination and physical harassment in almost all MENA countries, the online environment has tragically not been any safer and freer for them, especially with the purpose of fighting against cultural and traditional beliefs in favor of their rights and freedom. In

[244] Stanford Cyber Policy Center (2021). Digital Activism and Authoritarian Adaptation in the Middle East. *POEMPS Studies*, 43. Retrieved from https://pomeps.org/wp-content/uploads/2021/08/POMEPS_Studies_43_Web.pdf#page=23

[245] *Ibid*.

[246] Tazi, M. (2021). The Arab Spring and Women's (Cyber)activism: "Fourth Wave Democracy in the Making?" Case Study of Egypt, Tunisia, and Morocco. *Journal of International Women's Studies*, 22(9), 298-315. Retrieved from https://vc.bridgew.edu/jiws/vol22/iss9/20

Egypt, Saudi Arabia, Tunisia, Iran and other countries, women have been subject to governmental censorship and monitoring online; in fact, monitoring and surveillance intensify as women's voices gain more attention[247]. Additionally, online harassment and trolling are on the rise, as much as in other regions of the world, including the West. In a region where critical online speech or activity is subject to stringent internet surveillance, heavy censorship, legal restrictions and other harsh consequences, misogynistic online attacks, including intimidation, shame and discreditation, serve as a tool to silence women or to limit their impact in digital spaces. A report[248] by the Institute for the Future noted that women are target of government-backed harassment, through rape threats, misogynistic language and almost always false information, with the intent to discredit their morality and refraining them from expressing their opinions. As the MENA region is overrepresented on the negative end of several indices that measure gender inequality, activists and journalists in the Middle East frequently encounter severe backlash when they attempt to advocate for or engage in public campaigns for women's rights. Recently, there has been a clear strong resistance against feminist activists online. Popular female activists like Loujain Al Hathloul have been imprisoned, tortured and sexually raped in nations like Saudi Arabia for their activism or publicly defamed by false charges that they are foreign agents[249]. Activists are frequently called derogatory names that lack any basis in reality or are tortured into making false confessions that are subsequently spread to counteract deliberate lies. Even bringing up issues with digital harassment online might result in gendered misinformation. Political players target women who take the lead in raising concerns, who function as narrators and active interlocutors in the public sphere. These restrictive circumstances may have been made worse by the 2017 Gulf Crisis, during which Bahrain, Saudi Arabia, the United Arab Emirates and Egypt initiated a blockade against Qatar and claimed that country was inciting regional unrest and terrorism through its digital media[250]. An all-out mobilization of social media misinformation, including bots, trolls and influencers, was a component of the blockade. With modified hashtags, infographics and misinformation against a lot of the content targeted Al Jazeera and its journalists, the blockading countries made it quite clear that they wanted Al Jazeera shut down.

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[247] Jones, M. (2021). State-aligned misogynistic disinformation on Arabic Twitter: The attempted silencing of an Al Jazeera journalist. *Open Information Science*, *5*(1), 278-297. Retrieved from https://doi.org/10.1515/opis-2020-0126

[248] Institute for the Future (2018). *State-sponsored trolling how governments are deploying disinformation as part of broader digital harassment campaigns*. Retrieved from https://www.iftf.org/fileadmin/user_upload/images/DigIntel/IFTF_State_sponsored_trolling_report.pdf

[249] Guardian staff reporter (2019, 13 August). Jailed Saudi feminist refuses to deny torture to secure release. *The Guardian*. Retrieved from https://www.theguardian.com/world/2019/aug/13/jailed-saudi-feminist-refuses-release-in-exchange-for-denying-torture

[250] Jones, M. (2019). The Gulf information war: Propaganda, fake news, and fake trends: The weaponization of Twitter bots in the Gulf crisis. *International Journal of Communication*, 13(27). Retrieved from https://ijoc.org/index.php/ijoc/article/view/8994

Consequently, the harsh climate for female journalists has been even worsened online. Companies and government organizations that utilize digital technology to spy on and harass journalists are specifically targeting activists and journalists, endangering their capacity to obtain news and information. Digital hatred is highly prevalent for female journalists, bloggers and vloggers who cover technology, science and sports, namely, nearly all women who do not conform to gendered stereotypes or are in a sort of position of power[251].

The digital world is a tool in the hands of the oppressors even while it offers a space for resistance and unity. MENA countries are characterized by state-sanctioned violence against activists and limitations on civic space and activism, which are either reflected online or utilized as a tool to reinforce repression offline. This does not only frequently manifest as censorship, as well as questioning, arrests and incarceration on grounds linked to Internet material, but authorities also employ cybercrime laws to suppress and penalize free speech in nations like Egypt, Jordan, Saudi Arabia, the United Arab Emirates and Qatar. Authoritarian regimes primarily use restrictions on information dissemination to mitigate possible harm when faced with novel and unexpected challenges to the system and its core values. The most efficient tool at the disposal of authoritarian governments to prevent the spread of undesirable information is control over the media through a large market share of state-owned outlets that restricts access for independent media and suppresses social minorities' voices.

[251] Sobieraj, S. (2017). Bitch, slut, skank, cunt: Patterned resistance to women's visibility in digital publics. *Information, Communication & Society*, 21(11), 1700–1714. Retrieved from https://doi.org/10.1080/1369118x.2017.1348535

5. Closing the digital gender gap

In terms of its maturation into a communicative, immersive and content-driven platform, the Internet has reached its peak. Social media platforms, which are areas created to actively promote engagement and the sharing of content, can serve as a striking example of the potential for positive and progressive side on the Internet. Such user-driven, interactive platforms ought to actively promote the idea that the Internet is a free, open and participatory form of communication. However, the problems that are currently being faced through exposure to and engagement with online content are becoming more destructive and damaging, as they are progressively producing both online and offline harms. Regulators and the organizations in charge of social media platforms cannot continue to disregard the complicated issues involved in Internet regulation. Although regulatory measures have been a recurrent topic, few legal reforms have, to date, resulted in substantive change or effective protection of digital rights. It is time for better legislative regulation of digital inclusion and gender-based abuse online since the current scenario is insufficient to tackle such widespread and increasing issues. Online violence, especially violence against women, is endangering the safety of digital interaction more and more. Such actions are online reproduction of offline patriarchal hierarchies and mirror the normalization of inequality offline, fundamentally contradicting the principles behind the Internet, which is used to reinforce inequality and silence online women, instead of serving as a platform for fighting the normalization of abuse and inequality in daily life. To effectively address online misogyny issues and achieve long-lasting changes, a holistic reaction is therefore required. So far, there has not been any evidence that there is a proper intention to change the current dynamics of privilege and power, given the male-dominated hierarchies that exist within the legal and political systems. Globally, technology is widely acknowledged as a tool for promoting gender equality and sustainable development. Therefore, combating cyber violence through immediate, multifaceted and comprehensive action should be regarded as a crucial concern in order to take advantage of the opportunities of digital technology to empower women and girls. This demands the creation of a legislative framework supported by pertinent policies and programs with a proper and monitoring system, alongside the coordinated actions of numerous interdependent parties, such as governments, civic society and internet intermediaries. If governments and other important parties do not act right away, online gender-based violence and inequal access to the Internet are a violation of human rights that technology can only spread further. In the first subparagraph, I will focus on the strategies and policies that have been recommended, developed and implemented by international institutions so far with the objective to reduce the digital gender gap, resulting from obstacles to access the digital world and safely participate to it, while in the second subparagraph I will briefly explain how

sociodemographic research and analysis can contribute to face modern social challenges related to the digital inclusion, through the new digital methods of collecting data and information of the population, and which considerable role it has played in this thesis to identify digital inequalities reflecting already existing offline social inequalities.

5.1. Strategies and cyber security policies to fill the digital gender gap

There are still major obstacles to overcome in order to guarantee that women are involved in the shift to a digitally enabled society, notwithstanding the progress the world has made in terms of a large rise in access, the availability of new applications and cheaper devices. The productivity and social progress of the entire globe would gain from ensuring that women can effectively utilize new digital technology. As a result of information and communication technology policy reforms made since the early 1990s, access to mobile services is undoubtedly growing in low- and middle-income nations, coupled with declining pricing and a thriving internet ecosystem. A closer analysis, however, finds considerable inequalities in specific socioeconomic groups' abilities to use new technical applications for socio-economic growth, as well as large access gaps to the Internet[252]. Many categories, including elderly people, indigenous peoples and women, in particular, continue to be left far behind in having access to digital technologies that can help them enhance their quality of life. Only a small proportion of people will be able to take advantage of the opportunities for participation in the economy, for communication and building social networks and for access to enhanced public and private services as many aspects of daily life and basic services are now provided through digital technologies. Global inequality will rise as a result of the widening income gap between those who have access to digital technologies and those who are digitally excluded, particularly women. If the current gender gaps in digital inclusion are not effectively addressed, it is possible that gender inequality will continue to spread to many other sectors, such as the labor market and women's financial inclusion. This is mostly because digital technologies are pervasive and have an impact on every aspect of our life. As a result, because they lack digital literacy, one of the most in-demand skills in the current digital age, digitally excluded women will be excluded from more beneficial and

[252] Byrne, D. & Corrado, C. (2017). ICT Services and Their Prices: What Do They Tell Us About Productivity and Technology? *International Productivity Monitor*, 33. 150-181. Retrieved from http://www.csls.ca/ipm/33/Byrne_Corrado.pdf

prestigious employment opportunities[253]. They will consequently be excluded from finding a job that pays reasonably. In today's increasingly digital employment market, many firms choose to hire candidates through online channels. Women who do not have access to such platforms face the danger of being paid much less for their labor than what the market is now paying. Therefore, it is conceivable that the gender wage gap would get even wider if people are unable to access and use digital technology. Women's financial inclusion will be greatly enhanced by greater digital inclusion[254]. Digital economies are data-driven economies where data capital is a valuable resource. In order to determine whether or not to lend money to a specific consumer, new financial technologies analyze customer data stored in the form of digital transaction records. Since they lack this crucial asset, women who are digitally excluded are more risky and less reliable to capital providers. Time is of the essence in this situation since the longer it takes to overcome the digital gender gap, the less data capital women will be able to acquire, thus creating a far greater gap in financial inclusion. By enabling women to "*feel safer and more connected, and provide access to information, services, and life-enhancing opportunities like health information, financial services and employment opportunities*[255]", the adoption of mobile technologies alone can play a significant role in reducing the gender divide. Therefore, by minimizing gender inequities in the labor market and enhancing women's financial participation, measures focused at reducing gender gaps in digital inclusion might further empower women. A new disruptive process towards development could be seen if existing digital differences are addressed, especially in low- and middle-income countries where the digital gender gaps are the greatest. It would make it possible for developing countries to use modern technologies to address a variety of enduring issues, such as good healthcare, education, political engagement and civil rights[256]. The digital age has permanently shaped modern life and has the ability to radically connect people from all over the world and, at the same time, it faces numerous difficulties. It is linked to a variety of online risks, including hacking, harassment, identity theft, human trafficking, technological addiction and invasion of privacy. The COVID-19 pandemic has sped up the broad digitalization of many under-resourced sectors and groups that are socially disadvantaged have been particularly impacted, as the first chapter demonstrates. Rapid technological

[253] Mariscal, J., Mayne, G., Aneja, U. & Sorgner, A. (2018). Bridging the Gender Digital Gap. *Gender Economic Equity*. Retrieved from https://www.g20-insights.org/wp-content/uploads/2018/07/TF-4.1-Digital-Inclusion-Policy-Brief-15.5.pdf

[254] *Supra*, note 85.

[255] GSM Association, (2018). *The Mobile Gender Gap Report 2018*. Retrieved from https://www.gsma.com/r/gender-gap/

[256] Vyas-Doorgapersad, S. (2022). The Use of Digitalization (ICTs) in Achieving Sustainable Development Goals. *Global Journal of Emerging Market Economies*, 14(2) 265–27. DOI: 10.1177/09749101211067295

change has been difficult and problems including poor digital literacy, lack of technology access, inequality and systemic discrimination have made progress much more difficult.

A worldwide coordinated effort is urgently required to assist everyone in acquiring the digital skills necessary to stay up with this rapidly evolving environment. The development of digital citizenship and a wider range of digital skills that can support everyone in taking advantage of possibilities and reducing dangers in the digital environment is especially crucial. The development of digital skills education programs has received a lot of attention to date. Digital literacy is listed as a core fundamental ability for future education in the Learning Framework 2030 of the Organization for Economic Cooperation and Development[257]. However, until recently, there was no coordination between programs and terms like "digital literacy" did not have a common definition. It must be made sure that the extensive digitalization of the educational sector takes place inclusively while preventing the tide of rising inequality. Such results would go a long way toward ensuring the sustained growth of the digital economy and its ability to improve the lives of numerous people through the teaching of digital skills[258]. Thus, online education will become more and more significant in the educational system. The current manifestation of wider trends in the global economy as a whole is the digitalization of the education sector and the initiatives mentioned can be applied to both teacher preparation and workforce training in general. Online and offline options are no longer mutually exclusive; as the digital world affects more and more aspects of daily life, a deliberate effort must be made to guarantee that everyone has access to the education and training they need to succeed in the digital age. It is underlined in the literature that, although having access to the internet is important, it is insufficient to advance digital development and include disadvantaged people. Digital literacy, which is the capacity to use information and communication technologies to find, evaluate, create and communicate information, requires both cognitive and technical skills. E-skills, which are the capacity to use and develop digital technologies to adequately participate in an environment and economy that is increasingly characterized by access to digital information, are another important complementary area that needs to be addressed[259]. Girls and women most often have lesser literacy, education and digital skill levels, consequently, it is claimed that improving digital literacy and confidence can be a considerable source of growth for gender inclusion. To accomplish the latter, it

[257] OECD (2020). *The Future of Education and Skills. Education 2030*. Retrieved from https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf

[258] Tirado-Morueta, R., Aguaded-Gómez, J.I., & Hernando-Gómez, A. (2018). The socio-demographic divide in Internet usage moderated by digital literacy support. *Technology in Society*, 55, 47-55. Retrieved from https://www.sciencedirect.com/science/article/pii/S0160791X17300660

[259] Jackman, J.A., Gentile, D.A., Cho, NJ. et al. (2021). Addressing the digital skills gap for future education. *Nature Human Behavior,* 5, 542–545. Retrieved from https://doi.org/10.1038/s41562-021-01074-z

is necessary to comprehend the needs of women, increase investment in education and capacity-building initiatives, develop skills and confidence, support educators and promote new female role models.

Governments all across the world must develop and implement legislative and regulatory frameworks that encourage the adoption of digital technologies, taking into account the Internet as a multipurpose technology that affects all areas of the economy as well as international politics and society. Moreover, they should play the role of catalysts for development through transversal and integrated policies, encouraging the active participation of relevant stakeholders in the promotion and inclusion of socially disadvantaged groups.

Skill-building programs designed to give women and other social groups the skills they need for the workforce of the future must be implemented in conjunction with broader social policy measures, like encouraging women's education in STEM disciplines through scholarships, internships and training programs, taking into account gender quotas for admission to educational programs or minimizing the financial obstacles for women through the increase in private ICT service supply. Women's digital marginalization requires interventions that take into account current sociocultural norms and are driven by influential women in the digital realm who are directly challenging socio-cultural norms. In combination with such approach, long-term new masculinity programs aiming at changing men's perceptions of women in the digital age should be developed[260].

Currently, the international community is only at the beginning of its active endeavor to uphold women's rights and close the gender gap in the digital domain. The digital gender divide is not only enhanced by socio-cultural norms, lack of digital skills and non-affordability of digital devices and Internet connection, but also by forced exclusion or withdrawal of women from active participation to online spaces to prevent threats to their wellbeing and defend themselves from online harassment. The landscape of the internet is continuously changing. Cyberviolence is continually evolving, both in its current forms and in its gender-based manifestations. Gender-based cyber violence can be committed via a range of online communication tools, including social media, web content, forums, dating websites, comment sections and chat rooms. The first step toward recognizing the need for preventative measures to combat cyber victimization was the United Nations Congress on the Prevention of Crimes and Treatment of Offenders in 2000. At first, cybercrimes were confined

[260] *Supra*, note 253.

to child pornography, terrorism, identity theft and file theft[261]. Later, the definition of cybercrime was broadened to include expressions endorsing terrorism, posing a threat to national security and making racist remarks. With the transition away from fixed computers toward portable and more accessible devices that provide anytime, anywhere access to the Internet, technical advancements have accelerated dramatically over the past 20 years, alongside increase in cyber dangers.

The ease of exchange of and access to information in digital spaces, although facilitated by private entities, cannot be associated with unregulated violence; rather, both specific regulations on online gender-based violence and specialized mechanisms with skilled and trained personnel are essential for fighting and eliminating cyber violence. According to the OHCHR, women's access to justice should consist of a combination between civil, administrative and criminal processes including the fundamental areas of state compliance, namely, prevention, protection, prosecution, punishment and provision of redress and reparation[262]. Nonetheless, the European Parliament argues that existing legislation does not provide the mechanisms required to confront online gender-based violence adequately, due to the lack of a common understanding of gender-based cyber violence and member states' different approaches not covering all the aspects related to the issue. Thus, the main gaps identified to be fulfilled as soon as possible are the lack of appropriate legal tools, as a result of a harmonized definition of gender-based cyber violence among states, lack of awareness concerning the persistence of gender stereotypes, lack of the investigation of the scale and impact of the phenomenon and the lack of support services and safeguarding measures for victims. In particular, the European Parliament have developed a set of policy options, both legislative and non-legislative. In regard to the former, it recommended to secure EU accession to the Istanbul Convention or develop similar EU legislation, to develop a general EU directive on online gender-based violence and on its prevention and to strengthen the existing legal framework; in regard to the latter, to facilitate EU and national level awareness raising, to back national level victim support and safeguarding services, to conduct research into gender-based cyber violence and to expand EU collaboration with tech companies[263].

The first convention to address crimes committed online was the Budapest Convention on Cybercrime and Additional Protocol, which was adopted in 2001. It specifically addressed computer-

[261] Halder, D., & Jaishankar, K. (2012). *Cyber Crime and the Victimization of Women: Laws, Rights and Regulations*.
[262] Office of the United Nations High Commissioner for Human Rights (2019). *Eliminating Online Violence against Women and Engendering Digital Equality*. Retrieved from https://www.ohchr.org/Documents/Issues/Women/WRGS/GenderDigital/DueDiligenceProject.pdf
[263] *Supra*, note 101.

related fraud, copyright violations, child pornography and breaches of network security. The Budapest Convention's primary goal is to defend society against cybercrime by establishing a uniform criminal code through effective regulation and international cooperation. Gender-based cyber violence is included by Article 3 of the Istanbul Convention on Preventing and Combating Violence Against Women and Domestic Violence, which identified violence against women as including all forms of gender-based violence. In particular, it defines violence against women and hate speech online as "[a] *violation of human rights and a form of discrimination against women and shall. mean all acts of gender-based violence that result in, or are likely to result in, physical, sexual, psychological or economic harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life*[264]". Sexist hate speech is defined as "*expressions which spread, incite, promote or justify hatred based on sex*[265]" under the Additional Protocol to the Budapest Convention on Cybercrime by the Council of Europe. In addition, the Council of Europe Cybercrime Convention Committee stated in a report[266] released in 2018 that cyber violence may take the form of novel forms of violence that do not exist in the physical world and that may have long-term effects or result in repeat victimization after the criminal's initial action. At the international level, in its resolution, the UN General Assembly calls attention to the fact that "*ICT- related violations, abuses, discrimination and violence against women, including women human rights defenders, such as online harassment, cyber-stalking, violation of privacy, censorship and the hacking of e-mail accounts, mobile phones and other electronic devices, with a view to discrediting them and/or inciting other violations and abuses against them, are a growing concern and can be a manifestation of systemic gender-based discrimination, requiring effective responses compliant with human rights*[267]".

It is relevant to observe that the 2030 Agenda for Sustainable Development provides insufficient attention to ICT and digitalization as ways of achieving the SDGs. Only once in the resolution's content does the term "digitalization" appear, along with a reference to the need to close the "digital divide"; as concerns the perspective of the gender digital divide, it is not mentioned. Although the UN has recently implemented social development programs and working groups that directly address

[264] Council of Europe (2011). *Convention on preventing and combating violence against women and intimate partner violence*. Retrieved from https:/www.coe.int/en/web/istanbul-convention/text-of-the-convention
[265] Council of Europe (2020). *Factsheet Hate Speech*. Retrieved from http:/www.echr.coe.int/ Documents/FS_Hate_speech_ENG.pdf
[266] Council of Europe (2018). *CyberCrime Convention Committee, Mapping study on cyberviolence (Draft)*. Retrieved from https:/rm.coe.int/t-cy-2017-10-cbg- study/16808b72da
[267] UN General Assembly (2013, 18 December). Resolution adopted by the General Assembly. Retrieved from https://documents-dds-ny.un.org/doc/UNDOC/GEN/N13/450/31/PDF/N1345031.pdf?OpenElement

gender equality in the digital world in an effort to influence national state policy, the effectiveness of its efforts could be increased if it used the national states' capacity more actively. Instead, nations state themselves should develop programs in cooperation with the UN to the standards set by the international community for digital women's rights[268].

Notably, national governments and civil society are crucial actors for the prosecution and elimination of gender-based cyber violence. On one side, the former should update and reform existing legislative frameworks addressing online harassment against women, enact laws addressing gender-based cyber violence and enable their effective implementation by all government departments of laws and policies; on the other side, the latter should ensure safe discussions concerning online harassment, develop digital citizenship education and awareness, through initiatives condemning abusive behavior online and addressing its risks, and amplify the voices of victims reporting their experience[269]. As concerns of the main target of cyber violence online, UNESCO recommends that states should ensure the application of laws and rights specifically protecting women journalists offline to cyber violence, as required by UN Resolutions calling on states to collect and analyze quantitative and qualitative data of online threats and harassment of women journalists. Moreover, collaborative responses comprising civil society organizations, researchers and journalists' network are needed to acquire more awareness of attacks, to develop more effective responses to safeguard women journalists and to offer them adequate support[270]. Other than the major importance of collaboration between national governments and civil society, collaborative efforts from social media platforms are claimed to be essential as well. Some institutions[271][272] recommended that social media companies should use their technological skills and financial resources to create stronger, more accessible and effective reporting mechanisms addressed to gender-based cyber violence to hold perpetrations accountable and appropriately respond to women's security needs; to collect and publish disaggregated data on the phenomenon to track its scale and impact; to strengthen and improve content moderation, ensuring transparency and removal of abusive content promptly; to implement their corporate responsibility respecting human rights in conformity with the UN Guiding Principles on Business and Human Rights; to take responsibility to create a safe online environment, promoting information to raise awareness and including women's participation in the development of policy and technical solutions.

[268] Leenders, A.M.R. (2022). How Can UN Digital Policy Enable the Rights of Women? *RUDN Journal of Political Science*, 24(1), 53-63. Retrieved from DOI: 10.22363/2313-1438-2022-24-1-53-63
[269] *Supra*, note 112.
[270] *Supra*, note 146
[271] *Supra*, note 112.
[272] *Supra*, note 147.

However, the fact that social media networks themselves need to acknowledge that there are issues related to abuses of their services implies that they will be regarded as accountable for any content that is shared and placed on their platforms that violates their own standards and rules regarding proper conduct. Platforms must be effective in assessing material and promptly taking action to issue fines where necessary when there is content uploaded on their platforms that violates their standards[273]. The proper steps should be followed to ensure that evidence is preserved while also deleting comments from online spaces when this content is significant enough to call for the participation of the police. Additionally, there should be a shared responsibility on the part of all social media platforms to support and promote avenues of support for those who have been the targets of online abuse, particularly when such abuse takes the form of threats.[274] State actors must also acknowledge their own responsibility for failing to take action against the influence and dominance of each of the major Internet platforms. In order to combat online violence against women, international organizations should take the initiative and make it a top priority. In a similar manner, regional organizations must establish the proper leadership on this matter and guarantee that action plans have been developed with all regional delegates. States should take into account online forms of violence in their plans to stop violence against women, highlighting the necessity of including this widespread type of abuse into current regulations.

Partially, the non-governmental sector is also at fault for the failure of platforms to take measures to defend the internet participation rights of women. Non-governmental organizations should acknowledge that violence against women on the Internet can be a distinct problem as well as a problem that fits into other feminism-related activities. Finally, more focus has to be placed on the various types of online harm that can result from the abuse of women online, particularly when that abuse includes threatening comments that suggest there may be rape, assault or even killings. Accountability is what should be taken above anything else. It is unlikely that there will be practical ways to address the issue of online abuse until the key actors at all levels take on responsibility. Therefore, states must play a significant role in creating legislation and regulatory frameworks that

[273] Barker, K., & Jurasz, O. (2019). Online Misogyny: A Challenge for Digital Feminism? *Journal of International Affairs*, *72*(2), 95–114. Retrieved from https://www.jstor.org/stable/26760834

[274] OECD Development Centre (2015). Can social media effectively include women's voices in decision-making processes? Retrieved from https://www.oecd.org/dev/development-gender/DEV_socialmedia-issuespaper-March2015.pdf

incentivize or compel online platforms and websites to be held responsible for addressing gender-based violence in a manner that is consistent with human rights[275].

In the context of most MENA countries, national legal systems are hybrids formed between codes of colonial origin and religion-based personal status laws. In respect of the international legal framework, only Palestine and Tunisia have ratified the Convention on the Elimination of All Forms of Discrimination against Women without reservations[276]. The majority of countries in the region, on the other hand, ratified the Convention with reservations pertaining to provisions which conflict with Sharia principles, local customs and traditions. Despite ratification of the CEDAW, most countries of the MENA still fail to integrate its provisions into their domestic laws. Constitutions have not always reflected international commitments, and the majority of national reforms have not been developed in accordance with State requirements to exercise due diligence. An important weakness in the region's defense of women's rights is the absence of standalone laws that address all forms of violence against women in a cohesive and coordinated manner[277]. Different Arab nations have adopted different cybercrime regulations. At the moment, 138 nations have cybercrime legislation in place, including 13 Arab nations. The remaining nine Arab nations either adopted generic legislation to combat cybercrime or did nothing. Therefore, just 60% of Arab nations have laws in place to address cybercrime, including cyber VAWG[278]. In this regard, the Arab Convention on Cyber Crime seeks to stop, look into and prosecute crimes that are made possible by technology and are committed or organized across national borders. The Convention forbids any behavior involving the willful theft and unauthorized transfer of data stored on electronic devices. However, it is noteworthy that, much like the Budapest Convention, gender perspectives are entirely omitted from the document. Furthermore, the scope of these regional policies falls short of that of the global human rights framework. Inconsistent outcomes that frequently failed to close gaps in domestic legal systems involving violence against women and human rights in general have been developed as a result of their efforts[279].

[275] Suzor, N., Dragiewicz, M., Harris, B., Gillett, R., Burgess, J. & Van Geelen, T. (2019), Human Rights by Design: The Responsibilities of Social Media Platforms to Address Gender-Based Violence Online. *Policy & Internet*, 11, 84-103. Retrieved from https://doi.org/10.1002/poi3.185
[276] *Supra*, note 165.
[277] *Ibid*.
[278] Al-Nasrawi, S. (2021). *The Emerald International Handbook of Technology-Facilitated Violence and Abuse*, 493–512.
[279] *Supra*, note 227.

With respect to prevention and countering of misogynist radicalization leading to terrorism, OSCE recommends first of all that a gender perspective should be integrated as a key point to ensure the legitimacy and operational effectiveness of the security sector, by means of the establishment of effective security and justice delivery, the establishment of representative institutions supporting women's participation in the security sector and the professionalization of security forces developing technical capabilities and knowledge with a focus on gender. Furthermore, OSCE has engaged in providing practical step-by-step guidance for integrating a gender perspective into the security sector, especially addressed to core actors such as frontline law enforcement officers, crucial in building trust and relationships with the communities they serve, senior law enforcement officials, essential for ensuring the integration of gender perspectives by law enforcement institutions into strategical and practical work of preventing and countering terrorism, and police academies, required to develop and implement tailored training and education on the role of gender and its importance to ensure the operational effectiveness of the security sector in order to prevent and counter violent extremism and radicalization leading to terrorism[280].

Increasing awareness of the Incel ideology among frontline care providers and practitioners is a crucial first step in combating the Incel phenomena. The Incel ideology, its connection to violence, "push factors" and intervention strategies should all be covered. It is crucial to point out that such recommendation from the European Commission does not assume that conditions like mental disorders, social isolation or neurodiversity in any way predict Incel behavior; rather, it encourages widespread awareness-raising so that practitioners are prepared to respond if and when they get an Incel referral[281]. Consequently, professionals in fields like mental health, autism spectrum disorder support services, preventing and countering violent extremism interventions, teen dating and intimate relationship education, gender-based violence programming, digital literacy and social isolation should be aware of the online Incel communities and their ideology behind. Incels frequently participate in online forums on a variety of platforms but are very socially isolated. In order for interventions to be successful, providers of intervention and preventative services ought to think about initiatives intended to reach Incels online. For instance, it may also be possible to intervene with Incels through the creation of alternative and supportive forums for men and boys to discuss about their problems related to the masculine gender role. The Incel community serves as an emotional online support network in many ways, where individuals voice their worries and receive validation

[280] Organization for Security and Co-operation in Europe (2019). *Understanding the Role of Gender in Preventing and Countering Violent Extremism and Radicalization That Lead to Terrorism*. Retrieved from https://www.osce.org/files/f/documents/0/b/420563_1.pdf
[281] *Supra*, note 177.

in the violent misogynistic online space[282]s. Alternative online forums for men and boys to talk about sexual relationships, dating, rejection, and shame are scarce. These alternative online environments provide at-risk people with an opportunity to participate in online meetings that foster social identification, emotional support, and a sense of community without being exposed to the divisive views promoted by the Incel group. The ability to critically evaluate the narratives and marketing of the Incel ideology as well as recognize the ways in which the community exploits complaints and distorts research may be aided by digital literacy for at-risk individuals.

Due to a communication gap and a technological barrier, parents are becoming more distant from their children, which emphasizes the joint responsibility of important people in ensuring that children have access to and are securely directed through the Internet. An important defense against cyber misbehavior is the role of educators in raising awareness of potential harm and the significance of safe and ethical behavior online. In order to ensure that kids have safe, fulfilling and educational online experiences, educators must take on new teaching problems brought on by the Internet[283]. Teachers can assist their students in determining the worth and significance of the material they discover. Since the majority of victims of cyber-stalking are unskilled Internet users, educators need to stress the value of students' privacy and teach them how to avoid the pitfalls of giving personal information that could be used against them. Teachers can also serve as role models for children by showing them how to research Internet regulations in order to be informed online users and what to do in the event of a dangerous situation. Promoting digital literacy entails critically analyzing key media elements, opportunities to identify and interpret the various forms of content that the multifaceted media environment has to offer and knowledge of how to assess and integrate those contents into the proper interpretive frameworks. Understanding the potential and threats associated with the media also means developing better digital citizenship every day, which entails constantly adjusting to modern changes. Young people’s task is to develop so-called “digital skills”, which are increasingly essential for handling media content and, notably, for navigating the complexities of the modern world. Aspects of ethics and interpersonal relationships are undoubtedly closely linked to the skills themselves. Therefore, it is important to work on young people's capacities, skills, and awareness in order to reduce the impact of digital technologies' negative aspects and turn digital

[282] Young, O. (2019). What Role Has Social Media Played in Violence Perpetrated by Incels? *Peace Studies Student Papers and Posters*, 1. Retrieved from https://digitalcommons.chapman.edu/peace_studies_student_work/1

[283] Berson, I.R., Berson, M.J., & Ferron, J.M. (2002). Emerging Risks of Violence in the Digital Age. *Journal of School Violence*, 1(2), 51-71. Retrieved from DOI: 10.1300/J202v01n02_04

platforms, for all intentions and purposes, into favorable environments for personal development and positive interpersonal interactions[284].

5.2. The importance of demographic research for promoting digital rights

Demography, the systematic study of population dynamics and the factors that affect population structural changes as well as their effects, has always been a data-driven field. The Data Revolution contributed to the growth of the discipline of demography as it has led to the accumulation of enormous volumes of data through the transition from traditional to digital electronic technologies. The buildup of digital footprints brought about by the use of internet and mobile technologies indicates that social life is becoming increasingly mediated by digital technology. For instance, people frequently use mobile phones and email for communication, web search engines for information gathering and social media platforms for networking and social exchange. Essentially, the use of and interaction with online platforms and technology results in digital recordings and data streams that are regularly recorded. The Data Revolution has greatly expanded the options for online primary data collection and social networking platforms have been used by several research also to gather respondents for online surveys. The latter frequently have a broad audience and frequently allow people to be targeted based on particular demographic traits, interests and behaviors. They are therefore appealing for both selecting convenience samples and enlisting members of difficult-to-reach populations, typically at a lower cost than would be possible with conventional probability samples[285]. Large amounts of new types of data on human behaviors, interactions and activities, which is referred to as "digital trace" data have been produced following the adoption and spread of digital technologies, as well as the growing digitalization of various spheres of social life. Digital trace data sources have been used more frequently in recent years to conduct demographic research or to employ demographic methods, laying the foundation for the development of digital demography. Since they are derived from digital populations, it is crucial to take into account the disparities in demographic characteristics between individuals who are online and are represented in these data and those who are not. From the standpoint of demographic research, which frequently seeks out population-generalizable measurement, this is particularly pertinent. The analysis of the demographic traits and, consequently, biases of digital populations has been a significant contribution

[284] Górka, M. (2018). Education of young people and children as a way of fighting against Internet hate, a form of cyber violence. *EUREKA: Social and Humanities*, (1), 46-53. Retrieved from https://doi.org/10.21303/2504-5571.2018.00531

[285] Alburez-Gutierrez, D., et al. (2019). Demography in the Digital Era: New Data Sources for Population Research, in Arbia G., Peluso S., Pini A., Rivellini G. (eds.) *Book of Short Papers SIS2019*. Pearson.

of digital demography and social research thus far and has potential for further growth and wider investigation of socio-economic inequalities and population wellbeing, especially in relation to the new media[286].

Although the statistical issues are more difficult when data is taken from digital platforms where there might not be any ground truth data, this difficulty presents a chance to create new techniques. The data's nonrepresentativeness is crucial to the research design in some research situations. For instance, in certain circumstances, the crucial question is whether new forms of media and communication such as digital technologies mirror current social structures or are change-drivers[287]. The use of digital trace data in the field of demography will undoubtedly be beneficial and may lead to contributions that extend beyond the scope of the discipline. Given that populations are made up of people who use digital tools, demographic instruments that are typically used in other disciplines, such as sociology, economics, geography, statistics, public health, public policy, anthropology and others, can be modified and standardized to acquire insights into populations of digital environments. In a world driven by data, demographers have the expertise necessary to create techniques for extracting important information from massive but frequently complex, chaotic and nonrepresentative data.

The digital divides are an outcome of disparities in internet access, usage patterns, technical knowledge, the capacity to evaluate the value of information, among other things, and the variety of usage patterns. In order to avoid the digital divide and, in particular, the marginalization of certain social groups, there is a significant political, social and economic interest in identifying the factors that determine Internet use. Population studies have often indicated that the usage of technology is influenced by various socio-demographic traits of individuals, such as age, gender, education, disability, ethnicity and income. Likewise, literature supports the significance of distinct socio-demographic characteristics by using both qualitative and quantitative approaches. Studies using quantitative methods, primarily surveys, also examine the importance of specific socio-demographic traits like age, gender, education, ethnicity and income at the global level. Overall, such findings support the idea that individual socio-demographic traits have an impact on the population's usage of information technology and the dynamics behind online interactions. According to a number of scholars, disparities in the usage of digital technologies are merely a reflection of social structure

[286] Kashyap, R., Verkroost, F.C.J. (2021). Analysing global professional gender gaps using LinkedIn advertising data. *EPJ Data Sci,* 10(39). Retrieved from https://doi.org/10.1140/epjds/s13688-021-00294-7

[287] Cesare, N., et al. (2018). Promises and Pitfalls of Using Digital Traces for Demographic Research. *Demography*, 55(5), 1979–1999. Retrieved from https://doi.org/10.1007/s13524-018-0715-2

disparities and, as such, they are influenced by the political, social, economic and cultural traits of the respective countries. In order to evaluate the potential effects of various policies and initiatives, analyses with high sample sizes, comparisons between nations and consideration of the simultaneous effects of numerous distinct sociodemographic factors are very crucial and necessary[288].

Demographic and social research and analysis are fundamental for uncovering social challenges through the collection of characteristics shared by groups of individuals that indirectly affect their quality of life and potential opportunities. All social sciences must necessarily deal with society, people, and hence, population. Numerous socioeconomic details are included in demographics, such as a population's breakdown by gender, age, ethnicity, income, occupation status, disability, sexual orientation and so on. Based on a sample of the population in a given location, demographics provide a sort of generalization of that population. Clearly, not every person fits a certain demographic profile because demographics only give an overall view. In this regard, the collection of demographic data, complemented by a sociological perspective, provides the opportunity to detect the existence of inequalities and the differences in terms of benefits or dangers in relation to specific fields. There are few statistics on digital inclusion and they frequently do not break them down by gender and other factors such as ethnicity, education level, occupation, disability, sexuality. As illustrated in previous chapters, studies and researchers discovered that demographic factors like gender were not the only determinants but rather were a component of a larger picture of life experience and a wide range of other mediating variables, whose correlation should be further examined. In fact, constant socio-economic disparities between men and women can be used to explain the gender gap. Furthermore, it is important to improve the digital inclusion indicators so that they are comparable across nations, which is crucial for assessing the success of policy initiatives intended to increase digital inclusion generally and close the gender digital divide specifically. To comprehend the dynamics and underlying reasons for the gender digital gaps in various nations, more research must be conducted.

In this thesis, the collection and analysis of demographic information has been essential in discovering disparities related to the process of digitalization, investigating the differences in the experience of accessing digital technology and understanding the social dynamics behind the perpetration of online gender-based violence. As a result, this offers the possibility to tackle more adequately the issue of the worldwide digital divides, by discovering the impact of certain sociodemographic factors from the mere access to the Internet and the attainment of digital skills to

[288] Silva, P., Matos, A.D., & Martinez-Pecino, R. (2017). E-inclusion: Beyond individual sociodemographic characteristics. *PLoS ONE*, 12(9). Retrieved from https://doi.org/10.1371/journal. pone.0184545

the active participation and socio-economic benefits resulting from all these elements. Similarly, it also provides the opportunity to address more effectively the increasingly widespread issue of the gender-based cyber violence thanks to the analysis of information concerning the perpetrators, the socio-cultural context in which it occurs and the motivations behind its spread and to prevent more seriously the increase in the phenomenon by taking into consideration information concerning the main targets that are victimized and the repercussions on them.

Conclusion

Digital media, devices and other digital technologies are becoming more prevalent in our lives as their use and power grow. Technology has transformed the speed, nature and scope of interpersonal and group communication and contact, erasing traditional boundaries of time, space and identity. There have undoubtedly been advantages to such changes, but technology has also exacerbated existing socio-economic inequalities and discrimination patterns and introduced new types of intrusion, abuse and control. When it comes to gender inequality, there are a number of difficulties that women must overcome, all of which make it difficult for them to fight for their empowerment and rights online. Accessibility barriers, cost barriers, a lack of proper digital education, inborn biases and sociocultural norms all prevent women and girls from taking advantage of the opportunities provided by the digital transformation. Combining the relatively lower educational enrollment of women in the fields that would prepare them for success in the digital world with the limited use of digital tools and their relative lack of visibility or activity on platforms raises the possibility of increasing inequalities and discrimination.

Furthermore, blogs, websites and content created by women are increasingly exposed only to harassment and threats to their physical and mental safety, as well as censorship as a means to protect themselves and government suppression. There have been several reports of sexual harassment of female activists and journalists, which has silenced women's voices online and led to unfavorable gender stereotypes, by reducing and limiting representation of women in new media platforms. In the recent years, research has broadened its definitions to include a wider range of perpetuating behaviors committed online, especially against women. Online gender-based violence needs to be seen in the larger context of violence against women and is an ever-evolving phenomenon that directly affects victims, especially in terms of mental health, as evidenced by a rise in the prevalence of anxiety and depressive disorders.

Additional social and economic effects, which can differentiate even on the grounds of the geographical location and its socio-cultural context, include exclusion from public discourse, impacts in the labor market with a lower participation rate or position, the possibility of job loss or decreased productivity to a lower quality of life, physical harassment and serious security threats motivated by misogyny. Fundamentally, this type of violence should not be undervalued, especially within the cyber security sector, in light of the fact that numerous institutions and experts have identified it as a significant daily threat to the security and digital access of women. It is clear that victims of online

abuse are affected by the consequences also in the physical world, to the point that active participation in extremist websites or social media groups that constantly normalize and frequently even glorify gender-based violence can result in terrorist activities. Some of these effects exacerbate other forms of discrimination women experience, such as the gender wage gap in the workforce. From an intersectional perspective, they must also be considered in conjunction with other types of prejudice and hate speech directed at LGBTQ+ individuals as well as women from ethnic minority groups and other religious communities and disabled women.

Such trends may be reversible, and a more inclusive course may be forged, especially when policy is implemented in the form of coordinated and complementary initiatives. Raising awareness and combating gender stereotypes are necessary to close the digital gender gap. At the same time, it is important to make digital tools easier to access, safer to use and more affordable. Strong stakeholder collaboration is also necessary to remove obstacles that prevent girls and women from fully participating in the digital world. The empowerment provided by new digital tools has the potential to become a new pillar of inclusive global economic growth. In order to properly take advantage of this potential, efforts must be intensified to make sure that the digital revolution provides women with a chance to advance and the chance to create a more inclusive online world. Therefore, it is essential that more research is done on the widespread phenomenon of gender-based cyber violence and that appropriate preventive and prosecuting measures are taken through collaborative efforts between national governments, international institutions, social media companies and civil society in order to successfully achieve the fifth UN Sustainable Development Goal and avoid any type of threats to women’s safety and disadvantages limiting equal opportunities.

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Summary

Although digital technology is continuously evolving, its advancement and increased use on a daily basis have an impact on almost every element of human civilization and behavior. The process of digitalization, which involves turning information into digitized data via digital technologies, fundamentally alters how people live and work in postmodern societies that are becoming more and more globalized and digitalized. However, in order to attain a fully digital world, there are numerous obstacles to overcome. On the one hand, digital technology can facilitate it for people to engage in economic and social activities; on the other hand, not everyone will automatically move to a fully digital society or benefit from the opportunities that come with it to improve their life. In fact, ensuring that no one is left behind in this process and that it benefits everyone by enhancing their well-being is the main challenge of digitization. Unavoidably, the global socio-economic inequalities and challenges are reflected in digitalization and, consequently, socioeconomically disadvantaged groups are unable to fully benefit from digital opportunities due to disparities in the use of technology. In general, the inequity in access to and usage of information and communication technologies can be referred to as digital inequality. The latter exists across a range of demographic variables, including age, gender, location of residence, ethnicity, educational attainment and income level. According to the researcher Pippa Norris, the divide between those who have access to information and those who do not, including divisions along racial, gender and class lines, is the root of the digital inequality. Norris notes that, since 1993, the U.S. Department of Commerce has drawn attention to the disparity in access to digital technologies and the Internet based on factors such as age, education, ethnicity, race and gender, particularly among American black and Hispanic populations, poorer households, rural areas and women. Recent surveys and statistical analyses have verified these conclusions about the digital divide over time.

It is essential to see the digital world as a continuation of the real world in order to discover the inequities it features since social disparities in the physical world are not exempted from digital technology. As a matter of fact, one of the key indicators, but not the only one, used to assess the advancement of the new form of communication is the number of Internet users in relation to different demographic variables. In light of this, it is asserted that the global digital gap is principally a result of the economic, social and political situations in various nations and how they have changed through time, which has resulted in the uneven growth of the digital world globally. Another key point, the COVID-19 pandemic is known as “the great accelerator” in accelerating the global trend towards the daily use of digital technologies driving significant changes in lifestyle, business models and work patterns. In the long run, the issue of digital divides has provided even more evidence and light to the

role of digitalization in the COVID-19 pandemic. One of the key factors pushing digitalization is the move to remote working and remote operations in reaction to travel restrictions and quarantine measures around the world, with technological infrastructure and institutional constraints regarded as the main barriers. As a consequence, marginalized groups typically find themselves locked out of the digital ecosystem as a result of poor infrastructure, a lack of affordability or unequal uptake caused by political, social, environmental and economic issues. Furthermore, if the digital ecosystem is not built with the appropriate respect for the individual rights of digital users, it could have very harmful effects. Digital tools can be used by authoritarian governments and malicious parties to suppress political opposition and individual rights or to take advantage of people who lack digital literacy. Through the use of digital tools as tools of intimidation, surveillance and control that silence their voices, the development of social platforms that either enable or do not protect against discrimination, hate speech, cyber violence, recruitment into trafficking and radicalization to violence, social media has increased the risks that social minorities already face in the real world.

The socio-demographic profile of the Internet population has expanded over time in postindustrial civilizations, at least in the most affluent. In July 2022, there were 5 billion online users, or 63.1% of the world's population, according to DataReportal's Digital 2022 July Global Statshot Report, which was produced in partnership with renowned data partners who deal with statistical and demographic reports. There has been an increase of 178 million new users from the previous year. Similarly, it is estimated that the number of people using mobile phones worldwide increased by 93 million from July 2021 reaching around the 67% of the world’s population using mobile phone. However, despite the fact that the online population of poor countries and social minorities has increased as well, digital disparities that existed from the 1990s to the 2000s continued to exist, as anticipated by earlier experts. The World Bank estimates that in 2020, the Middle East and North Africa region reached around 78% of its people online, compared to 91% and 84% for North America and Europe and Central Asia, respectively. The region with the lowest online population, Sub-Saharan Africa, has barely reached 30% of its population online. Despite the rapid growth of Internet users globally, including developing countries, the Statista Research Department confirmed the continued existence of unequal access to the Internet between developing and advanced economies worldwide in July through the publication of the collected number of Internet users worldwide by region in 2022. Geographical digital access gaps between and within nations with high and low levels of income and human development have been notable since the 1980s and they continue to widen. Although it is by no means the only one, economic richness is by far the most significant element in explaining digital divides between nations. Other factors include the

accessibility and cost of digital technology, the population's overall level of education and literacy, the degree of democracy, the effectiveness of policies promoting access to and use of digital information and the culture's history with technology and digital communication.

Understanding the inherent characteristics of the digital gap and observing whether and how digital access varies based on factors like income, education level, gender, ethnicity, age and place of residence, are essential to analyze the digital divide. It is evident that age and gender are the primary personal inequality factors contributing to inequalities in material access and Internet usage. According to a study of American adults by Pew Research Center undertaken between 2000 and 2021, material access first rises with age before beginning to decline after the age of 30 and much more beyond the age of 65. Due to the high expense of Internet access and equipment, the lack of relevant skills and interests and a general lack of trust or faith in technology, older generations typically face more obstacles to Internet access than younger generations. Internet usage appears to be evenly distributed between men and women in the United States, but in Europe this only applies to the youngest users. On the other side, although the gender gap is closing and Internet usage appears to be divided equally in the United States, this only applies to the youngest generations in Europe who have access to education and, consequently, an equal distribution has not yet been achieved.

According to the OECD, the term *digital gender divide* refers to gender disparities in resources and ability to access and effectively use digital technology both within and between nations, regions, industries and socioeconomic classes. Inherent biases and socio-cultural conventions that lead to gender-based digital exclusion are some of the core reasons of the digital gender divide, coupled with impediments to access, affordability, education and a lack of technology proficiency. Worldwide, there is still a gender digital divide: whereas 62% of males use the Internet, only 57% of women do, even though the gender digital divide has decreased globally in recent years, improving from 0.89 in 2018 to 0.92 in 2020. Nearly all industrialized nations, including those in North America, Europe, the Commonwealth of Independent States and the growing small island nations, have reached parity. Nonetheless, there is still a significant and widening gender gap in developing nations where women are disproportionately underrepresented. It has been found out that only 19% of women use the Internet on average, which is 12% less than men. Specifically, the International Telecommunication Union reported that, in 2021, 24% of women in Africa had access to the Internet, compared to 35% of men, and that, in Arab States, 56% of women had access to the Internet, compared to 68% of men. These statistics show that Africa and Arab States have the largest gender gap. In effect, low- and middle-income nations continue to be the most impacted in terms of mobile device ownership and

mobile Internet usage. Except for a minor decline in South Asia, the gender difference in mobile ownership in low- and middle-income nations, where women are more likely to own a mobile phone, remained almost unchanged. It is not surprising that the nations with the lowest rates of mobile ownership also tend to have the widest gender inequalities in mobile usage and ownership. Considering positional inequalities, household income and education level rank among the most significant positional inequality categories. The likelihood of being able to pay the expense of owning digital tools and having an Internet connection increases with household income. The development of digital skills and the quality of Internet use also improve with greater education levels. This largely applies to younger generations because previous generations who were born before the 1960s and 1970s typically did not have access to computers at school. Young people in industrialized nations who receive a regular education are encouraged to use computers and the Internet at school and are motivated to use digital technology to further their intellectual interests.

As shown above, the Internet provides opportunities and difficulties for women and other socially disadvantaged groups. On the one hand, people can use the Internet to exercise their right to free speech and to debate topics relevant to their lives and experiences; on the other hand, the Internet exposes people to those who may want to restrict their use of digital spaces and restrict their online participation. Since the Internet is a reflective phenomenon and a social product and site of social interactions, digital spaces frequently intensify or reshape the offline power connections and dynamics of daily life in the physical world. It follows that the digital world reflects oppressive power structures and hierarchies, which are constant characteristics of society, as well as discrimination based on gender, sexuality, ethnicity and other factors. This results in specific threats to one's safety and well-being being aimed at particular targets, which is a novel expression of an already well-known phenomenon in the physical world. Online violence is one of the biggest threats, despite its undermining, that particular social categories encounter and that makes it difficult or impossible for them to use the Internet safely. The attempts to sexually degrade and demean women and girls serve as an example of how gender-based violence is comparable both online and offline. In fact, gender-based cyber violence is connected with levels of physical and sexual violence. The prevalence of cyber-harassment and cyberstalking seems to rise along with levels of physical and sexual violence. As a consequence of sociocultural concerns that normalize physical and sexual violence, including instances of gender-based cyber violence, countries with high rates of gender-based violence also appear to have greater rates of gender-based cyber violence.

Provided the growing prevalence of social media and digital technologies, gender-based cyber violence is an issue that directly affects women at an individual, social and economic level. It can take many forms, from psychological effects and a reduction in their ability to participate in public discourse to physical harassment and serious security threats motivated by misogyny. Online gender-based violence needs to be seen in the larger context of violence against women, which can take many different forms and sort of exist on a continuum between offline and online. People from all around the world may access the Internet, making them both potential offenders and targets of gender-based online violence because there are no clear-cut national boundaries. Due to existing social norms of discrimination and inequality that are further legitimized and disseminated by gender-based online violence, women, young girls and LGBTQ+ individuals are among those categories most frequently targeted by offenders of online violence. Online gender-based violence is characterized by constraints in terms of time and place, anonymity and transnationality that make it difficult to prosecute offenders, the difficulties in easily removing data from the Internet and the rapid dissemination of information.

Through a survey of 45 nations and all age groups (18-64 years), the Economist Intelligence Unit found that there are significant geographical variations in the prevalence of online violence. Women in Europe and North America specifically suffered cyber violence at much lower rates (between 74% and 76%) than women in Asia Pacific (88%), Africa (90%) and Latin America (91%). The Middle East (98%) had the highest rate of gender-based online violence. According to the FRA's European Survey on Violence Against Women, adolescent girls are disproportionately victims of several forms of online harassment that are primarily focused on gender, sexuality and age. Given the prevalence of cyber harassment, which women aged 18 to 29 experienced at a rate of 20% compared to women aged 30 to 39, younger age groups are categories at more risk of cyber violence. The Pew Research Center reported that nearly 50% of women (47%) who reported being harassed online among adults in 2021 were female. Considering other demographic differences, it follows that black people (54%) and Hispanics (47%) are more likely than white people (17%) to be the targets of online harassment because of their ethnicity. Similarly, people who identify as LGBTQ+ (50%) have experienced online harassment because of their sexual orientation and are more likely than those who do not (17%) to report such harassment because of their gender. The data gathered by FRA revealed also that the perpetrator is typically unknown (68%) in the majority of cases of sexual harassment experienced by women since the age of 15, followed by someone close to the victim (35%) or from the workplace (32%). Indeed, since the age of 15, indecent affirmations (83%) and cyber harassment (73%), including inappropriate advances on social media platforms or sexually explicit emails and messages,

have been the most often reported types of sexual harassment against girls. Because of the nature of harassment, which permits anonymity and low traceability, little is known about their common demographic traits, aside from the fact that the majority of victims of online sexual harassment since the age of 15 (71%) indicated that the perpetrators were typically lone men or groups of men with a public and performative scope. Notably, online violence is easier for offenders to commit than offline violence since it is possible to assault women from a distance with less risk of being detected and prosecuted. The online disinhibition effect, in which people tend to disassociate their 'real' identities from their online conduct and associated undesirable behaviors, is made easier by websites that provide anonymity and pseudonymity. Likewise, dehumanization is a core mechanism that is fast spreading on social media and has real-world ramifications as well, increasing the risk of repression and violence for the targeted groups.

The persistence of online harassment against women has a number of effects on their day-to-day physical and mental safety, particularly when sensitive content is shared publicly. The spread of such content cannot be regulated and may be used to further misogynist behavior by using derogatory language to describe women and blaming the victim of such behavior. Beyond the digital realm, cyber violence has a direct effect on the victims, beginning with psychological effects like stress disorders, depression, dissatisfaction with their body image and high levels of anxiety. Additionally, effects can be categorized as social and economic, including withdrawal from public discourse, increased costs for legal and medical research, effects on the labor market in terms of a decreased labor force, a possibility of job loss or lower productivity and a lower quality of life due to mental health problems. Some of these effects exacerbate other forms of discrimination that women experience, such as the gender pay gap in the workplace, the loss of liberty and privacy and, in the worst cases, the progression of offline and online abusive behaviors that result in attempts at or actual acts of sexual harassment in public places. Thus, the safety and inclusion of women in the cyberspace are now threatened by online gender-based violence, which can occasionally extend to intimate partner abuse.

The sociotechnical affordances of web platforms have a significant impact on how individuals use digital technologies to connect and engage with one another; as a result, online harassment of women also changes as technology advances. This is the case of the growing '*manosphere'*, which is the collection and use of websites, online forums, public group chats, and blogs that strongly promote sexism and misogyny and decry feminism. The manosphere serves as the best example to underline how online gender-based violence can have serious repercussions on the women's safety that do not end in online spaces, but also continue offline. In even more extreme instances, manosphere-based

radicalization has been connected to mass shootings motivated by misogynist or male supremacist terrorism with the goal of punishing women, particularly in response to noncompliance with gender standards, and destroying feminist groups. A number of mass murderers and violent attackers with misogynistic motives have been identified as being members of Incel forums and communities. These groups are known for their promotion of misogynistic ideas that hold that movements for women's liberation and women themselves are to blame for their lack of romantic and sexual relationships with them. Social media plays a key role in the development of the Incel community and the idolization of violence within that culture, which has had a negative impact on Incel violence. Social media was crucial in the growth of Incels as a hate group since it provided a platform for radicalization and allowed for communication. While some individuals who held Incel ideology might still do so, they would not have had access to social media to engage with one another, form an ideological group or become radicalized. Social media was not only crucial for the development of the Incel organization, but it has also played a significant role in encouraging community members to act violently offline. Incels gained credibility as a hate group with aggressive real-world representatives, following the assault of Elliot Rodger who was supported and then glorified by Incel communities.

Unfortunately, there has been little research on this recent phenomenon in terms of sociodemographic traits. However, some information has been gathered through surveys that academics and websites have run independently. According to a survey carried out in 2020 by the Anti-Defamation League research center, Incels are commonly viewed as young, white men. The survey's results primarily support the sociodemographic profile: 82% of respondents said they were between the ages of 18 and 30, while he largest proportion of the population (36%) was aged 18 to 21 and he age range for the second-largest group was 22 to 25 with 27.9% of the population. Most alarmingly, 8% of respondents stated that they were under the age of 17. Around 55% of respondents identify as white or Caucasian, with the remaining 45% divided across a range of ethnic groups, including Black, Latino, Asian, Indian and Middle Eastern. Additionally, online polls of Incels provide a fragmented, entirely self-reported view of its core online subculture. According to a March 2020 study of incels.co forum users, they are primarily young guys who reside with their parents, have never engaged in sexual activity with a woman and have never been in a committed relationship. The majority of respondents were white and from North America and Europe. Despite primarily being from middle- and upper-class socioeconomic backgrounds, half never went to college. The high frequency of issues with mental health is a final key element. 59% of users claimed to experience depression, 74% stress and anxiety, 25% autism, and 67.5% said they had thoughts of suicide. The promotion of white supremacy within some Incel communities and the frustration caused by their drive for social mobility to achieve a

higher social position that may help them face their fears can both be somewhat explained by all these demographic data that have been gathered to date. Young adult males are the most likely to suffer from the crisis of masculinity and gender roles in recent times, according to the APA researchers, and its effects include a widespread increase in violence, both offline and online, as well as mental health issues. The greater presence of demographic factors like young age and gender within Manosphere online spaces indicates the impact of such crisis.

In effect, it appears that people who are active in these communities are more likely to get radicalized as a result of their youth, discontentment with their lives from a social or economic standpoint or their mental health. Thereby, it is commonly acknowledged that some forums turned into settings that promote a toxic and harmful masculinity ideal, alongside anti-feminist attitudes, and served to satisfy the desire to identify as an Incel to join those forums to overcome social isolation by interacting with a group of like-minded individuals. The examination of the manosphere reveals a broad sense of emotional fragility, which needs special attention. The manosphere actually began as a comparatively benign representation of the actual problems that men faced in society in relation to the male gender role, nevertheless, the unique sensation of vulnerability is met with resentment, which is accepted as a genuine emotion and reaction, whether it is expressed online or off. Insofar as it might provide the manosphere as a platform for communication that could help its users deal with experiences of insecurity brought on by shifting gender norms and financial insecurity. By failing to depart from traditional male homosocial interactions, emotional networks encourage anti-feminism and sexism that are, to some extent, less evident offline.

After some recent mass killings that seemed to link their beliefs to terrorism actions, the strength of the manosphere came to the public's attention. The Incel community is distinct from previous hate groups in that social media's emergence was the key factor that made their operations possible. Concerns are raised about not just how freely hate may be disseminated online, but also about how challenging it is to control the growth of extremist communities in the quickly evolving Internet realm and the possible effects offline. Most compelling evidence, the bulk of Incel websites and subreddits have been removed as a result of violating the policies and standards of behavior of these platforms. Incels also seem to be acting more violently offline, in addition to the hatred they display online. The majority of research have shown convincing evidence of Incels' propensity for misogyny, linking Incel forums to acts of physical violence, anti-feminism, and sexual violence. Many of the violent and terroristic acts that the Incel community plans have masculinity as their main target. They frequently operate independently of any other ideologies, religious tenets, or beliefs and are

frequently a male response. Numerous perpetrators of violent crimes and mass shootings motivated by misogyny have been discovered to be members of Incel forums and communities that frequently replicate misogyny from offline to online and vice versa, radicalizing members by surrounding them with extreme and violent viewpoints.

Moving forward, the scenario of online gender-based violence in the MENA Area serves instead as a major example of the continuum of violence against women and young girls in online spaces. The 2011 uprisings marked the start of a decade of online activism in the Middle East and North Africa, during which previously marginalized people, including feminists and women in general, used blogs, social media and technology as tools of resistance and free speech. This development opened up new possibilities, but it did not totally solve underlying inequities. On the one hand, gender inequality is still a problem and has resonance in areas of society that have become more public. To restrict the emergence of revolutionary groups, authoritarian and illiberal regimes in the region control and monitor online information.

Recent studies on the sociodemographic parameters impacting the exposure to cyber violence have been conducted, at least in Egypt and the Arab States. According to a study on the topic of cyber violence against women in Egypt, the majority of victims (92.6%) indicated that the perpetrators were unknown, and nearly three-quarters of respondents (72.8%) said they had been exposed to it through social media. In 2020, 45.3% of the victims had several incidents, and 41.6% of the participating females said they had been subjected to cyber violence. Ten incidents involved male perpetrators who were either current or ex-partners, members of the victim's family, coworkers, or friends. While 13.6% of exposed females reported social consequences like withdrawal from online interaction and feeling alone, the majority of exposed females (76.9%) reported psychological symptoms like anger, worry, dread and suicidal thoughts. On the grounds of the results of an analysis concerning the effects of sociodemographic characteristics, age, education, place of residence, occupation or daily Internet use had no effect on the rate of exposure to cyber violence. Only the marital status was shown to be significant, with married women being less likely to experience it. Married women are anticipated to use social media less regularly and to engage with people more cautiously, lowering their risk of being exposed to cyber violence. Regarding the Arab States, UN Women conducted a comprehensive survey of male and female Internet users over the age of 18 in Iraq, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia and Yemen in order to gather information on the prevalence, effects and consequences of online violence on women in the Arab States. On one side, men who answered to the survey said they had used violence online at a rate of 27%. The likelihood of online violence is

higher among younger people, particularly among young men. A third of men between the ages of 18 and 24 specifically claim to have engaged in some type of online violence, including mainly students, unemployed and those who have only completed primary school. On the other side, for one in three women, online harassment continued offline, posing a serious risk to their physical and mental wellbeing. In fact, 33% of female online assault victims report that some or all of their interactions have moved offline.

Despite the harsh realities of the Middle East and North Africa, feminist movements and women's rights have been a powerful force for social change, actively promoting the fight against gender-based violence, fighting against discriminatory laws and social norms, and creating alternative and safe spaces for women and marginalized groups to foster solidarity. On the downside, the fight for gender justice is continuously hampered by growing restrictions on civil society and freedom of assembly and expression, while the scope and complexity of the problem of online abuse against women and girls in the MENA region have not yet received much attention. Nearly half of Arab States Internet users, particularly human rights activists and female activists, reported feeling uncomfortable as a result of online harassment. The fact that self-censorship is a widespread reaction to online violence is a crucial point. Although women and activists have a unique chance to change social norms, offer alternative narratives, unite and empower women through the use of digital tools and platforms, they decide not to speak up because they are afraid of social or family judgment, are ignorant of their rights, have frequently experienced online violence, or are too aware that the legal system in their nation is insufficient to protect them and/or prosecute offenders.

Furthermore, due to the use of digital media by state and non-state actors, activists today in authoritarian situations and democracies face a serious challenge. As they learned more about the potential of digital communications, autocrats as well as activists strive to exploit and manipulate it for their own purposes. Regimes in the Middle East started to view social media as a substantial potential threat, and as a response, they heavily invested in tools to control, observe and manipulate online behavior. Misogynistic online attacks, such as intimidation, shame and discrediting, serve as a tool to silence women or to limit their impact in digital spaces in a region where critical online speech or activity is subject to strict internet surveillance, heavy censorship, legal restrictions and other harsh consequences. Activists and journalists in the Middle East frequently face harsh opposition when they try to promote or participate in public campaigns for women’s rights as the MENA region is overrepresented on the negative end of several indices that assess gender inequality. Even while it provides a platform for resistance and cooperation, the digital world is a tool in the

hands of the oppressors. When faced with new and unanticipated threats to the system and its fundamental principles, authoritarian regimes typically deploy limits on information release to minimize potential harm. In such case, the most effective weapon at the disposal of authoritarian governments is control over the media through a substantial market share of state-owned outlets that restricts access for alternative media and silences the voices of social minorities.

In order to successfully achieve gender equality, it is absolutely essential that more research be done on the pervasive phenomenon of gender-based cyber violence and that suitable preventive and prosecuting measures be taken through cooperative efforts between national governments, international institutions, social media companies and civil society. Ensuring that women can employ new digital technology efficiently would boost global productivity and social growth. Conversely, if the current gender gaps in digital inclusion are not effectively addressed, gender inequality will continue to spread to many other sectors, such as the labor market and women's financial inclusion. It is especially important to build digital citizenship and a wider range of digital skills that can help everyone take advantage of opportunities and lessen risks in the digital environment. In addition to socio-cultural norms, a lack of digital literacy and the high cost of digital devices and Internet access, forced exclusion or withdrawal of women from active participation in online spaces to protect their safety and self-defense from cyber violence also contributes to the widening gender gap in the digital world. In order to take advantage of the opportunities provided by digital technology to empower women and girls, combating cyber violence by rapid, multilateral and comprehensive action should be seen as a major priority.

Governments all over the world must create and put into place legal and regulatory frameworks that promote the adoption of digital technologies, taking into account the Internet as a multifunctional technology that has an impact on all spheres of the economy as well as global politics and society. Henceforth, they should work as catalysts for development by promoting the active involvement of relevant stakeholders in the promotion and inclusion of socially disadvantaged groups. Given the gender hierarchies that exist within the legal and political systems, there has not been any indication to yet that there is a proper purpose to modify the current patterns of privilege and power. Especially in the context of most MENA countries, national legal systems are hybrids formed between codes of colonial origin and religion-based personal status laws. Constitutions have not always reflected international commitments, and the bulk of national reforms have not been developed in compliance with State obligations to undertake due diligence. The absence of stand-alone laws that address all

types of violence against women in a coherent and coordinated manner is a critical weakness in the region's defense of women's rights.

Additionally, the increase in digital literacy is an essential source of growth for gender inclusion. The development of digital citizenship and a wider range of digital skills can support everyone in taking advantage of possibilities and reducing dangers in the digital environment. On one hand, the promotion of digital education among women and girls can help them to benefit more from labor market opportunities through online media or within the field of digital technologies and to better defend themselves from potential online threats and be aware of online dangers. On the other hand, it can help to decrease the online phenomenon such as the manosphere, by raising awareness of online violent ideologies among professionals especially within the field of violent extremism and better development of online gender-based violence strategies, and to shed light on the legal consequences of perpetrating online harassment and the serious repercussions suffered by the victims. Thereby, it is essential to work on young people's capacities, skills and awareness in order to reduce the negative effects of digital technologies and transform digital platforms into favorable environments for personal development and positive interpersonal interactions.

Last but not least, demographic and social research and analysis are fundamental for identifying societal problems because they reveal traits that people have that indirectly affect their potential and quality of life. Demographics cover a wide range of socioeconomic information, including a population's breakdown by gender, age, ethnicity, income, employment status, disability, sexual orientation and other factors. In this perspective, the collection of demographic information combined with a sociological viewpoint offers the chance to identify disparities and variances in the advantages or risks in the digital environment. Studies and research have shown that demographic elements like gender are not the sole determinants but rather are part of a bigger picture of life experience and a variety of other mediating variables, whose correlation should be further investigated.