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From:	General Secretariat of the Council
To:	Delegations
Subject:	Gender equality and youth:opportunities and risks of digitalisation

Delegations will find attached the report entitled "Gender equality and youth: opportunities and risks of digitalisation"¹ prepared by the European Institute for Gender Equality (EIGE) at the request of the Austrian Presidency.

¹ Report on the review of the implementation of the Beijing Platform for Action, with particular reference to critical areas of concern "L: the Girl Child."



Gender equality and youth: opportunities and risks of digitalisation

Final report September 2018

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Country abbreviations

AT	Austria
BE	Belgium
BG	Bulgaria
СҮ	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
PL	Poland
РТ	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom
EU-28	28 EU Member States

Glossary of terms

Cyber harrassment

Harrassment by means of email, text messages or the internet. Cyber harassment is a form of violence against women and girls that can take many forms, namely:

- Unwanted sexually explicit emails, text (or online) messages;
- Inappropriate or offensive advances on social networking websites or internet chat rooms;
- Threats of physical and/or sexual violence by email, text (or online) messages;
- Hate speech, meaning language that denigrates, insults, threatens or targets an individual based on her identity (gender) and other traits (such as sexual orientation or disability) (EIGE, 2017a).

Cyber hygiene

It refers to actions taken by users of ditigal technlogies to ensure their safety online. The European Union Agency for Network and Information Security (ENISA) defines cyber hygiene as a set of "simple daily routines, good behaviours and occasional check ups to make sure the organisation's online health is in optimum condition" (European Union Agency for Network and Information Security, 2016).

Digital literacy

The set of cognitive skills applied when using digital environements (Eshet-Alkalai, 2004). The terms 'digital literacy' is often used interchangeably with the term 'digital skills'.

Digital skills

The definition of digital skills has evolved along with technological development. UNESCO offers the following broad definition: "more than merely knowing how to use ICT (...) to obtain, produce and share information", digital skills also encompass the ability to "seek, process and evaluate information critically, to exploit it in solving complex problems and to use precise techniques to produce or access internet content" (Fau & Moreau, 2018). The Broadband Commission adds that digital skills include a wide range of competences, aptitudes and behaviours (Broadband Commission, 2017). Digital skills are measured in four specific domains, namely information skills, communication skills, problem solving skills and software skills. A full description of how digital skills are currently measured is set out in Annex II: Proposed list of BPfA indicators and particularly in Table 3.

Digital technology

Digital technology can be difficult to define, as it refers broadly to all types of electronic equipment and applications that use digital information, including information and communication technology (ICT), such as computer and network hardware or their software. Digital technology also refers to smartphones, television sets, calculators, compact disc players, and even global positioning systems (Warschauer & Matuchniak, 2010).

Gender trolling

Anonymous sexist hate speech is often called gendertrolling, malicious acts online involving "the sending or submission of provocative emails, social media posts, or tweets, with the intention of inciting an angry or upsetting response from its intended target" (Lumsden & Morgan, 2018, p. 122). Gendertrolling has included rape and death threats (Lumsden & Morgan, 2017). What sets gendertrolling apart from other one-off forms of online harassment is that it aspires to cultivate a following or foment dispute. This type of online harassment is a means of excluding and silencing women's voices from digital spaces.

Girl child

A female person between the age of 0 and 18 years old (Ponte, 2006). Children are defined by the UN Convention on the Rights of the Child as "human beings below the age of eighteen years unless under the law applicable to the child, majority is attained earlier".

Revenge porn or non consensual pornography

EIGE (2017) defines non-consensual pornography or 'revenge porn' as "the online distribution of sexually graphic photographs or videos without the consent of the individual in the images. The perpetrator is often an ex-partner who obtains images or videos in the course of a prior relationship, and aims to publicly shame and humiliate the victim, in retaliation for ending a relationship. However, perpetrators are not necessarily partners or ex-partners and the motive is not always revenge. Images can also be obtained by hacking into the victim's computer, social media accounts or phone, and can aim to inflict real damage on the target's 'real-world' life (such as getting them fired from their job)." (EIGE, 2017a)

Sexting

Ringrose et al (2013) present sexting as "a *portmanteau* term that combines the words sex and texting (...) and has been defined as 'the exchange of sexual messages or images' (Livingstone, Haddon, Görzig, & Ólafsson, 2011) and 'the creating, sharing and forwarding of sexually suggestive nude or nearly nude images' through digital technologies such as mobile and the internet (Lenhart, 2009)" (Ringrose, Harvey, Gill, & Livingstone, 2013).

Slut-shaming

Slut-shaming is defined as a form of cyberbullying, where girls and young women are targeted on social media and on the internet and bullied through degradation or humiliation for their sexuality (actual or perceived) (Bailey & Steeves, 2015).

Youth

In the EU Strategy for Youth adopted in 2009, the term 'youth' refers to teenagers and young adults aged between 13 and 30 years (COM (2009)200 p.2). EUROSTAT statistics consider the youth

population to be aged between 15 and 29 years². This report focuses on young people aged 15 to 24.

Executive summary

EIGE's research shows the many ways digital technologies are benefiting young people in terms of access to learning, friendship, information and mobilisation. It also shows that aggressive behaviour online is anticipated and normalised. As a result, young people have developed pre-emptive coping strategies. Young women and girls in particular considerably restrict what they express online for fear of cyber-aggression, sexualised cyberbullying, gossip and hateful comments. For boys, the tendency seems to be to ignore and minimise the abuse experienced, whether that abuse be directed toward girls or boys.

For the EU to harness the potential of digital technologies for youth mobilisation, diminishing the power of gender stereotypes online and promoting the diversity of voices, opinions and gender expression are essential. The opportunities and threats of digitalisation for gender equality are rarely explicitly recognised. It is crucial that the EU institutions and the Member States incorporate a gender perspective into all digital youth initiatives and that they recognise that digital media offers a powerful tool for mobilisation in support of gender equality. Provided that there is targeted support and funding for women's empowerment, digitalisation can significantly contribute to the pursuit of an inclusive, equal and participatory society.

In the EU, 92 % of young women and 93 % of young men use the internet every day. This reflects a substantial increase since 2011, when 81 % of EU youth used the internet daily. Although the level of use is almost identical among young women and men, it is worth noting that gender gaps to the detriment of women are still a reality among older generations.

Young people represent the most digitally skilled generation in the EU, with 56 % of young women and 58 % of young men aged 16-24 holding above-basic digital skills. The rest of this generation have either basic or low digital skills. By comparison, only around one-third of the population aged 25-54 have above-basic digital skills. The fact that the majority of adults in Europe in 2017 had low to basic digital skills³ would seem to suggest that many parents, teachers and educators may be lagging behind young people when it comes to digital skills. It is estimated that only 20-25 % of students in Europe are taught by digitally confident and supportive teachers who have ready access to ICT and have few obstacles to using it in school⁴. Investment in life-long learning and efforts to remove barriers to occupational training offer ways to support teachers in updating and increasing their level of digital skills. Such training could additionally benefit gender equality within the teaching profession, which remains female-dominated across Europe (EIGE, 2017c).

 $^{^2}$ More information on statistical indicators used by the European Union in relation to youth available at: http://ec.europa.eu/assets/eac/youth/library/publications/indicator-dashboard_en.pdf

 $^{^3}$ 57 % of women aged 25-54 and 52 % of men aged 25-54 as shown in figure 1.

⁴ Source: A common European response to shared goals A concept for tackling the digital skills challenges in Europe Outcome of the DSM Sub-group on digital skills, available via

http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=43900

Although young women and men have similar digital skills, young men indicate higher confidence in their digital skills

Throughout the EU, a similar share of young women and men feel sufficiently skilled to use digital technologies in their daily lives⁵, yet boys feel more confident about their digital skills. For example, 73 % of boys, compared to 63 % of girls, aged 15-16 feel comfortable using digital devices that they are less familiar with. In countries with an overall lower level of youth confidence in digital skills (e.g. AT, FI, LV), the gender gap to the disadvantage of girls is particularly large, reaching as high as 25 p.p. in Finland.

At the EU level, the gender gap in overall digital skills can be attributed more specifically to a gap in problem-solving digital skills, to the detriment of young women. In countries where young women outnumber men in basic problem-solving digital skills, more young women also tend to have above-basic overall digital skills. Altogether, this shows the importance of improving digital problem-solving skills among young women in order to close the gender gap in overall digital skills.

Digital spaces are gendered spaces which hinders the participation of young women

Overall, young women and men have a very high level of social engagement online, yet genderspecific patterns appear for certain activities. Young people show a very high participation on social networks, compared with all other generations, even young adults aged 25-29⁶. Somewhat more young women (60 %) than men (56 %), engage in uploading self-created content. Despite the higher overall participation of young women on social networks⁷, more young men (26 %) than young women (18 %) post comments on online articles or through online social networks or blogs. In general, more young men (55 %) than young women (46 %) follow debates on social media, for example by reading articles on the internet or through online social networks or blogs. Young women's lower engagement in online debates or in the reading of news can be linked to research suggesting that their online presentations involve complex negotiations between the social status rewards of online self-exposure and a risk of harsh judgment, young women being readily castigated for being "too" public. Research also highlights the significant time and effort that young women are required to invest in order to maintain an online presence displaying "appropriate femininity" as socially expected (Bailey & Steeves, 2015). Girls' lower engagement in debates on social media may be a preventive strategy to avoid harsh criticism.

Political activities online are more fraught for girls and young women

According to the present study, the percentage of youth who in the preceding three months had posted opinions on civic or political issues online, or participated in online consultations or voting (for example to decide or express their opinion on urban planning, or signing a petition) is low. The

⁵ According to Special Eurobarometer 460, in 2017, 92 % of young women and men aged 15-24 consider to be sufficiently skilled in the use of digital technologies in their daily life.

⁶ According to Eurostat, in 2017, 88% of young women and 87% of young women aged 16-24 have used online social networks in the past three months compared to 83 % and 79% of women and men aged 25-29.

⁷ PISA data indicates that 82% of young women, aged 15-16, participate in online social networks every day or almost every day compared to 72% of young men the same age.

share of young women posting opinions on civic or political issues via websites is particularly low⁸.

This finding mirrors data from a recent analysis of 'traditional' political participation in 18 western democracies which showed that women were less likely than men to share their political opinions publicly (Coffé & Bolzendahl, 2010). It also supports research carried out with politically-involved young people showing that they were reluctant to engage in political debate on social media out of concern for self-presentation and to a lesser extent, out of fear of receiving negative feedback (Storsul, 2014). The fact that social media erases nearly all social context from acquaintances can lead to "a lowest-common denominator effect, as individuals only post things they believe their broadest group of acquaintances will find non-offensive" (Marwick, 2010). Given that girls and young women are socialised from an early age to carefully monitor self-presentation both off and online, such pressures could explain girls' lower propensity to take part in civic and political debates, in line with their lower overall participation in online debates in general.

Exposure to online harassment has far-reaching effects on young women's online engagement

More young women (9 %) than young men (6 %) report being a victim of online harassment (including but not limited to cyber harassment, blackmailing, and other offenses). For the first time, in 2013, the Health Behaviour In School-Aged Children Study asked school children whether they had experienced cyberbullying, either through messages or through pictures (Inchley & Currie, 2013). The data shows that 12 % of 15-year-old girls have been cyberbullied by messages at least once compared to 7 % of boys⁹. After witnessing or experiencing online hate speech or abuse, 51 % of young women and 42 % of young men in the EU hesitate to engage in social media debates due to fear of experiencing abuse, hate speech or threats. This indicates that the impact of online harassment is disproportionately felt by young women. Cyber-harassment

"The things you get hated for are your opinions and sexual things, if you're a girl. That's about it."

Girl, focus group participant, Sweden

from peers and strangers often make young people, especially girls, less willing to be politically active online. To avoid criticisms and abuse related to their identities, more young women than young men restrict their political activities online (as they also do offline), thereby missing out on the full advantages of digital media.

Gender norms are exacerbated online

⁸ 14% of young women aged 16-24 have posted opinions on civic or political issues via websites compared to 18 % of young men of the same age.

⁹ Young people were asked whether they had experienced anyone sending mean instant messages, wall-postings, emails and text messages. Data for the E-27 (data for Cyprus and Northern Ireland is not available). Source: EIGE's calculations from HSBC 2013/2014. Available at http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

Experts interviewed in the course of the project expressed the concern that social media, especially young women's high engagement in uploading self-created content (notably pictures), reinforced the objectification of women and girls. The omnipresence of beauty standards online establishes an aesthetic norm that weighs on heavily women and girls and hinders their participation in public and political life. This concern is reflected in data from the World Health Organisation showing that almost one in two 15-year-old girl thinks she is too fat, compared to about one in four boys¹⁰.

High exposure to sexually-objectifying media has been shown to lead young women to internalise beauty standards and see themselves as objects rather than people with agency¹¹ (Vandenbosch & Eggermont, 2012; Wolf, 2013), which in turn is shown to lessen girls' and young women's propensity

"But I think men have more trouble to talk about things. Even if we are abused, we don't talk about it." Boy, focus group participant, Sweden to engage with public affairs, including participating in a vote (Heldman & Cahill, 2007).

Experts stressed the facts that boys are also exposed to widespread objectification of women online, particularly through the problematic depiction of women in games¹², as well as to unhealthy representation of "male" attitudes and behaviours, increasingly referred to as "toxic masculinity". As an example, boys whose behaviour is judged not manly enough or boys who are considered to be gay are often mocked online. Boys mentioned how hard it was for boys to speak up about abuse or cyberbullying, especially when they lacked a supportive family environment: *"For a boy saying 'they make fun of me' it's embarrassing"* (boy, IT, 17).

Findings indicate some boys may overestimate their own ability to handle problems online, and are less prepared than girls to seek and accept help, which is probably related to stereotypical standards of boys being expected to 'man up'.

Boys also discussed pressure from male peers to request or demand nude pictures from girls and further pressure to share such pictures without consent. Both male and female participants noted society's different standards concerning sexual behaviour, when girls and women are blamed for their sexual agency, whereas boys are praised. Victim-blaming attitudes were prevalent among focus group participants.

¹⁰ In the EU 27, 47.2 % of 15 year old girls think they are too fat compared to 23.2 of male peers. Source: EIGE's calculations from WHO Health Behaviour of School-Aged Children, acessible:

www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1 ¹¹ This process is referred to as "self-objectification"

¹² In 2015, almost half of boys aged 15-16 (49 %) in the EU-28 play collaborative online games every day or almost every day. The corresponding percentage for girls the same age is 7 %.

Introduction

The need for an increased focus on youth and digitalisation is evident considering the rapid growth in children's and young people's access to the internet, including through mobile internet devices. According to Eurostat data, 93 % of 16-24-year-olds used the internet daily in 2017. Digital devices, particularly when used to go online, provide a multitude of opportunities for young people, but also expose them to various risks. Research and policies tend to focus more on identifying and preventing online risks and harm and far less on the opportunities and benefits of online engagement.

Digitalisation has strong potential for the empowerment of women and girls, allowing access to information and knowledge beyond conventional means and providing new platforms for creativity and self-expression, which can inspire others to act. It opens new opportunities to participate, interact and campaign with a view to defending the rights and freedom of women and girls. It also offers empowerment opportunities for people with specific needs, such as those with disabilities, the Lesbian, Gay, Bisexual, Transgender, Queer and Intersex (LGBTQI) community and other groups (EIGE, 2016). Digitalisation also enables less hierarchal forms of communication and a more equitable media landscape.

While digitalisation can empower women and girls, it also poses new challenges to gender equality. Digital technologies have been increasingly associated with cybercrime and are misused as an instrument to harass and harm women and girls, while at the same time reinforcing existing gender stereotypes. It is estimated that the overwhelming majority of agressive behaviour, harassment, abusive language and denigrating images in online spaces target women. Girls are by far more likely to be victims of negative, degrading and stereotyped portrayal, cyberbullying, cyber harassment, unwanted sexting and sextortion, hate speech and personal data misuse. This can have devastating psychological effects particularly. At the same time, digital tools and technologies can also play an important role in supporting and empowering survivors of violence (e.g. web campaigns, information and support websites and apps) and in helping to combat gender-based violence (EIGE, 2017a).

Despite the political commitment to maximise the benefits of digitalisation on education and economy and numerous international and national research programmes dedicated to digital technologies, there are still extensive knowledge gaps regarding digital technologies and gender equality. Little is known about what girls and boys gain from new technologies or which strategies work best to empower them online. Broader knowledge is needed on why girls and boys are increasingly likely to experience harm linked to internet use and what are the emerging gender challenges related to digitalisation. EIGE's report aims to fill in some of these knowledge gaps and to support the development of policies that redress structural gender inequalities embedded in online and offline worlds.

The issue of digitalisation and youth is high on the political agenda of the EU. The Council Resolution on the EU Work Plan for Youth for 2016-2018¹³, for instance, reaffirms the importance of addressing the challenges and opportunities of the digital era for youth policy, youth work and young people. The Paris Declaration of Education Ministers, adopted in 2015,¹⁴ stresses the priority of enhancing critical thinking and media literacy, particularly in the use of the internet and social media, so as to develop resistance to discrimination and indoctrination. The Austrian Presidency of the Council of the EU (2018) chose youth and gender equality as one of its priority areas in the second semester of 2018.

The EU's commitment to the Beijing Platform for Action (BPfA) marks an important step in recognising major inequalities in all the critical areas of concern identified in this context, including 'the girl child'. The current study will address two objectives related to the promotion of girls' awareness of and participation in social, economic and political life and to the eradication of violence against girls. In 2008, the Council took note of three indicators in this area of concern based on the report prepared by the Slovenian Presidency (Council of the EU, 2008).

In line with the request of the Austrian Presidency of the Council of the EU, this report explores how digital technologies can be used to promote gender equality by strengthening the social and political participation of young women and men. It also analyses the gender-related risks of digitalisation for girls and boys. It is based on qualitative research (focus groups with girls and boys and expert interviews) allowing for an in-depth analysis of gendered practices related to opportunities and risks linked to digital technologies in the context of the promotion of gender equality among young people in the EU at large. The research was carried out in 10 selected Member States.

Chapter 1 provides an overview of the youth, gender and digitalisation context and defines the scope of the report. Chapter 2 presents how the opportunities and risks of digitalisation from gender perspective are framed and addressed in public policy at the EU level. Chapter 3 then highlights available data on young people's digital skills and their access to digital technologies, the use of such technologies for social and political participation and their experience of online risks. Chapter 4 presents young people's personal take on those issues by analysing findings from focus group discussions. Chapters 5 and 6 present conclusions and policy recommendations drawn from the research findings. A list of new indicators is set out in Annex II.

¹³ Resolution of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, on a European Union Work Plan for Youth for 2016-2018, OJ C 417/01, 15.12.2015, p. 1.

¹⁴ More information on the Paris declaration of EU Education Ministers and the measures taken towards its implementation can be accessed at this link: http://ec.europa.eu/education/news/20160316-paris-declaration-education_en

1. Setting the scope: the gender equality, youth and digitalisation nexus

With the development of information and communication technologies, the last two decades have seen a profound shift in the way information is produced, stored, accessed and exchanged, leading to what is often referred to as the digital revolution (Gurumurthy, 2014).

Digitalisation, understood as the process by which domains of social life are restructured around digital communication, technology and media infrastructures, increasingly permeates all aspects of European societies, economies, cultures, institutions and political structures. In doing so, digitalisation is profoundly transforming the way individuals perform daily tasks and experience interaction, including in the domain of work, finances, health, education, entertainment, social activities and political governance.

Far from being solely a technological phenomenon, digitalisation is also a social phenomenon. As such, it is both shaped by and shaping other social constructs such as gender. Digitalisation is evolving in the context of a Western-based binary opposition between nature and culture, feminine and masculine, which typically associates scientific and technological developments with masculinity. Historically, this has contributed to the association of men with machines and the emergence of a deep-rooted cultural stereotype of women as technically incompetent or invisible in technical spheres (Wajcman, 2010).

Similarly, digitalisation is producing effects on gender roles and gender relations that are deep and far-reaching. With the emergence of digital spaces characterised by instant communication technology and the constant use of and access to social media, the line between what constitutes a private versus a public space has been reshaped and blurred. In that regard, digitalisation is giving new relevance to the feminist arguments that the public and private are inseparable and that personal matters are political in essence (Hanisch, Firestone, & Koedt, 1970; Weinstein, 2014). One key example is how sharing individual testimonies of oppression under one rallying hashtag highlights the collective dimension of gender inequality and the interplay between individual and collective experience (Baer, 2016).

Over the past two decades, researchers and feminist scholars have explored to what extent digital technologies in general and the internet in particular could provide an opportunity to transcend inequalities based on gender, age, race, ability and other structural inequalities (Mainsah, 2011). However, online spaces have also been shown to reproduce unequal power structures observed in the physical world. For example, digital platforms appear as both spaces of empowerment and identity formation, but also as sites of surveillance and self-monitoring, especially in terms of gender norms linked to physical appearance (Baer, 2016; Carstensen, 2013; Consalvo & Paasonen, 2002; Levi-Sanchez & Toupin, 2014). The impact that digital media and the internet likely have on the welfare and social capital of individuals is now understood to depend on a series of complex factors

ranging from personal characteristics, socio-economic background, usage habits and content (Shah, Kwak, and Holbert 2001).

Understanding the opportunities and risks that digital technologies present in the context of the pursuit of gender equality is a prerequisite for societies to effectively harness the related opportunities and mitigate the risks, especially for youth. Young people are the most skilled users of digital technologies¹⁵ in Europe. Due to mobile phones, their access to internet and social media has become more personal and more private as compared to the first internet users (UNICEF, 2017). What is often referred to as a "bedroom culture" also implies that adolescents, unlike younger children, use the internet and digital media under limited parental supervision (Bovils and Livingston, 2001, EU Kids online, 2015).

Youth is a time of intense socialisation and formative experiences, which are increasingly being mediated by digital technologies with a lasting effect on the lives of young people. Digital technologies may affect their academic results, including whether and what they choose to study, and can help them develop interests and hobbies, as well as find recreational outlets including games, music and films. The norms they are exposed to online in terms of behaviour, physical appearance and aptitudes expected from women and men will affect their beliefs, perceptions and gender identity. Such experiences can exacerbate or mitigate the effect of inequalities encountered in the off line world.

Similarly, for a growing share of young people in Europe, experiences such as developing friendship, exploring one's sexuality, dating and navigating intimate relationships are increasingly shaped by digital technologies. As Livingstone states, "creating and networking online content is becoming an integral means of managing one's identity, lifestyle and social relations" (Livingstone, 2008). So are body image and self-presentation.

The phenomenon of virtual community opens up new opportunities for young people to perform citizenship in everyday life. Understood as "full membership of a community" (Marshall, 1950), citizenship is about rights, responsibilities and legal status, as well as identity, belonging and participation (Lister, 2007; Abraham et al., 2010; Halsaa, Roseneil, & Sümer, 2012). While having access to digital technologies can be considered a precondition of full exercise of citizenship in current Europe, opportunities and risks brought about by digitalisation further influence the experience and performance of citizenship in its multidimensional and gendered character. Examples include instant social control via social networks and subsequent self-discipline mostly related to the beauty myth imposed on girls (Wolf, 2013); young people from ethnic minorities or women and girls acting as invaders of digital spaces (Leurs, 2015); and second-generation migrant youth using their knowledge of digital technologies to assist their parents in crossing a digital divide and crossing geographical distance between them and their families (Leurs, 2015).

Young people are one of the most disfranchised of all age groups according to statistics on election turn-outs (Horvath & Paolini, 2013; Kiisel, Leppik, & Seppel, 2015; Quintelier, 2007). In recent years, several policy initiatives have been undertaken in the EU that reflect concerns about the declining interest of young women and men in politics. Research evidence also notes the decline in voter

¹⁵ See section 3.1

turnout, membership in political parties, interest in traditional politics and trust in political institutions (Crowley & Moxon, 2017; Willems, Heinen, & Meyers, 2012). However, alongside the decrease in conventional forms of participation among young people, there is an increase in informal (unconventional) forms of participation, such as signing petitions or participating in political demonstrations. This phenomenon has been known as the 'paradox of youth participation'. While Cammaerts et al. refuse the "participation crisis" of young people, they conclude that young people often feel that their priorities and interests are under-addressed or ignored in current social, economic and political discourses and processes (Cammaerts, Bruter, Banaji, Harrison, & Anstead, 2016).

Digital technologies can constitute an important catalyst for new forms of political participation of young people and, more broadly, their expression of citizenship. In recent years, policy-makers and scholars have explored ways to bolster the civic engagement of young people, as seen in the literature on the subject and the adoption of EU-wide youth mobilisation strategies (see section on policy context). Research has shown positive links between young people's social media engagement and their political involvement in a broad sense (Storsul, 2014; Xenos, 2014), including exposure to different perspectives (Kahne, Middaugh, Lee, & Feezell, 2012) and solidarity actions (García-Galera, Del-Hoyo-Hurtado, & Fernández-Muñoz, 2014). Xenos, Vromen, & Loader (2014) label social media as "the great equalizer" that transforms existing patterns of social inequality by lowering the threshold for civic engagement. They found out that social media are positively related to political engagement, and suggest a number of patterns consistent with a flattening out of social asymmetries in political engagement over time, via a process of generational replacement (Xenos, 2014). Many other authors take a more critical stance and find that previously existing differences in engagement are replicated in online environments (Brandtzaeg, 2015; Checkoway, 2010; Morales et al., 2016).

Gender and intersectionality have not systematically been used as a lens of analysis in such studies, with the exception of emerging qualitative research focusing on girls and young women or youth from a migrant background (Geniets, 2010; Harris, 2008; Leurs, 2015). Intersectional analysis points to more contrasted realities between internet engagement and civic or political participation (Brandtzaeg, 2017). For example, girls from low socio-economic backgrounds may experience more powerful gendered barriers to political participation than both boys from the same environment and girls coming from other socio-economic background (Harris, 2008).

To capture the various and far-reaching ways in which digital technologies support youth participation and greater gender equality among young people, the concept of gendered citizenship can prove helpful. Born from the need to capture women's experience of citizenship, it seeks to capture notions of identity, belonging and participation (Abraham, 2010; Lister, 2007). Concerned with exploring 'lived citizenship', the concept offers a prolific way to explore relationships between the state and individuals as well as among individuals including through feeling of inclusion or exclusion (Roseneil, Halsaa, & Sümer, 2012). Intimate, bodily, multicultural and political dimensions of gendered citizenship will be explored in this report. Given the profound ways in which digitalisation is affecting not only representative democratic structures, but also social relationships and gender relations, the concept provides a useful lens for studying young people's experiences online.

1.1 Focus of the report

The intersection of youth, digitalisation and gender equality provides an interesting context for the analysis of the girl child, one of 12 critical areas of the BPfA and the focus area of this report. The report is concerned primarily with the following strategic objectives regarding the girl child: L.7 Eradicate violence against the girl child; and L.8 Promote the girl child's awareness of and participation in social, economic and political life. The opportunities and risks of digitalisation for youth go hand in hand, and this report therefore covers a range of interconnected issues, from online violence against girls and young women to their access to and involvement in social and political life online (or lack thereof).

The report focuses broadly on youth aged between 15 and 24¹⁶. The quantitative section includes data representing this age category, while the qualitative section deals with a more narrow age range, 15-18, in order to focus specifically on girls and boys in the EU. Throughout the report, the terms "youth" and "young women and men" refer broadly to girls and boys and young women and men aged 15-24.

Various data sources were used to assess the effects of digitalisation on youth and gender equality. Statistics from Eurostat, Eurobarometer and the Programme for International Student Assessment (PISA, collected by OECD) regarding social and political participation, as well as risks, are analysed for the age group 15-24. Qualitative data collected specifically for the purpose of this report in 10 Member States with girls and boys aged 15-18 are also used. The countries, selected for reasons further elaborated upon in the methodological overview, are representative of diverse situations across the EU regarding children's access to digital technologies, risks associated with such technologies and gender equality conditions.

Regarding access to and use of digital technlogies, the focus of this report is on the use of computers as well as other devices enabling access to the internet. The report provides a snapshot across the EU on the selected aspects of the digital gender divides affecting youth. The opportunities offered by digitalisation include a heterogeneous set of activities such as learning, communication, participation, creativity, expression and entertainment (Livingstone & Helsper, 2010). These can be measured in terms of time spent for example using the internet for schoolwork, chatting with peers, downloading music or playing games. The term 'opportunities' is used in order to recognise the value of children's online activities and the fact that children can and do engage with the internet in potentially beneficial ways (Livingstone, Mascheroni, & Staksrud, 2015).

With regard to risks, the quantitative section considers problems that can curtail the opportunities presented by digitalisation, including exposure to hate speech and extremism, having been a victim of harassment online, as well as hesitation to engage due to fear of online retribution. The qualitative section subsequently broadens its focus to address risks experienced by young women and men in the EU that are not currently quantified by Eurostat and Eurobarometer. These risks include gender-based cyber violence, threats of sexual solicitation and violence, gendertrolling, and non-consensual pornography, or 'revenge porn'. The qualitative section also frames its analysis of opportunities and risks around theoretical conceptions of citizenship, including political, social,

¹⁶ The definition of youth varies by Member State and policies. The EU, however, defines youth as girls and boys and young women and men aged 15-29 (Perovic, no date).

intimate and bodily citizenship.

Within each section, intersecting inequalities are identified and acknowledged. In the quantitative section, data is gender-disaggregated and attention is given to two age categories in particular, ages 16-19 and ages 20-24. Furthermore, population density, income level (in the case of Eurostat data) and self-identification of class (in the case of Eurobarometer) have been considered.

Up to now, public discourse has focused disproportionately on the risks of digitalisation as opposed to its benefits. To redress the balance, this report also gives due attention to the opportunities offered by digitalisation. Digital activities comprise a core part of girls' and boys', as well as young women's and men's daily lives. Such activities and the opportunities and risks they bring, are evolving quickly with technological progress. The conceptual divide between "real life" and the digital world is losing its meaning (EIGE, 2017a), particularly for young age groups. In that regard, it is important to understand how digitalisation intersects with the lives of young people, as well as with efforts to promote gender equality. Looking at opportunities and risks of digitalisation through the lens of gender equality allows for a more nuanced understanding of the dynamics of digitalisation among EU youth.

1.2 Methodological overview

The analysis of gendered practices related to opportunities and risks of digital technologies for young people and their potential to promote gender equality is based on three main research methods. First, an analysis of quantitative data and scientific literature on young people's access to and use of digital technologies and their digital skills was caried out. This part of the research process focused on the age group 15-24.

Second, an analysis of policy and legislative initiatives was conducted at both EU and national levels.

Third, a qualitative research in 10 selected Member States was carried out (Austria, Estonia, France, Hungary, Ireland, Italy, Poland, Romania, Spain and Sweden) In addition, Denmark was chosen as a pilot for the methodology for focus groups. As the focus groups in Denmark were used to test the methodology, the data emanating from them is not included in the analysis.

The research included interviews with experts at the national level and focus group discussions with girls and boys from the age group 15 - 18. Both interviews and focus groups discussed the technologies young people use; for what purpose; the modes of online social, political and cultural participation in relation to gender equality and how are they gendered; what motivates and hampers participation of girls and boys and the risks boys and girls are facing when using digital technologies.

More information on the selection of countries, methodologies adopted for the review of academic literature, analysis of quantitative data, policy review, selection of experts and recruitment of focus groups participants is presented in Annex I: Methodology.

2. How are opportunities and risks of digital technologies framed in public policy?

Various aspects of digitalisation have been a policy priority of the EU in recent years, in particular with a view to their potential for empowerment and inclusion of disadvantaged groups. The **Digital Agenda** is one of Europe 2020 flagship initiatives, which, among other objectives, aims to promote digital literacy, skills and inclusion and strengthen online trust and security (European Commission, 2014).

Opportunities and threats of digitalisation for gender equality are rarely explicitly recognised. It is crucial for EU institutions and the Member States to incorporate a gender perspective into all digital initiatives and to recognise that digital power is driving a new, stronger wave of awareness about challenges for gender equality. Digitalisation has considerable potential with regard to creating an inclusive, equal and participatory society, if targeted support and funding infrastructure for women's empowerment is given sufficient recognition.

2.1. Opportunities of digitalisation for active participation in

youth policies

Active citizenship of youth is high on EU political agenda. The **EU Strategy for Youth 2010-2018** calls for active participation of young people in society, as does the Paris Declaration of EU Education Ministers, which focuses on active citizenship among young people and children. The EU Strategy for Youth has two main objectives: to provide more and equal opportunities for young people in education and the labour market; and to encourage young people to actively participate in society (European Commission, 2009). Although promoting gender equality and combating all forms of discrimination is an important guiding principle of the strategy, a gender equality perspective is addressed very narrowly, only in relation to the need to combat gender stereotypes via formal and non-formal education systems.

In its **EU Work Plan for Youth 2016-2018**¹⁷, the Council of the EU and the representatives of the governments of the Member States agreed that youth and cross-sectional cooperation shall be strengthened in the following priority areas: increased social inclusion of all young people; stronger participation of all young people in democratic and civic life in Europe; easier transition of young people from youth to adulthood, in particular the integration into the labour market; support for young people's health and well-being, including mental health; contribution to addressing the challenges and opportunities of the digital era for youth policy, youth work and young people; contribution to responding to the opportunities and challenges raised by the increasing numbers of

¹⁷ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=cex:42015Y1215%2801%29

young migrants and refugees in the European Union (Council of the European Union, 2015). Some of these aims are also endorsed by the European Pillar of Social Rights.

Following the Work Plan, an expert group on 'Risks, opportunities and implications of digitalisation for youth, youth work and youth policy', coordinated by the DG EAC, was established. In 2018 the group delivered a study (European Commission, 2018)(European Commission, 2018) on the impact of internet and social media on youth participation and youth work and proposed policy recommendations(European Commission, 2018).

In preparation for the next EU Youth Strategy, the European Youth Forum ran a Structured Dialogue with young people from all over Europe and published The **Youth Goals**¹⁸ for the future of Europe. Among other goals, young people aim to foster a sense of belonging to the European project and build a bridge between the EU and young people to regain trust and increase participation; ensure equality of all genders and gender-sensitive approaches in all areas of life of a young person; enable and ensure the inclusion of all young people in society; ensure young people have better access to reliable information, support their ability to evaluate information critically and engage in participatory and constructive dialogue; integrate and improve different forms of learning, equipping young people for the challenges of an ever-changing life in the 21st century; strengthen young people's democratic participation and autonomy as well as provide dedicated youth spaces in all areas of society.

Participation and citizenship emerge as relevant concepts in current youth policies and key concepts in the process of setting new directions and key issues of future EU youth policies. This report provides a gendered approach to these concepts to support the development of policies for all young women and men in the EU and policies that redress structural gender inequalities embedded in online and offline worlds.

2.2. Addressing digitalisation in education policy

The use of new technologies in education has received increased policy attention in the last years and is embedded within an overall strategy to transform education in support of a more active use of innovative pedagogies and tools for developing digital competences.

In the **2015 joint report** of the Council and the Commission on progress in the implementation of 'Education and training 2020' (ET 2020), the Commission and the Member States emphasised that education needs to respond effectively to the demands of a changing society and labour market, raising Europe's skills and human capital, and strengthening its contribution to economic growth (European Union, 2015). The report further stressed that gender gaps in education and training, which are also based on the continuation of gender stereotypes, must be tackled and gender differences in educational choices addressed. In addition, in order to tackle bullying, harassment and violence in the learning environment, including gender-related, requires that learning institutions

¹⁸ http://www.youthconf.at/wp-content/uploads/2018/04/YouthGoalsHandout.pdf

and educators must be equipped and supported to promote inclusion, equality, equity, nondiscrimination and democratic citizenship in their learning environments. This could be achieved through stronger synergies between education, research, innovation and employment and innovative approaches to curricula, including use of information and communication technologies (ICT).

The **Paris Declaration** of EU Education Ministers (2015) called for action at all levels to reinforce the role of education in promoting citizenship and the common values of freedom, tolerance and nondiscrimination, strengthening social cohesion, and helping young people become responsible, openminded and active members of a diverse and inclusive society. The Declaration urges the EU to support the sharing of good practices with a view, among others, to fostering the education of disadvantaged children and young people by ensuring that education and training system address their respective needs.

In its recent Communication on a **Digital Education Action Plan** (2018), the European Commission acknowledges that while there are many opportunities arising from digital transformation, the biggest risk today is of a society ill-prepared for the future. It stressed the need for strengthening children's and young people's critical thinking and media literacy, so they can judge and overcome the ever-present threats of disinformation, cyberbullying, radicalisation, cybersecurity threats and fraud. To address these challenges, the EU called for an EU-wide awareness-raising campaign targeting educators, parents and learners to foster online safety, cyber hygiene and media literacy;

and a cyber-security teaching initiative building on the Digital Competence Framework for Citizens, to empower people to use technology confidently and responsibly. The Action Plan focuses on the need to stimulate, support and scale up purposeful use of digital and innovative education practices. The Commission holds that closing the gender gap through digital and entrepreneurship education is vital if Europe is to fully embrace the benefits of the digital revolution. While both girls and boys have similar levels of interest and competence in digital technologies, fewer girls foster this interest in their studies or for their

Coding and computational skills in education systems:

Curriculum renewal processes highlighting digital skills, particularly computational skills and coding, have already taken place or are being implemented in the United Kingdom, France, Finland, Poland, Italy, Denmark, Portugal, Malta, and Croatia (Bocconi, Chioccariello, Dettori, Ferrari, & Engelhardt, 2016). The United Kingdom, for example, became the first in the world to incorporate coding into the national curricula of both primary and secondary schools. The European Commission's 2016 New Skills Agenda directly encourages Member States to develop coding and computer science in education. The policy challenge which remains, however, is the lack of synchronisation of language of digital literacy - particularly in regard to digital skills - across Member States. Furthermore, many curricular reforms remain gender blind in their approaches.

career, with the result that currently in the EU fewer than one in five ICT professionals are female (EIGE, 2017c, 2018). Girls and young women require positive examples, role models and support to overcome stereotypes and realise that they too can embark on a fulfilling and successful career in ICT and STEM.

The European Parliament Resolution¹⁹ (2014) on **Empowering girls through education in the EU** stresses the importance of education as the foundation of responsible citizenship, gender equality and empowerment of girls on social, cultural and professional levels, as well as for the full enjoyment of all other social, economic, cultural and political rights and subsequently the prevention of violence against women and girls. The EP further underlined close links between gender stereotypes and bullying, cyberbullying and violence against women, and the need to fight these from an early age.

2.3. Navigating the risks of digitalisation in policy

The fact that the internet can be both empowering and at the same time pose many dangers renders adequate policy responses necessary.

The EU Agenda for the Rights of the Child²⁰ sets as one of its objectives the achievement of highlevel protection of children in the digital world, while fully upholding their right to access the internet for the benefit of their social and cultural development. In its **Conclusions on the protection of children in the digital world** adopted in 2011, the Council invited the Member States to continue the work on the protection of minors by promoting widespread use of awareness raising campaigns to address children, parents, teachers and others working with children, and by promoting consistency in teaching online safety and media literacy in schools as well as in early childhood education and care institutions. It was recognised that a combination of policies is required to deliver a better internet for children. These should to be included in an EU-wide strategy, which develops baseline requirements and avoids fragmentation. It stressed that while regulation remains an option, where appropriate, it should preferably be avoided, in favour of more adaptable selfregulatory tools, and of education and empowerment.

In its communication on **A European Strategy for Better Internet for Children** (2012)²¹, known as Better Internet for Kids, the Commission acknowledged that while the Digital Agenda for Europe aims to have every European digital, children would have particular needs and vulnerabilities on the internet, which must be addressed specifically so that the internet becomes a place of opportunities for children to access knowledge, communicate, develop their skills and improve their job prospects. Based on a Commission report²² on how child safety recommendations have been implemented in the Member States, the Commission proposed to combine a series of instruments based around legislation, self-regulation and financial support, including actions such as the Safer Internet Programme (2009-2013), the "Connecting Europe Facility" and "Horizon 2020" from 2014. The Commission committed to support the creation of an EU-wide interoperable service infrastructure to support the Safer Internet Centres, which provide online safety information and public awareness tools, as well as platforms for youth participation. A series of actions were proposed to be undertaken by the Commission, Member States and industry resulting in children benefiting from better digital and media literacy skills and more creative and educational online content; offering parents and children better ways of staying safe online, such as simple, effective tools for reporting

^{19 (2014/2250(}INI))

²⁰COM(2011) 60 final.

²¹ COM(2012) 196 final

²² Protecting Children in the Digital World COM (2011) 556 final.

abuse, age appropriate privacy settings, content classification schemes and parental controls; society at large acquiring better procedures for identifying, notifying and taking down child sexual abuse material found online.

In its Conclusion on a European Strategy for Better Internet for Children (2012), the Council stressed that in order to enable children to use the internet safely, it is necessary, on the one hand, to address the issue of technical tools that make safe navigation on the internet possible, and on the other hand, to equip children with the appropriate knowledge, skills and competences, which would allow them to act in online environment in an effective and responsible way. It therefore encouraged the Member States to step up the implementation of strategies to include the teaching of online safety and digital competences in schools, encourage the use of the internet across school subjects and in this respect support adequate teacher training. It called on Member States to appoint a national digital champion whose work would aim at promoting the benefits of an inclusive digital society.

Recognising and tackling gender-based violence online:

In its Perspective and Action Plan for 2017, Denmark's Minister for Equal Opportunities acknowledges the problem of digital sexual abuse, including 'revenge porn,' and announces plans to launch a package of initiatives addressing the issues. The package intends to direct attention to youth education programmes, through the creation of an ethical code and launch of a campaign on digital education. It also looks at whether police are equipped to handle victims of online abuses. Additionally, Denmark has drawn up a pan-Nordic survey regarding sexism and hate speech aimed at children and young people. In 2015, the United Kingdom introduced section 33 to its Criminal Justice and Courts Act, thereby formally making the disclosure of sexual photographs or videos without the consent of the person pictured a legal offence. In 2016, the annual Report of Violence against Women and Girls released by the Crown Prosecution Service (CPS) revealed that there

A study on the **Benchmarking of Safer Internet policies in Member States (2014)**²³ conducted on the implementation of the Better Internet for Kids (BIK) provides a comprehensive analysis of how BIK related challenges are addressed in policies and initiatives, and to develop a sustainable benchmarking tool - the "BIK Map" for future policy work on European level. The results of the study reveal that current practice in the EU countries related to actions and initiatives fostering awareness and empowerment show a high breadth of activities, including new risks such as online grooming and cyberbullying. The issue of sexual harassment, however, constitutes a less frequent focus and is covered in (only) half of the countries. While the Safer Internet Centres play a key role in the coordination of actions and initiatives in the EU countries, the study highlights that there is room for improvement in the design of the policies in the EU countries, in particular in relation to the collection of evidence and the evaluation of the efficiency and effectiveness of measures included in these policies. Also a stronger coordination among the responsible ministries would be beneficial, including an increased stakeholder involvement.

In its Resolution on Gender equality and empowering women in the digital age²⁴ (2016), the

²³http://www.technopolisgroup.com/wpcontent/uploads/2015/03/1786_Benchmarking_Safer_Internet_Policies.pdf ²⁴ (2015/2007(INI))

European Parliament highlights that education and training are key to empowering women in the digital age, while stressing that ICT can be used to abuse and threaten women through acts such as cyberbullying or stalking, hate speech or other forms of violence and risks. The European Parliament identified the need for greater efforts from the Member States to prosecute any homophobic or transphobic crimes that take place online, as well as to apply properly the EU legislation in force in this regard²⁵. The EU and Member States should therefore undertake measures to promote education on safe and respectful use of the internet and the risks of online gender-based violence for both boys and girls and to involve men and boys in the fight against violence against women and girls. It called on the Commission to present a European Gender Violence Strategy that includes a legislative instrument and tackles new forms of violence against women and girls, such as cyberbullying, the use of degrading images online, the distribution on social media of private photos and videos without the consent of the people involved²⁶.

3. What do we know about youth's access to and use of digital technologies?

This section presents an overview of quantitative data and findings from literature on how young people access digital technologies and how they are used for social and political participation. It also includes an analysis of available data on the risks experienced by young women and men when using digital media. The insights on data gaps are presented in Annex III: Analysis of current data gaps.

3.1. How and why do youth use digital technologies?

Understanding access to digital technologies, or lack thereof, is important, as research has shown that gradations in frequency of internet use (from non and low users through to weekly and daily users) are found to map onto a progression in the take-up of online opportunities among young people (from basic through moderate to broad and then all-round users). Differences in internet use matter, as they contribute to inclusion and exclusion (Livingstone & Helsper, 2007; Ólafsson, Livingstone, & Haddon, 2014). On the one hand, digital inclusion or exclusion often mirror some of the structural inequalities observed in other areas of society (for example, people with lower education having lower access to information and participation). On the other hand, social inequalities intersect with divides in digital access and result in disparities in online activities, with children who benefit from a greater autonomy of use and a longer online experience also reaching the top of the ladder of opportunities (Mascheroni & Ólafsson, 2016).

Demographic, use and expertise variables are all shown to play a role in accounting for variations in the breadth and depth of internet use. The literature supports the idea that beyond access, a set of

²⁵ Report on gender equality and empowering women in the digital age (2015/2007(INI)) Committee on Women's Rights and Gender Equality. Available at: http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2016-0048+0+DOC+XML+V0//EN

²⁶ Several Member States have recently adopted legislation targeting forms of cyber violence against women. For more information on law enforcement responses, good examples and further steps needed see (EIGE, 2017a)

attitudes and wider know how affects digital skills and therefore digital participation (Correa, 2016; Livingstone & Helsper, 2007). Overall, access to and use of digital technlogies goes hand in hand with the level of individual's digital skills and motivation to use and enhance them.

Gender is an important factor to both levels and types of digital skills

Digital societies require digital competences in order to ensure full participation. As increasingly recognised, digital participation in society depends not so much on access per se, but rather on digital competences and opportunities that come with it (Ferrari, 2017). A debate on which digital competencies are essential to this participation, nonetheless, is not settled, partially due to the fast pace of digitalisation and partially – due to the diversity of concepts or lack of comparable data.

Across various concepts used to define digital skills (Meri-Tuulia, Antero, & Suvi-Sadetta, 2017), evidence in this sub-section is anchored on the performance-based digital skills indicators. According to EUROSTAT²⁷, an indicator based on selected activities in using digital technologies can be considered as a proxy of the digital competencies and skills of individuals (see more in Annex II, Proposed list of BPfA indicators). The latter digital skills indicator measures performance in four specific areas: 1) information skills (e.g. retrieve, analyse, judge information), 2) communication skills (e.g. share resources, link and collaborate with others through digital tools, cross-cultural awareness), 3) problem solving skills (e.g. make informed decisions on the most appropriate digital tools, solve conceptual and technical problems, update own and other's competences) and 4) software skills for content manipulation (e.g. create and edit new content, produce creative expressions, media outputs and programming, deal with licences).





Source: Eurostat, ISOC [isoc_sk_dskl_i]

Note: Digital skills are measured in relation to performed activities across 4 domains of digital competencies: information, communication, problem solving and software skills. Individuals with "above basic" level of skills display such levels of skills in all 4 domains; individuals with a "basic" level of skills have at least one "basic" levels of skills across 4 domains; individuals with "low" level of skills miss some type of basic skills, i.e. have from one to three "no skills" across 4 domains; individuals with "no skills" did not perform any activities across all 4 domains, despite declaring having used internet at least once during the last 3 months; digital skills could not be assessed for those individuals who have not used internet in

²⁷ http://ec.europa.eu/eurostat/cache/metadata/en/tepsr_sp410_esmsip.htm

the last 3 months. For this figure, EIGE has used numerical data rounded to zero decimals by Eurostat and therefore percentages might not add up to 100%.

Young people in the EU are the most digitally skilled generation, with 56 % of young women and 58 % of young men aged 16-24 holding above basic digital skills and the rest of youth having either basic or low digital skills (Figure 1). In comparison, around one third of population aged 25-54 have above basic digital skills, whereas the others in this age group tend to have either low or basic digital skills. The levels of digital skills imply that those with above-basic digital skills can perform more than one activity in all four areas of digital activities, whereas those with, for example, low digital skills have "no skills" in one to three out of the four areas of digital activities. This shows that digital inclusiveness of our societies still has important barriers that need to be removed. A considerate part of the EU youth and even more so other age groups would benefit from up-skilling.

The level of digital skills of the EU youth as noted in 2017 shows a fast improving situation, with a somewhat faster pace observed for boys than for girls. In just a couple years, from 2015 to 2017, the share of young women aged 16-24 with above basic digital skills increased by 4 percentage points and of young men - by 7 percentage points. Similarly, the share of population in older age groups (25-54) having above basic digital skills slightly increased, though a gap in comparison to youth is still large. A note of cautiousness should also be expressed here, as the displayed EU averages mask vast country differences. For example, in Romania as few as 21 % of young men and the same percentage of young women aged 16-24 have above basic overall digital skills, in contrast to Luxembourg where as high as 82 % of young women and 80 % of young men have such level of digital skills.

Beyond the levels of digital skills, girls and boys in the EU reveal somewhat different types of digital skills, reflecting the influence of wider gender norms that play a large role in technology self-efficacy (Huffman, Whetten, & Huffman, 2013). At the EU level, the gender gap in overall digital skills mostly follows the gap in problem solving digital skills to the detriment of young women (Figure 2). Nonetheless, in the majority of the EU countries, boys reveal lower information and communication digital skills, whereas gender gaps in software skills are highly determined by country contexts often favouring either girls or boys. Altogether, this shows an importance of further analysis in how gender plays a role in the acquisition of certain digital competencies, especially given a fast pace of digitalisation and the implications of exclusion if not able to take full benefit of digital opportunities. Furthermore, the current gender biases in the composition of overall digital skills points to the importance in particular levelling *digital problem solving* skills among young women and men in order to close gender gap in overall digital skills.

Across the EU, only three countries (MT, PT, NL) reached equal share of young women and men aged 16-24 having above basic digital problem solving skills (Figure 2). Although a large gender gap in overall digital skills in Malta still remains and is due to considerably more young women than men having software skills, but fewer young women having information and communications skills.



Figure 2: Gender gaps in the above basic level of digital skills, by digital skills' type and countries (16-24, %, 2017)

Source: Eurostat, ISOC [isoc_sk_dskl_i]

Note: Percentages are calculated over all individuals. Countries are grouped on size of the gender gap in problem solving digital skills: "no gender difference" refers to a gender gap from -1 (inclusive) to 1 (inclusive) p.p.; within the group, countries are sorted in the descending order of the gender gap in overall digital skills.

Overall, the fact that, in 2017, the majority of adults in Europe have low to basic digital skills²⁸ whereas the majority of youth have above basic digital skills point to the fact that most parents, teachers and educators may have be lagging behind young people when it comes to digital skills. This has implication on access and utilisation (how, where, for what purposes, etc.) of digital skills

 $^{^{\}rm 28}$ 57 % of women aged 25-54 and 52 % of men aged 25-54 as shown in Figure 1.

among the youth. For example, it is estimated that only 20-25 % of students in Europe are taught by digitally confident and supportive teachers having high access to ICT and facing low obstacles to their use at school²⁹. From this perspective, investment in life-long learning and efforts to remove barriers to occupation training of teachers, as shown by EIGE's research (EIGE, 2017c), would support not only teachers, but also the youth. In addition, teachers should be better equipped to answer the diverse needs of the EU youth for the purpose of (ICT enabled) inclusive education. For example, different teaching approaches are needed to tackle multiple digital divides, including those due to lower digital skills, lower income to have access to diverse technologies, urban and rural divide in broadband internet access or other gender related digital gaps (e.g. Warschauer, 2007).

Digital participation is shaped by gendered perception of digital skills

Assessment of digital skills can be based not only in relation to actual performance of certain activities, but also on the basis of self-reported evaluation. Both dimensions are of equal and complementary value to understand digital gender divides. Self-evaluation of the skills in particular highlights a self-efficacy dimension – a confidence and beliefs with respect to the own capability to perform digital tasks. As noted by existing research, self-efficacy regarding the use of digital technologies is one of the most important motivational constructs explaining the use of digital technologies as well as digital literacy (Rohatgi, Scherer, & Hatlevik, 2016). Consistent under-rating or over-rating of own digital skills in comparison to objectively held digital skills can point to potential under-utilisation of such skills now and in the future. Though empirical research on the self-perception of digital skills compared to the actual skills is still sparse, existing evidence points to a positive link between ICT self-efficacy and actual digital literacy (Hatlevik, Throndsen, Loi, & Gudmundsdottir, 2018).

A similar and high share of young women and men feel skilled enough to the overall use of digital technologies in their daily lives³⁰. Nonetheless, consistently across the EU, boys express higher confidence across a range of skills in relation to the use of digital technologies. For example, 73 % of boys compared to 63 % of girls aged 15-16 feel comfortable using digital devices that they are less familiar with (Figure 9). In countries, with overall lower level of youth confidence in using digital devices (e.g. AT, FI, LV), the gender gap to the disadvantage of girls in regards this dimension is particularly large, reaching as high as 25 p.p. in Finland.

²⁹ Source: A common European response to shared goals A concept for tackling the digital skills challenges in Europe Outcome of the DSM Sub-group on digital skills, available via

http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=43900

³⁰ According to Special Eurobarometer 460, in 2017, 92 % of young women and men aged 15-24 consider to be sufficiently skilled in the use of digital technologies in their daily life.



Figure 3: Individuals who feel comfortable using digital devices that they are less familiar with, by sex and country (15-16, %, 2015)

Source: Pisa

Note: data is missing on CY, FR, MT, RO; listed country scores refer to gender gaps to the detriment of women (p.p.).

Equivalent gender gaps across all EU countries are noted on a range of other indicators (see Annex II: Proposed list of BPfA indicators for more details) linked to motivation and confidence in performing certain problem solving tasks with digital technologies (EIGE, 2018). Across all EU countries, gender gaps to the detriment of girls exist regarding own initiative in solving a problem with digital devices (83 % of boys but 69 % of girls aged 15-16 in the EU) or regarding installing software by themselves (73% of boys but 49% of girls aged 15-16 in the EU).

Emerging research (Robinson et al., 2015) highlights the necessity not only to identify gender digital gaps, but also to better explore structural reasons behind them as well as consequences for outcomes such as "building social capital, employment opportunities or educational attainment". For example, it should be taken into account that digital gender gaps occur not only through gendering of skills but also through gendered labour market processes associated with jobs involving technolgy (Robinson et al., 2015). Lower perception of girls of their own capacity in using digital technologies goes hand in hand with lower aspirations of engaging in digital jobs in the future and reflects a large influence of gender stereotypes regarding one's occupational choices.

As EIGE (2018) study shows, between 3 % (DK, PL, PT, IT, FI) to 15 % (EE) of teenage boys are interested to work as ICT professionals at the age of 30. Nonetheless, in only four (4) Member States (EE, BG, MT, RO) from 1 % to 3 % of teenage girls aspire to become ICT professionals, while in the remaining Member States, barely any girl has an interest in becoming an ICT professional. These figures certainly go beyond the observed gender gaps in digital skills, reflecting strong gender stereotypes regarding occupational choices and inter alia gender segregated engagement in and out of school activities, which is also relevant to forming digital competencies. For example, based on Eurostat data for the EU in 2011, 29 % of young men but 21 % of young women aged 16-24 acquired IT skills through self-study using books, CR-roms, etc.

Gender equality and youth: opportunities and risks of digitalisation 30

Large divides, including on the basis of gender, continue regarding the use of digital technologies

Digital and in particular computer technologies are expanding rapidly from desktop computers to laptops, tablets and smart phones. Though research increasingly reports of reducing gaps in access and ownership of digital technologies and computers per se, it also stresses that large divides persist for the most disatvantaged population groups and especially concerning computer ownership, time using computers or the internet or even age when a person starts using computer technologies (Shank & Cotten, 2014).

Furthermore, limited research evidence is available on the extent, reasons and consequences of gender gaps regarding computer technologies (Bulman & Fairlie, 2016). As an example, research indicates that girls from primary school level onwards tend to receive less support from parents, peers and teachers for learning how to use computers (Vekiri & Chronaki, 2008). This not only stresses the fact that family and socio-economic background is an important dimension to gender digital divides, but also points to the vicious circle in building one's capacity and self-efficacy in regards the use of digital technologies. On the one hand, greater experience with digital technologies is linked to greater confidence and motivation in using them. On the other hand, youth with greater digital self-efficacy would engage with computers more (Shank & Cotten, 2014).



Figure 4: Frequency of computer use in the EU-28, by sex and year (16-24, %)

Source: Eurostat, ISOC [isoc_ci_cfp_fu] Note: Percentages are calculated over all individuals.

In the EU, only 7 % of the young women and men in the EU do *not* use computers (Figure 3) and slightly more young men (79 %) than women (75 %) aged 16-24 use computers on a daily basis. Though this share of youth using computers daily increased during the last decade (2007-2017), the trend seems to be reverting in the last few years.

Furthermore, fewer girls than boys tend to actively use computers. Daily computer use declined among girls aged 16-19 since 2011 by 10 % (Figure 4). Among boys of the same age group, the decrease in computer use on daily basis is not as prominent. A similar trend, but of a much smaller magnitude is also observed among youth aged 20-24. In contrast, other generations mark a rise in daily computer use, though from much lower initial levels, in particular among elderly women.





Source: Eurostat, ISOC [isoc_ci_cfp_fu]

Note: Percentages are calculated over all individuals in the respective age group.

Although on average in the EU more young men than women use computers daily, vast country differences exist both regarding gender gaps and regarding the frequency of computer use. In three Member States (CY, FI, PT) young women use computers on a daily basis more often than young men. About an equal use is noted in seven Member States (PL, LV, MT, EE, UK, IT, ES) (Figure 5). The largest gender gaps favouring young men are observed in Greece, Luxembourg, France (13 p.p.), Croatia (12 p.p.), as well as Germany (8 p.p.). Despite the country-specific gender gaps, daily computer use across the EU ranges from 63 % (FR) to 93 % (CZ, PL) among young women and from 65 % (ES) to 95 % (CZ) among young men.





Source: Eurostat, ISOC [isoc_ci_cfp_fu]

Note: Percentages are calculated over all individuals. Countries are grouped on size of the gender gap: "somewhat more" refers to a gender gap from 1 (inclusive) to 5 (exclusive) p.p., "no gender difference" refers to a gender gap from -1 (exclusive) to 1 (exclusive) p.p., "considerably more" refers to a gender gap as of 5 (inclusive) p.p.; within the group, countries are sorted in the descending order. Countries with similar figures for women and men could be displayed as one point (UK, ES).

Despite equal share of female and male youth being present online, gender shapes access modes and activities online

The daily internet use is higher than the daily use of computers. On average in the EU, about 92 % of young women and 93 % of young men use internet daily (Figure 6). Computers are no longer the only medium of going online. Overall, using the internet is the most common digital activity for all young people, whereas computer use is linked to more differential digital engagement among young women and men.

In the majority of Member States more than 90 % of young women and men use internet daily. In only a few Member States, less than 90 % of young women (BG, RO) and less than 90 % of young men (IT, BG, RO, ES, FR) use internet daily. In five Member States a higher share of young women than men use internet daily (MT, PT, SE, LV, LT). This group of countries is also marked by a very high overall youth engagement online.



Figure 7: Daily internet use, by sex and country (16-24, %, 2017)

Source: Eurostat, ISOC [isoc_ci_ifp_fu]

Note: Percentages are calculated over all individuals. Countries are grouped on size of the gender gap: "somewhat more" refers to a gender gap from 1 (exclusive) to 5 (exclusive) p.p., "no gender difference" refers to a gender gap from -1 (inclusive) to 1 (inclusive) p.p., "considerably more" refers to a gender gap as of 5 (inclusive) p.p.; within the group, countries are sorted in the descending order. Countries with similar figures for women and men could be displayed as one point (FI, EE, NL, PL).

Overall, the very high shares of the EU youth -92 % of young women and 93 % of young men - using internet daily reflect a substantial increase since 2011, when 81 % of the EU youth - both young women and men - used internet daily. It is worth noting, that gender gaps to the detriment of women are still visible among the older generations.



Figure 8: Daily internet use in the EU-28, by sex, age group and year (%, 2011, 2017)

To access the internet, EU youth uses various devices, though boys tend to access internet via more diverse instruments. The majority of youth predominantly uses mobile phones, with no big gender gaps noted herein (Figure 8). Some gender gaps are visible for other devices used to access internet. On average in the EU, more young women than young men use laptops, netbooks and tablet computers. The latter pattern is observed in almost all Member States, except for in Lithuania, the UK and Hungary, where slightly more young men (by 2-3 p.p.s) use internet on a laptop or netbook, or the Czech Republic and Croatia, where more young men (5 p.p.) than young women use tablet computers. Across the EU, young men consistently lead (by 8 p.p.) in the use of desktop computers. In some countries, this gender gap exceeds 20 p.p. (LU, EE, DK, SE) and only in Cyprus about the same share of young women (22 %) and young men (21 %) use desktop computers. A higher share of young men use other mobile devices to access the internet. Altogether this suggests that young women and men choose different technologies to access the internet, which is not only a potential indication of gender differences in online activities, but also of gender differences in digital skills and motivation.



Figure 9: Devices used to access the internet in the EU-28, by sex (16-24, %, 2016)

Source: Eurostat, ISOC [isoc_ci_ifp_fu]

Source: Eurostat, ISOC (isoc_ci_im_i, and isoc_ci_dev_i). Note: Percentages are calculated over all individuals.

Despite the aformentioned gender gaps in certain areas of digital competencies, many common internet activities are performed to the same extent by both young women and men in the EU. For example (Figure 10), gender gaps are non-existent when it comes to daily activities, such as participating in social or professional networks (89 % of young women and 87 % of young men), sending and receiving e-mails (88 % of young women and 87 % of young men), watching internet streamed TV or videos (83 % for young women and men), listening to music (80 % for women and men), finding information about goods and services (73 % of young women and 75 % of young men), reading online news sites, newspapers or magazines (68 % of young women and 69 % of young men) or internet banking (47 % of young women and 49 % of young men). Gendered patterns are present in somewhat less frequent activities online. For example, in the EU considerably more (67 %) young men than women (45 %) are active in playing/downloading games or downloading software (48 % and 30 % respectively), which may also partially be in line with a noted higher desktop computer use among boys (Figure 8). More (59 %) young women than young men (44 %), seek health information or make an appoinment with a practitioner (13 % and 8 % respectively).

Though information regarding young women's and young men's activities online is overall not too well researched, especially across the EU, certain gender gaps (e.g. seeking health information online) have been explored in more detail. For example, it is noted (Wartella, Rideout, Montague, Beaudoin-Ryan, & Lauricella, 2016) that teen girls in the US are more likely than boys to browse certain topcis online: depression (22% of girls, but 10% of boys), diet/nutrition (44 % of girls versus 29 % of boys) or stress/anxiety (25 % of girls but 14 % of boys). In addition, the latter study noted that girls tended to use social networking for health more than boys.




Source: Eurostat, ISOC (isoc_ci_ac_i)

Note: Percentages are calculated over all individuals in the age group 16-24 years old; * refers to 2016 data.

Gender gaps are of different magnitute for different socio-economic groups. For example, higher socio-economic background of families is associated with smaller gender gaps in online activities. Though overall more young men than young women in the EU use internet for downloading software, the gender gap (13 p.p.) among those with higher family income (1st quartile) is lower in comparison to gender gap (19 p.p.) among those with lower family income (4th quartile)³¹.

In sum, evidence in this sub-section demonstrates that the digital divide, just as many other socioeconomic inequalities, is not a static condition, but a matter of a continuous shifting. It also confirms that the division of society into simple digital "haves and have nots", especially among youth, is almost a thing of the past (Jan Van Dijk & van Deursen, 2010). Digital gender gaps persist in the EU, but they are more of a relative nature (i.e. Garrido-Lora, Duran, & Ramos, 2016; JA Van Dijk, 2017). For example, evidence in this section echoes emerging literature observations that while access to digital technologies per se is viewed as becoming less of an issue for the European youth (Van Deursen & Van Dijk, 2014; JA Van Dijk, 2017), gender inequalities regarding motivation of access, digital skills, confidence in using digital technlogies or usage types are still far and wide present, with various social and economic impacts, including of social and political participation.

3.2. What are the forms of social and political participation youth show online?

³¹ Source: own calculations on the basis of 2015 [isoc_ci_ac_i] micro-data

Digital technologies constitute a powerful space for socialising, communicating and interacting with peers. This is of particular importance to adolescents whose interests, relationships, aptitudes and tastes are being formed. Internet mediated environments enable forms of social interaction and creative production that have an overall positive impact on young people's public orientation, while the interactive, collaborative and user-generated content capacities of social media technologies themselves offer the prospect of facilitating new modes of communication that supports contemporary youth cultures.

Digital spaces are gendered spaces of intense socialisation

Some of the activities performed by young people online relate specifically to socialisation, namely participating in social networks (creating user profile, posting messages or other contributions to Facebook, twitter or other social networks), playing or downloading games, reading online news or uploading self-created content on any website to be shared with others. In addition to already high engagement by youth, these activities are on the rise. For example, participation in social networks has increased by 12 p.p. for young men aged 16-24 and by 7 p.p. for young women aged 16-24 during the period of 2011 to 2017, reaching almost 90 % engagement of the youth. This high and increasing online social participation by young people is often linked by existing research to their age-specific need to compensate for the lack of spaces for privacy intrinsically linked to their dependency³². When moving mainly between school and home, spaces where their communication is monitored by educators or parents, peer-communication through digital devices fills youth's needs for their own spaces (Baer, 2016; Ito, Okabe, & Matsuda, 2005; Regan, 2008).

³² Though levels of engagement in these social online activities decrease significantly with age for young women and men, pointing to age-specific form of online social behaviour, overall online social participation is on the rise for the entire population. For example, participation on social networks has risen from 38 % of both men and women aged 16-74 in 2011 to 54 % of men and 55 % of women aged 16-74 in 2017 [Source: Eurostat].





Note: Percentages are calculated over all individuals in the respective age groups; * refers to 2016 data.

Overall, young women and men have a very high social engagement online level, but gender specific patterns appear for certain activities. Both young women and men have a very high and gender equal participation on social networks, in comparison to other generations and including even young adults aged 25-29 (Figure 11). Somewhat more (60 %) young women than men (56 %), engage in uploading self-created content.

Furthermore, differently to other online social participation forms, reading online information, such as news sites or newspapers, attracts those aged 16-24 less than those aged 25-29. In the latter age group, men have a lead, whereas gender equal engagement is noted for those aged 16-24. Last but not least, gender differences appear most strikingly in relation to playing or downloading games, with 65 % of young men having engaged in this activity over the past 3 months compared to 44 % of young women in the same age group.

The aforementioned gender gaps, such as in playing or downloading games, disclose only a fraction of the real magnitude, as frequency of the activity is not taken into account. PISA estimates, for example, point to a much larger gap: almost half of young men (49 %) play collaborative online games every day or almost every day, whereas this percentage is only 7% for young women³³. Similarly, data on frequency of engaging into online networks point to a much higher online social participation by girls than by boys. As displayed in Figure 12, 82 % of teenage girls (15-16) in the EU-28 use online networks daily or almost daily, compared to 72% to boys. Furthermore, this gender pattern is present in all EU countries, with the widest gap noted in the Netherlands (19 p.p.) and Latvia (17 p.p.) and the smallest gaps – in Germany (4 p.p.), Finland (4 p.p.) and Portugal (4 p.p.).

Source: Eurostat, ISOC [isoc ci ac i]

³³ Source: OECD, PISA. ICT familiarity



Figure 12: Individuals who participate in online networks every day or almost every day, by sex and EU country, 15-16, 2015, (%)

Source: PISA. ICT familiarity

Note: Data is missing for CY, FR, MT, RO. The figure refers to activities performed outside of school.

Despite higher general participation of young women in social networks, more young men (26 %) than young women (18 %)³⁴ post comments to online articles or through online social networks or blogs. In general, more young men (55 %) than young women (46 %) follow debates on social media - for example by reading articles on the internet or through online social networks or blogs. This gender gap is tripled when socio-economic background is considered in addition to gender. Among the EU youth that identify as belonging to the upper middle or higher class, 42 % of young women indicate following debates on social media, while almost three-quarters of young men (73 %) do.

In addition, country differences are large not only in terms of overall following of debates on social media (less than 20 % of youth in Romania and about 80 % in Finland), but also regarding the extent and direction of gender differences (Figure 13). The most outstanding gap is observed in Germany, where more than two-thirds of young men follow debates (77 %), but less than half of young women do it (44 %). Similarly, the gaps in favour of young men are around 20 p.p. in the Czech Republic, France and Italy. Still, in about a third of the Member States the opposite gender gaps and about equal gender participation emerge. For example, there are significantly more young women than young men who follow debates on social media in Slovenia (20 p.p. gap). In Austria, a high overall following of social media debates is noted among both young women and men.

³⁴ Special Eurobarometer 452, 2016



Figure 13: Individuals who follow debates on social media by reading articles or through online social networks or blogs, by sex and EU country, 15-24, 2016, (%)

Source: Special Eurobarometer 452

Note: Countries are grouped on size of the gender gap: "somewhat more" refers to a gender gap from 1 (inclusive) to 5 (exclusive) p.p., "no gender difference" refers to a gender gap from -1 (exclusive) to 1 (exclusive) p.p., "considerably more" refers to a gender gap as of 5 (inclusive) p.p.; within the group, countries are sorted in the descending order. CY, LU, MT, SE have been excluded due to unreliable data

Though overall information is lacking to better understand the nature of the content posted by young women and men, existing research suggests that adult women are more likely to go online for social interaction and relationship maintenance (Bode, 2017; Junco, 2013) or for other social and expressive purposes (Bakker & de Vreese, 2011) and perform activities that connect to others such as posting, tagging and viewing photos, commenting on content, posting status updates, sending private messages and friend requests (Junco, 2013). Additionally, other authors have highlighted that while women's private communication online did not differ from men's, women's public communication online (typically, comments or replies visible to everyone), focused around emotional support and positive reinforcement of others, significantly more than men's (Joiner et al., 2014).

Additional research on girls' complex negotiations between the social status rewards of online selfexposure and the gendered risk of harsh judgment that seems to go along with being "too" public can help shed light on the lower engagement of young women in online debates or reading of news (Bailey & Steeves, 2015). This research highlights how girls are pressed to adhere to high beauty standards, to engage in romantic relationships with boys and to have an intense social life but at the same time they also are judged negatively if bringing those aspects forward on social media (Bailey & Steeves, 2015). It highlights the significant amount of time and effort dedicated to maintain an online presence which would display "appropriate femininity" as socially expected (Bailey & Steeves, 2015).

Those elements highlight how women and girls tailor their activities and behaviour online to

conform to gender norms. Existence of those tensions shed light on possible reasons behind lower girls' engagement in debates on social media as a preventive strategy against a higher risk of harsh criticism.

Political activities online are more fraught for girls and young women

Social networks have not only become the central facilitators for daily communication with peers, family, and acquaintances, but have also fostered new opportunities for communities to engage in dynamic expression of values and beliefs, sharing of ideas and opinions, and public deliberation (Milhalidis, 2014). The use of social media platforms including blogs, Facebook, and Twitter can thereby lead to increased online (Brandtzaeg, 2015) and offline civic engagement and behaviour (Paek et al. 2013).





Source: European Youth in 2016 for the first variable, Standard Eurobarometer 86 for the last three.

In the EU, somehwat fewer girls than boys see social media's benefits to political participation. In 2016, Eurobarometer "European Youth in 2016" and the Standard Eurobarometer survey asked young people how they felt about the benefits of online social sectors for political affairs. In regard to the statement that "online social networks represent progress for democracy, because they allow everyone to take part in public debate", 51 % of young men and 47 % of young women aged 16-24 agreed (Figure 14). This is among the lower scores, as across a series of questions about the benefits of social media for political life, young women and young men showed overall high level of support for the idea that social media are a modern way to stay informed of political news, that they can raise people's interest in political affairs and that are ways to express one's views in the public debate. Simultaneously, the majority of young women (61 %) and young men (56 %) were of the opinion that information on political affairs from online social networks cannot be trusted. The fact

that young people tend to agree that online social networks carry important benefits to the public political debate while still considering that political information on social media should not be trusted highlight a certain level of awareness on the risks of disinformation as well as an ambivalence vis a vis social media.



Figure 15: Activities related to online political participation among young people in the EU-28 by age and sex, 2017

Fewer young women post opinions on civic or political issues or take part in online voting (Figure 15). The percentage of youth who in the preceding 3 months had posted opinions on civic or political issues online, or participated in online consultations or voting (for example to decide or express their opinion on urban planning, or signing a petition) is low for both young women and young men alike. Nonetheless, important differences exist across countries (see more in Annex II: Proposed list of BPfA indicators). For example, at least 20 % of young women and young men posted opinions on civic or political issues online in the Netherlands, Denmark, Italy and Spain. In the Netherlands, there is a 10-points gender gap (23 % of young women and 33 % of young men performed this activity). The gaps in favour of young men are of at least 10 percentage points also in Luxembourg, Croatia, and Greece. Similar country scores and gender gaps are also observed regarding participating in online consultations or voting. The gap in favour of young men is of at least 10 percentage points in favour of young men in the Netherlands or Croatia. Opposite gender gaps, exist, such as in the UK, where more young women than young men take part in online consultations or voting (14 % versus 5 % respectively).

Young women's lower online engagement in civic and political debates mirrors findings from analysis of 'traditional' political participation in 18 western democracies showing that women are less likely than men to share their political opinions publicly (Coffé & Bolzendahl, 2010). However, the gender

Source: Eurostat, ISOC [isoc_ci_ac_i], related to activities in the past three months. Note: Percentages are calculated over all individuals.

aspects of online politics require further research. Topics such as unwillingness to post likely-tooffend political content or concerns about being victim of online harassment, cyber stalking, or sexist hate speech need further investigation. Other research carried out with politically-involved young people showed that they were reluctant to engage in political debate on social media out of concern for self-presentation (Storsul, 2014) and to a lesser extent, out of fear of receiving negative feedback. The fact that social media erases all social context from acquaintances has been noted to lead to the tendency "to create a lowest-common denominator effect, as individuals only post things they believe their broadest group of acquaintances will find non-offensive" (Marwick, 2010). Given that girls and young women are socialised from an early age to carefully monitor self-presentation both off and online, it could explain girls' lower propensity to take part in civic and political debates, in line with lower overall participation in online debates too.

Furthermore, the current gender gap in political participation does not provide the right support to young women's aspirations of political participation. For example, in 2017, only 17 % of political party leaders across the EU were women (EIGE, 2017b). Altogether, this shows that actions aimed at lessening the impact of gender stereotypes in digital spaces as well as at overall gender sensitive political culture would be promising venues to address youth gender gaps in civic and political participation.

3.3. How do youth perceive and experience online risks?

While new digital technologies have undoubtedly increased opportunities to participate in social and political life, the use of media can be linked to various risks, ranging from data protection issues and exposure to harmful content to cyberbullying and gender-based harassment (Livingstone & Haddon, 2009). It is increasingly understood that opportunities and risks of digitalisation are entangled, although a risk does not necessarily result in harm (Livingstone et al., 2011). It should be considered, though, how online experiences may jeopardise social and political participation, especially given that the literature points to the shrinking divide between the reality of offline and online spaces (EIGE, 2017a). In other words, what occurs online represents as much of a reality for youth as does what occurs offline. In this era of digitalisation, these spaces should no longer be understood as separate. As will be explored in this section, certain online experiences, both positive and negative, may subsequently affect how girls and boys interact or engage online.

Young women are more likely to be victims of online harassment

More young women (9%) than young men (6%) report being a victim of online harassment (including but not limited to cyberbullying, blackmailing, and other offenses) (Figure 16). Additionally, for the first time in 2013/2014, the Health Behaviour In School-Aged Children (HBSC) survey asked school children aged 11, 13 and 15, if they had experienced cyberbullying, either through messages or pictures (Inchley & Currie, 2013). The data shows that 12% of 15 year old girls

had been cyberbullied by messages at least once compared to 7 % of boys³⁵. When it comes to pictures, prevalences are more similar with 9 % of girls and 7 % of boys³⁶. This indicator is among the ones proposed by EIGE to add to the monitoring of the Beijing Platform for Action in Annex II: Proposed list of BPfA indicators.

Young men are more exposed than women to encountering material promoting racial hatred or religious extremism (20% and 25% respectively) (Figure 16). Existing literature argues that cyberbullying is increasingly ubiquitous to the point of becoming routine for youth (Bryce & Fraser, 2013). It is clear, though, that the internet is far from being a friendly environment, especially for girls and women (Council of Europe, 2016). For example, those with feminine-appearing usernames have been found to be more likely to receive malicious private messages than those with more masculine or neutral-sounding usernames (Meyer & Cukier, 2006). Online abuses toward girls and women are now encompassed within the definition of gender-based violence and such abuses are not seen as inherently different from offline abuses but rather an iteration or extension of them (Lewis, Rowe, & Wiper, 2016).



Figure 16: Issues experienced online in the EU-28 by sex, 15-24

Sources: Special Eurobarometer 404; Special Eurobarometer 452

Note: Percentages are calculated over the individuals who have witnessed or experienced hate speech/abuse on social media for the third variable.

Data presented here shows that the EU youth not only perceives but also encounters online risks and abuses, which subsequently has profound effects on online behaviour, including that of political and social participation. The aforementioned gender gap of victims of online harassment to the detriment of young women is noted in the majority of Member States (Figure 17). In only four Member States – Latvia, Lithuania, the Netherlands and Poland - there is no gender difference

³⁵ Young people were asked whether they had experienced anyone sending mean instant messages, wall-postings, emails and text messages. Data for the E-27 (data for Cyprus and Northern Ireland is not available). Source: EIGE's calculations from HSBC 2013/2014. Available at http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

³⁶ Young people were asked whether they had experienced anyone posting unflattering or inappropriate pictures online without permission. Data for the E-27 (data for Cyprus and Northern Ireland is not available). Source: EIGE's calculations from HSBC 2013/2014. Available at http://www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

reported in being a victim of online harassment. Also, in four Member States – Malta, Austria, Slovenia and Sweden – young men report having been a victim of harassment somewhat or considerably more than young women. Data on online harassment, just like other data on gender-based violence, still needs to be interpreted with caution. Prevalence rates obtained from survey-based data, which capture the share of individuals who decide to disclose their experience of victimisation, are influenced by factors such as the level of awareness of the phenomenon of violence in a society or perceptions of violence as being a private matter (EIGE, 2017a). For example, the notably high reported shares of online harassment for both female and male youth in Sweden, which is consistent with levels of other forms of violence against women in the country (either cyber harassment or sexual harassment³⁷), warrants more research.

Figure 17: Individuals who have been a victim of any kind of online harassment by sex and EU country, 15-24, 2013



Source: Special Eurobarometer 404

Note: Countries are grouped by size of the gender gap: "somewhat more" refers to a gender gap from 1 (inclusive) to 5 (exclusive) p.p., "no gender difference" refers to a gender gap from -1 (exclusive) to 1 (exclusive) p.p., "considerably more" refers to a gender gap as of 5 (inclusive) p.p.; within the group, countries are sorted in the descending order.

Online abuse has a disproportionate effect on young women's online engagement

The majority of young women and men have noted the presence of and have been exposed to online abuse, although there is a slight gender gap. For example, when asked about witnessing or experiencing cases where abuse, hate speech or threats were directed at journalists, bloggers, and people active on social media, 57 % of young women and 62 % of young men aged 16-19 responded affirmatively. This gender gap is smaller among young women and men aged 20-24 (61 % and 62 %

³⁷ The EU-wide survey on violence against women carried out by the Fundamental Rights Agency in 2012 found that 18 % of women in Sweden had experienced cyber harassment since the age of 15, compared to 11 % in the EU-28. For sexual harassment since the age of 15, prevalence rates were of 81 % in Sweden, compared to 55 % for the EU-28 (FRA, 2014). No data are available for men.

respectively responded in the affirmative³⁸).

The impact of witnessing online harassment is disproportionately felt by young women. After witnessing or experiencing online hate speech/abuse, 51 % of young women and 42 % of young men in the EU hesitate to engage in social media debates due to fear of experiencing further abuse, hate speech or threats. This gender gap is noted to be somewhat smaller for young women and young men aged 16-19 and larger for young women and men aged 20-24 (6 p.p. and 11 p.p., respectively). There is no gender gap observed between young women and young men with upper-middle-class and higher socioeconomic backgrounds, pointing to online cultures being harsher among more socio-economically vulnerably youth. Furthermore, young women and young men who live in rural areas or villages are more likely to hesitate to participate in social media debates in comparison to those living in small, medium and large towns.

Gender gaps in hesitation to engage in social media debates to the detriment of young women are particularly large (20 p.p. or more) in at least six Member States (SK, PL, UK, FI, DK, SI) and somewhat smaller in a number of other countries, reflecting the EU average of 9 percentage points.

Overall, this gap illustrates that relatively similar online experiences in terms of encountering racial hatred or religious extremism and witnessing online abuse could have different outcomes for young women and young men when it comes to online engagement. Such results should not be underestimated, and organisations are increasingly concerned with how gender-based cyber violence could negatively affect people's ability and right to engage in free speech (UN Women, 2015).



Figure 18: Individuals who hesitate to engage in social media debates due to having heard, read, seen or experienced cases of abuse, hate speech or threats by sex and EU country, 15-24, 2016

Note: Countries are grouped on size of the gender gap: "somewhat more" refers to a gender gap from 1 (inclusive) to 5

³⁸ The Special Eurobarometer 452

(exclusive) p.p., "no gender difference" refers to a gender gap from -1 (exclusive) to 1 (exclusive) p.p., "considerably more" refers to a gender gap as of 5 (inclusive) p.p.; within the group, countries are sorted in the descending order. Note: BG, CY, EE, ES, HU, IT, LU, MT, NL, PT, RO, SE have been removed due to unreliable data

In order to get a sense of perceptions of online risks, it is crucial to consider how understandings of cyber violence, particularly gender-based violence, may be evolving across different generations. 22 % of young women and 21 % of young men aged 20-24 mention "harassment and stalking using new technologies" when asked for what comes to their mind when they hear the phrase "violence against women." Among the younger age group 16-19, more young women and young men mention harassment and stalking using new technologies (26 % and 23 %, respectively) (Special Eurobarometer 428). A similar trend exists for individuals who think violence against women is more likely to occur online compared to at home, in the workplace, in schools and universities, in public spaces or on public transport: while 24 % of young women and 27 % of young men aged 20-24 responded affirmatively to the above, 33 % of young women and 28 % of young men aged 16-19 responded affirmatively (Special Eurobarometer 449). In terms of intersecting factors, the perception that violence against women is more likely to occur online compared to other places increases with socioeconomic status. It may be interesting to investigate whether different generations have varied perceptions on violence against women and whether younger generations in particular prove to have more progressive opinions on the subject.

Finally, while the risks of digitalisation – including the gendered aspects of it - must be taken seriously, it is important that discussion of such risks not be confined to restrictive and prohibitive conclusions, as has historically been the case. Mitigation of risks should best be tackled through gender sensitive digital media literacy, policy and legal frameworks.

4. Young peoples' personal take on digital technologies

To analyse young people's experiences of digital technologies and explore the potential of digitalisation for gender equality, the report draws on feminist citizenship studies. Such research is broadening the notion of citizenship to include not only the legal, political and social aspects, but also the cultural, sexual and body-related dimensions of citizenship (Roseneil et al., 2012). Born from the need to capture how women exercise their citizenship, this research seeks to capture notions of identity, belonging and participation (Abraham, 2010; Lister, 2007). Concerned with exploring 'lived citizenship', the focus is on what citizenship means in the lives of young women and men and how people's lives as citizens are affected by their social and material circumstances, as well as by widespread usage of digital technologies (Hall & Williamson, 1999; Roseneil et al., 2012). The concept of 'lived citizenship' thus offers an innovative way to explore relationships between the state and individuals (the vertical aspects of citizenship), as well as between individuals (the horizontal aspects of citizenship), including through feelings of inclusion or exclusion (Roseneil et al., 2012; Siim, 2000; Yuval-Davis, 2008)

Through analysing opportunities and risks of digitalisation, the report relates to both the normative ideal of citizenship and also to the opposite of such: the absence of rights, non-participation, the lack of capacity to exercise responsibility and agency, as well as experiences of outsider-status and non-

belonging (Roseneil et al., 2012). Dimensions of citizenship that will be touched upon in the subsequent sections include intimate, bodily, multicultural and political citizenship. Given the profound ways in which digitalisation is affecting not only representative democratic structures but also social relationships and gender relations, employing these dimensions of citizenship provides a useful lens of analysis for young people's online experiences.

4.1. Self-presentation and the importance of the body

Recent research has underlined the importance of analysing not only the aspects of citizenship related to political representation (see 4.3) but also other aspects of well-being, including issues linked to the body (Oleksy, Hearn, & Golańska, 2011). Authors acknowledge that the body plays an important role in determining who will benefit from citizen rights and who will not. The social construction of women as ineligible in society because of their very identification with the body, nature and sexuality has been demonstrated in the literature (Lister, 2003).

Bodies of women and men, girls and boys, are perceived differently in society and these differences have constituted grounds for the representation of women and girls as "others" and excluding them from full citizenship (Halsaa, Roseneil, & Sümer, 2011). This section discusses young people's bodily experiences and the differentiated treatment received by human bodies online.

*Tensions around self –presentation: "Surely, we don't post photos that can, for example, 'destroy us'*³⁹.

Young people were asked if they want to appear and be perceived in a certain way or if they compare themselves with peers when posting on social media. The respondents talked about physical appearance as well as desirable personality traits. Some young people reproduced stereotypes uncritically, either by reporting extreme preoccupation with body image and presenting only the best version of themselves (girls in particular but at times also boys) or mocking girls for being preoccupied, whereas others recognised the role of social media in reinforcing such unhealthy beauty standards.

While some girls declared they were not interested in presenting a certain image, other girls stated that they were careful with pictures they selected, consciously curating their image: "On social media we can share only what we want to share and we want people to see, we hide a lot of things that others can understand only when meeting us. For example I post a photo and who doesn't know me can think exactly what I'd like him/her to think: 'What a good girl' or other things, but who really knows me... knows the work behind this photo and knows that I want to appear in a certain way... We always give the best vision of ourselves...we don't post photos that can, for example, 'destroy us''' (girl, IT, 17). The image of the so-called 'good girl' was also mentioned by girls in Spain, France and Romania in connection to fear of negative comments. It should not be assumed though that such curation precludes youth from feeling like themselves: "I don't post any pics that do not, more

³⁹ Girl, IT, 17.

or less, correspond to my lifestyle, I'd say. And I think, that's rather authentic" (girl, AT, 16).

Encompassed within the topic of performativity is comparison and self-comparison with peers or celebrities. While some participants admitted that they compare themselves, others choose to not do so: "I used to compare myself, then I realised that this is bad for me. One of my girlfriends always compares herself, and I see how bad it is for her, because she has very low self-esteem. I consciously don't compare myself to anybody" (girl, HU, 16). "Often also, beauty ideals are spread, because, a lot of stars are very thin, and they correspond to the plastic beauty ideal. And especially, for a woman, or as a young girl, you are concerned, because also women are really, strongly influenced by, beauty ideals." (girl, AT, 17). One boy claimed he and other boys do not modify their pictures but implied that many others (ostensibly girls) do: "So we don't edit pictures to appear more beautiful than we are... excuse me, 'I', because I cannot talk for other people... no. Just what's real" (boy, RO, 18). Some boys mocked peers who allegedly spend hours choosing the right picture (again, referring mostly to girls): "There are also people spending much times deciding: no, this photo, no ...'because I don't have a good smile', 'my face is too big'... some people spend an hour to choose the photo to post" (boy, IT, 16).

Girls and boys seemed to agree to various extents that girls may care more about appearance, although there was rarely interrogation of why: *"If you call a boy 'fat', they don't care but girls are much more worried about their physical appearance. Some girls have a strong personality and don't care about that but some others don't and they are hurt by that"* (girl, ES, 16). One girl mentioned that boys also might get preoccupied with their body image, but usually at an older age than girls, and by the time they start to receive feedback they have already more protective mechanisms in place, whereas girls tend to be influenced by their peers at a younger age (girl, AT, 16). Boys seem to agree with this analysis to some extent: one participant talked also about how boys send and receive positive reinforcement and validation among themselves: *"I think, with boys, there are differences, it's rather positive for boys. If you see someone is better built, it's rather, you would say hey cool. It's rather positive, you don't belittle someone, one who has the bigger biceps will not despise the other, but perhaps give advices on how one could get better and build up" (boy, AT, 18).*

The experiences of girls and young women also illustrate how the "beauty myth" is reinforced online. The beauty myth has been described as a form of control over women's bodies and minds through the imposition of unachievable standards of "beauty" (Wolf, 2013) . As part of the beauty myth, women are asked to "work hard" on their appearance to seem young, slim, appealing, professional or attractive to men. An intrinsic aspect of this system is competitiveness among women, which is mentioned by the research participants above, indicating that such phenomenon begins at a young age. Data from the World Health Organization indicates that girls are much more likely to be dissatisfied with their bodies than boys of the same age. Almost one in two 15 year-old girls thinks she is too fat compared to about one in four boys⁴⁰. The consequences of such dissatisfaction on boys' and girls' behavior is even more striking, with 26 % of girls aged 15 engaged in weight

⁴⁰ In the EU 27, 47.2 % of 15 year old girls think they are too fat compared to 23.2 of male peers. Source: EIGE's calculations from WHO Health Behaviour of School-Aged Children, acessible:

www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

reduction behavior compared to 10 % of boys of the same age⁴¹.

Instead of promoting solidarity and friendship, the beauty myth encourages women to compare themselves, and balance low self-esteem and self-confidence with competition with other women (Wolf, 2013). Under the constant control of social media, this aspect is even more striking. It seems that virtual reality provides tools to reinforce effects of the beauty myth and add new aspects and behaviours to desired but unachievable beauty standards.

Constant work on achieving ideals of beauty, investing money and time to build a certain type of an image could constitute factors preventing women from participating in society and politics or some other leisure activities. Research has indicated a relationship between sexually-objectifying media, internalisation of beauty ideals and self-objectification (Vandenbosch & Eggermont, 2012), with self-objectification having been shown to lessen girls' and young women's propensity to engage in public affairs, including participating in a vote (Heldman & Cahill, 2007), providing an important link with section 4.3 regarding political participation.

Comparisons with peers on social media and comparisons with professional models (Carey, Donaghue, & Broderick, 2014) have been associated with body image concerns among adolescent girls, with social media playing an intermediary role (Tiggemann & Slater, 2013, 2014). As these studies are correlational, however, there remains a need for further analysing the effects of other potential factors, such as peer pressure, or the rise of a global fitness culture, which has become a (self-regulating) lifestyle for adults and young people alike. In literature, the 'effects paradigm' has focused on the role of the media, and more recently social media, in promoting such unhealthy beauty standards and norms (Fardouly, Diedrichs, Vartanian, & Halliwell, 2015; Tiggemann & Slater, 2013). Other theoretical frameworks on the topic are becoming salient, such as the social constructionist approach, which sees young people as competent agents able to assert their sexual agency in engaging with online (sexual) content (Chronaki, 2013; Tsaliki, Chronaki, & Ólafsson, 2014).

Body-shaming as a form of gendered aggression online: "there are cases when I don't post a pic, because something is wrong on this one, or my skirt is too short on it, and then I don't post it because that puts me at risk.^{#42}

Body-shaming was a problem mentioned by several participants, girls and boys alike. Girls being shamed for displaying their bodies on social media was an issue mentioned by girls in Romania: "I also know a girl who has been verbally attacked by a lot of people for something she did. She posted a picture in a bathing suit and everyone shamed her for showing her shapes, and why is she showing it to everybody and cannot keep it to herself. She was harassed a lot for something she chose to do, and she felt fine with showing to the world what she has. And I don't think it's normal." (girl, RO, 15).

Such example illustrates that there are consequences for youth, in particular girls, for not adhering to a particular type of femininity approved by society. Girls commonly mentioned that the fear of judgment, gossip and criticisms from peers had stopped them from posting pictures of themselves: *"A lot of my old friends (girls) used to scroll Facebook in my presence, saying things like look how ugly*

⁴¹ Source: EIGE's calculations from WHO Health Behaviour of School-Aged Children, acessible:

www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1 ⁴² Girl, HU, 16.

that one is, look how gross she is. According to this I know what they would think, and then there are cases when I don't post a pic, because something is wrong on this one, or my skirt is too short on it, and then I don't post it because that puts me at risk, and because what would others think." (girl, HU, 16). Youth are clever in their usage of social media networks, however, and certain practices illustrate well thought out navigations of the unique pressures of being a girl. Girls in Ireland, for example, mentioned 'Finstas' (a portmanteau of 'fake' and 'Instagram'), a private account for friends exclusively. "So then you compose whatever you want on that [private one] and usually that's people like ... being themselves. And then they have their [public] account for everyone to see where they post the perfect pictures" (girl, IE, 16).

While boys, generally speaking, considered that body-shaming was more commonly targeted at girls and that male bodies received less scrutiny and judgement online, some boys also mentioned receiving negative comments related to physical appearance, among which fat-shaming is common: "A boy who is a friend of mine was attacked because he is fat. He left school for that reason. It was on the 6th course of primary school; he was very upset and had to go to a different school. Others didn't seem to care but I and some other friends were sad for him" (boy, ES, 15). Others mentioned that the fear of negative comments has brought up insecurities about themselves: "I'm just afraid,

Experts interviews: Gender stereotypes are **reproduced online** - Most experts seemed to express concern that the harmful gender stereotypes seen in society offline are reinforced online. In this regard, experts referred to online influencers who reinforce rather than challenge stereotypes, dominant ideals of feminine bodies, and hyper-sexualisation of women through mainstream online games and pornography. Two experts noted the danger of pro-anorexia and pro-bulimia sites. Without taking away attention from the risks of digitalisation for girls when it comes to self-presentation, a few experts corroborated the fact that boys too suffer from stereotypes of masculine bodies reiterated online, although notions of masculinity may also prevent them from discussing it.

Two experts independently noted that there may be increased surveillance and control of girls by family or romantic partners via location-tracking apps. Such phenomenon further illustrates the dual nature of opportunities and risks online: while certain services (geolocation in this instance) can be used for good, they can also be used to hinder one's independence or monitor one's activities. that ... I had the same case with my current profile picture. I was wondering whether I should post it, because I wanted people to know who I am. I don't know, I just am like that, I haven't even posted pictures of myself on Instagram, ever. So, before posting that picture on Facebook I talked to three of my friends and asked whether I should post it. They approved and then I posted it" (boy, EE, 16). Boys mentioned how hard it is for boys to speak up about abuse or cyber-bullying, especially when they don't have a supportive family environment: "For a boy saying 'they make fun of me', it's embarrassing" (boy, IT, 17). The same problem was identified by a SE respondent, who called out the gender socialisation which teaches boys not to cry and not to ask for help: "But I think men have more trouble to talk about things. Even if we are abused, we don't talk about it" (boy, SE, 16).

Research comparing boys and girls in terms of body image dissatisfaction found that boys do perceive appearance-related pressure, criticism and teasing at levels that are similar or higher than girls (Ricciardelli, 2012). Links have been made between the online disinhibition effect (Suler, 2004) and people's willingness to post hateful comments, especially body and fat-shaming. In sum, specific

forms of peer bullying, such as criticism of appearance, negative comments and teasing about the body have been linked in the literature to body image dissatisfaction and other psychological and emotional problems (Ricciardelli, 2012; Wertheim & Paxton, 2012). Such research indicates that there is an entangled, complex relationship between body- and fat-shaming and self-presentation on social media online.

Conclusion

It can be helpful to frame such findings with the notion of bodily citizenship, "a way of focusing upon processes of social marginalization where violations of bodily integrity have a central role" (Pringle, 2011). Classic conceptualisations of citizenship exclude notions of the body and even within feminist research the subject of bodily citizenship is underdeveloped (Halsaa et al., 2011), but it is clear that how society views and treats bodies can affect significantly how people participate (or not) and exercise (or not) their activities, goals and desires in society. Violence and harassment against women in both public and private spheres has been identified as a threat to women's bodily integrity (Lister, 2007).

As illustrated in this section, girls and boys experience social pressures to conform to ideals of femininity and masculinity online. Evidence suggests that youth will find unique ways of curating their personal image, often dividing it into a public and private image, as seen with the example of 'Finstas,' mentioned by girls in Ireland but also a common practice elsewhere. And yet, when it comes to the body, boys and girls, disproportionately, are dissatisfied with their body image, comparing themselves to others online more than boys and engaging in dieting and weight loss activities more than boys. Evidence also suggests that when youth fall outside of norms of heteronormative femininity and masculinity, or outside of thin ideals, they are shamed or risk being shamed for it online. Considering that digitalisation creates and mixes both public and private spaces, providing a medium for the reproduction or rejection of societal standards about the body, it is essential to link rather than keep separate notions of the body and citizenship.

4.2 Intimate relationships online: between sexual agency and coercion

Intimate citizenship is a new feminist concept that links intimate life to citizenship. It is based on the feminist claim that "the personal is political" and that the line between what is public and private can not be drawn clearly (Halsaa et al., 2011). Plummer (1995), who is said to have coined the term, defines intimate citizenship as "a cluster of emerging concerns over the rights to choose what we do with our bodies, our feelings, our identities, our genders, our eroticisms and our representations" (Plummer, 1995, p. 17). This conceptualisation further extends the traditional understanding of citizenship to encompass all intimate aspects of the private sphere (Oleksy et al., 2011).

This section aims to illustrate the experiences and views of young people when intimate/private aspects of their life are (voluntarily or not) displayed online and how their identities or feelings may clash with "discourses and stories about how to live the personal life" (Plummer, 2001, p. 238).

Romance, sexting and sexual agency: "danger is not sexting, danger is the spread of these photos when we leave each other"⁴³.

Young people highlighted that a large share of peer-communication online focuses on intimate relationships and romance: "We have a group of girls and if we know that one of us meets a guy, then everybody is up there to find out what happened" (girl, HU, 16). "With my best friend we usually talk about boys... especially in a private message" (girl, HU, 17). Similarly, some suggest that they hope "to find a new boyfriend …" (girl, IT, 15). One boy stated that digital culture accommodates discussions between male friends about girls they like (boy, HU). Participants were asked to discuss sexting. Both girls and boys stated that they participate in it.

Many enthusiastic comments were made during the focus group discussions about sexting, which is often perceived as a funny and flirty practice by young people (girls, ES; boys, EE). The importance of trust was underlined⁴⁴: "*if you trust the other person, I think sexting can be fun. You don't have to take it too seriously, it can be fun*" (boy, ES, 18). Girls and boys considered sexting acceptable for couples and for those who do not live with their romantic partner, as is the case for most adolescents⁴⁵: "*I respect people who do it because they are together or in love. They are free*" (girl, FR, 16). Participants mentioned many additional positive aspects of this practice, such as its use as a way to express sexual desire in a relationship (girl, FR; boys, IT, FR), having sexual relationships without the risks of sexual acts in person, obtaining sexual pleasure easily (boy, FR, 17) and, more generally, discovering one's sexuality (girls and boys, FR).

Young people also mentioned some negative aspects of sexting and seemed aware of potential risks. Some differentiated between sexting done in a consensual manner and the non-consensual dissemination of nude photos: *"For me, if you have a chat with your girlfriend you can ask her to send you an intimate photo, if she sends it to you, good. Danger is not sexting, danger is the spread of these photos when we leave each other."* (boy, IT, 16). Certain participants were critical of boys who share nude photos of others without consent: *"... I don't find sexting stupid, but if you send pictures to a boy, that boy should have some decency, because that girl trusted him if she sends him something like that, and I don't know what's the good thing in more people finding out. Wow, you saw a girl naked! The internet is full of naked girls, you can look as much as you want" (boy, RO, 16).*

Girls and boys also underlined the importance of peer-pressure and its negative consequences. *"Sometimes, girls and boys feel some pressure from their peers to do it. It is like a bet or challenge"* (girl, FR, 15). Another boy mentioned sometimes boys send nude photos under pressure, to prove to their peers they can do it (boy, FR, 17). Some girls also mentioned that sending nude photos is a form of initiation into sexual maturity and girls feel pressured into doing it: *"It's like a secret society... to be initiated inside you have to like oh send a nude or do this or do that then you're like a woman or something"* (girl, IE, 15). One boy from Ireland articulated this double pressure, on boys to ask for nude picture, and on girls to send them: *"It's because the guys put pressure on other guys and then girls put pressure on other girls because they're like, 'Oh we're doing this, why aren't you doing it?' sort of thing"* (boy, IE, 17). Stereotypical gender norms are also the culprit for how boys relate to girls sending nudes: *"Like saying stuff like 'man up' andcreating... an image of being*

⁴³ Boy, IT, 16.

⁴⁴ AT, FR girls and boys, as well as IE, SE boys mentioned this point.

⁴⁵ According to ES, RO, EE, FR boys and HU, SE girls.

really hardy and being really tough... and... [what] their reaction should be when they get nudes, like that's all really harmful and damaging but people don't realise it" (girl, IE, 17).

Someone being coerced into sending nude photos was recognised as a problem by many focus group participants: "You kind of build a relationship with that person without even seeing him. It comes to a point when he may invite you to do sexting and if you say no, this person may say, ok, I am no longer speaking to you. In that case, if you don't want to lose your relationship with this person, you may accept, you feel pressure to accept" (girl, ES, 17). Adolescent girls being blackmailed by their boyfriends to send nude pictures under the threat of breaking up was mentioned as well. Both boys and girls explicitly mentioned threats with physical violence: "Yes, I know one... He said, 'I know where you live and I also know you have a younger sister and I know she goes out of school at 5 o'clock... If you don't do this, I will attack her.' My sister will not be attacked because she goes with her mother but you still have the fear and wonder how he can know that. In many cases you cannot report [this]" (girl, ES, 17). "Yes, a lot, a lot of girls. Girls that are threatened, 'Look, send the picture, if not... I will catch you on the street'. And the girl is like 'I will give you to the police," then [the response] "if you give me to the police, I will still catch you on the street'. And girls, not necessarily only girls, it can be a boy too, but girls are more affected by this, in most cases girls feel fear, they feel pressured, and they are too scared and don't know what to do...and they end up like this" (boy, RO, 18).

In the literature, sexting has been compared to cyberbullying due to the perceived harmful nature associated with these practices (Diliberto & Mattey, 2009). Authors explained that it is not always possible to differentiate sexting and cyberbullying, depending on the situation (Dake, Price, Maziarz, & Ward, 2012). From their perspective, the two practices become similar as soon as the recipient decides to send the messages to someone else without the consent of the sender. However, scholars also acknowledged that sexting might happen in very different scenarios, as "sexts" are not only sent in a context of flirtation or sexual relationship. On the contrary, research has shown that sexting also occurs between friends for "fun" or simply for them to form close ties with each other (Albury & Crawford, 2012).

Research links sexting to peer-pressure both within and outside of a romantic relationship, with girls facing much more pressure to send "sexts" than boys (Livingstone & Mason, 2015; Van Ouytsel, Van Gool, Walrave, Ponnet, & Peeters, 2017), which was seen in the focus groups. Sexual pressure, sexual stereotypes and sexual harassment characterise a broader context in which girls are pressurised to send sexual content and messages (Ringrose, Gill, Livingstone, & Harvey, 2012). In particular, girls must navigate double standards and invest energy and effort to construct a sexuality that is audacious, but not too much. Boys may also be disadvantaged by these sexual double standards as they are often criticised online if they do not conform to stereotypical believes and representations about masculinity (Ringrose et al., 2012; Tanenbaum, 2015).

Feminist literature has denounced the moral panic (e.g. prohibitive discourses and anti-sexting campaigns) around sexting, arguing that it infringes on girls' sexual agency. Such panic obscures perpetrators of cyber harrassment and leads to biased and prohibitive policies and initiatives against sexting in general rather than against non-consensual dissemination of sexually-explicit content (Hasinoff, 2013, 2015). It has been argued that sexting regulation reflects a rather generalised sentiment that girls should feel ashamed of their sexual availability, behaviour or history (Gong &

Hoffman, 2012). Additionally, discourse around non-consensual dissemination of nude photos often reinforces victim-blaming and toxic masculinity, in other words blaming girls and women for what happened, while viewing boys and men as inevitable perpetrators (Fairbairn, 2015). A middle ground must thus be found: sexting need not be denounced altogether, but the nuance that sexting as a consensual practice can evolve into cyberbullying must also be acknowledged.

Slut-shaming and discriminatory standards based on gender: "...if a girl has affairs with many boys, there is immediately bad talk..."⁴⁶

Female participants noted society's different standards concerning sexual behaviour, where girls and women are stigmatised for their sexual agency, whereas boys are praised for their exploits, an antiquated view that remains active within society: "Because, for instance, if a girl has affairs with many boys, there is immediately bad talk...." (girl, AT, 16). On the contrary, "[boys] don't get slut-shamed" (girl, IE, 15). Boys also discussed sexist double standards for women and men and concluded that expressions of girls' sexuality are judged very negatively: "Generally, I also think that there are especially against women in our society more sexist accusations, can you say that, or, sexism against women is simply a lot stronger than against men. That's why it's also a bigger problem for women, if such pictures of themselves exist. [...] if someone is timid or not so good with girls, at our age [it is a problem for boys too]. But, apart from that, we have less to fight with that, compared to girls our age" (boy, AT, 17).

However, some participants considered slut-shaming to be a normal response to what they consider silly or irresponsible behaviour. In this regard, these participants reiterated existing double standards, illustrating how deeply stereotypical gender roles are embedded in society: "*This girl was doing stupid things in the swimming pool and shared that picture. And people started to call her things that normally one calls a girl when doing those stupid things.* [...] She was wearing a bikini and *two/three guys started to call her things...Things such as whore. She deleted that photo*" (boy, ES, 15). Others believe that girls provoke and invite the criticism therefore they must be prepared to handle the consequences "... but it seems to me that the girls provoke it themselves, i.e. provoke these people to criticism, besides, if you want to be famous on the internet, you have to reckon with hate, this is my opinion, if the girl posts a photo in a bathing suit, or out of bounds and then others criticise her that in reality ... well I think that it is not entirely the fault of these people, she only wants to present herself on the internet" (girl, PL, 15).

None of the focus group participants identified personally with the LGBTQI community, nor did they mention the potential benefits of social media to LGBTQI youth to counter the heteronormative dimension of online social networks. This lack of such spontaneous discussion could have been due to sampling size, lack of awareness or remaining taboos regarding non-normative sexualities. One girl (HU, 17) mentioned that she was member of a group on social media about the acceptance of gay people.

⁴⁶ Girl, AT, 16.

Some reflected on homophobia and transphobia observed online. Referring to someone experiencing harassment: "There's also a gay guy in my class and then these other boys from another class, they're sort of machos, they are disturbed by it. They have made all sorts of comments, and I have talked to them about it, like "Why does it bother you, think positive, you get all the girls.' I've tried to handle it with humour. But they don't like his 'faggot' behaviour'" (girl, EE, 18). "It happened to a friend of mine too. Everybody was making fun of him by saying that he behaves like a girl. I think that he is homosexual and a group of friends online were making fun of him" (boy, FR, 15). "...there is this guy I know who was female and is transitioning to male. So obviously has like

Expert interviews: Online opportunities for vulnerable categories of youth - During the interviews, experts pointed at various opportunities to challenge norms and stereotypes online and to break free from societal bonds and power structures. They often mentioned the chance offered to young people to overcome prejudices and stereotypes thanks to the possibility to communicate online without being immediately reduced to their appearance. Experts cited that this is particularly salient for young people from vulnerable groups, such as young people with migrant background or disabilities.

Several experts stressed the contribution of digital technologies in empowering young people by giving them a space where they can address what may be viewed as sensitive topics. This particularly applies to young people with special interests and needs, such as members of the LGBTQI community, migrants and young people with disabilities. Digitalisation serves as a potential medium for organising and building a sense of community, potentially allowing youth to break out of their isolation and not feel alone.

One expert who has conducted studies with people with neuropsychological disabilities highlighted the role of digital technologies for young people with such disabilities in finding and making friends.

female reproductive ... yeah do you know all that ... so people would be commenting on his pictures, for example 'do you have a ...?'" (girl, IE, 17). Similarly, (Navarro, Yubero, & Larrañaga, 2015), for example, demonstrated that boys and girls who do not adapt to traditional sexual and gender roles are more likely to suffer online victimisation, while young people that are conforming to traditional gender norms wil be less confronted with it.

Slut-shaming has also been discussed in the literature, sometimes in relation to behaviours in the offline world, Tanenbaum (2000), for example, has showed how early developers and rape victims are more at risk of being slut-shamed, and, more recently, in relation to experiences in the online world (e.g. (Lumsden & Morgan, 2017; Ringrose et al., 2012; Ringrose et al., 2013). The majority of authors, as the participants in the focus groups, link slut-shaming to the existence of sexual double standards – according to which, boys are praised if they are seen to have an active sexual life whereas girls are criticised and called "sluts" for similar behaviours. Although these standards are not new (Ringrose et al., 2013; Tanenbaum, 2015), they come nowadays in sharp contradiction with the behaviour presented as good to girls (Tanenbaum, 2015), i.e. hyper/early sexualisation in the media and society in general. This creates a "contradictory landscape in which females are applauded for sexual audacity when they're not being humiliated and disgraced" (Tanenbaum, 2015, p. vii).

Researchers have also argued that social media and digital profiles have intensified practices of rating and comparing both women's and men's bodies (Ringrose et al., 2013). Depending on gender,

race, age, class, etc., the sexual morality of the representations made online will be assessed very differently (Ringrose et al., 2013). The intersection between gender and social class is often mentioned in the literature on slut-shaming: Armstrong, Hamilton, Armstrong, and Seeley (2014), for example, discuss the use of a slut discourse by privileged women to maintain their class privileges. Scholars have also emphasised the importance of peer-pressure (Ringrose et al., 2013; Ringrose & Renold, 2012) and the harmful consequences of this practice such as encouragement of rape culture and creation of self-destructive behaviours among girls (Tanenbaum, 2015).

From a different perspective, Ringrose and Renold (2012) explained how the term "slut" has been re-claimed by women in the context of the SlutWalks (which some young people have also been part of) through a process of 're-signification'. This process refers to the re-appropriation of an injurious term and its transformation to one of celebration. According to these authors, it is a way to use the term "slut" for positive political action and to refuse the negative impact of slut-shaming.

Conclusion

Many intimate and private aspects of young people's lives are likely to be publicised through digital technologies, which makes the intimate dimension of citizenship an essential element to take into consideration when discussing the concept of citizenship and the experiences of young people online. As reflected in this section, the decisions that girls and boys make online about their private relationships – one of the main topics they cited discussing online – and their identities are directly related to the concept of intimate citizenship (Plummer, 1995). The concept is concerned not only with "the processes, practices and discourses through which states and policies regulate and shape intimate life (...), [but also] with the social relations between individuals and groups within civil society" (Halsaa et al., 2011, p. 56).

Among online intimate practices, sexting is a debated practice amongst young people and experts. Young people like it for being "fun" and a new way of discovering more about sexuality, whereas experts and public discourses often emphasise the risks of sexting, namely the non-consensual spread of pictures or videos and the subsequent damages, especially for girls. Public and expert discourses, however, often over-emphasise the risks for young people of being online. This "culture of risks" tends to represent young people as powerless victims without agency, and additionally constructs girls and women as being mainly docile and passive. Prohibitive, punitive and victimblaming discourses arguably infringe on young people's rights. Girls in particular seem to be more affected by the risk-averse dominant discourses and, as a consequence, are often over-protected, which hinders their opportunities to assert their sexual agency and their other rights, including selfexpression and political participation.

4.3 Being political online: easier said than done

Political citizenship is traditionally understood as the right to participate in the exercise of political power (Halsaa et al., 2011; Marshall, 1950). Leydet (2006), drawing on Cohen (1999), Kymlicka and Norman (2000), and Carens (2000), highlights three dimensions of citizenship pertaining exclusively to the political world: a person's citizenship as a person's right to claim the law's protection; a

person's right to act as a participant in political institutions; and a person's membership of a political community (nation) that provides a source of identity (a nationality). In this section, political citizenship is understood broadly as encompassing more than traditional civic activities such as voting or being a member of a political party. Over time, young people have gradually turned away from traditional politics and have privileged alternative forms of political and civic activity, such as signing petitions and participating in demonstrations (Crowley & Moxon, 2017; Willems, Heinen, & Meyers, 2012). A conception of political participation that only focuses on institutional politics "does not see the many other ways in which young people engage with, and participate in, the world around them" (Crowley & Moxon, 2017, p. 16). A wider conception of political participation in the context of this report is especially important given the fact that most youth under the age of 18, regardless of their formal statehood, do not have the right to vote.

Discussing politics: "if you're a politician, maybe you need to express your opinions publicly, but if you're 16, you need to stay safe"⁴⁷.

When it comes to discussing politics online, girls and boys express similar thoughts and show similar behaviours, with key findings illustrating that youth are keen to be involved in politics online but that they share a scepticism toward politicians and the government. A gender difference emerges in so far as girls may be more likely than boys to take into consideration possible retribution to online political participation. This fear of backlash evidenced in focus group discussions mirrors findings presented in the quantitative section of the report.

Among those who favour online politics, Twitter is a popular space: "I talk a lot [online] about politics in Venezuela... I like that people can freely express their opinion... I mainly use Twitter for political topics" (boy, ES, 18). "I always tweet my opinion" (girl, IE, 17)"... if anyone has me on like Facebook or Twitter they'll probably delete me after like 3 weeks if they don't like politics because I just post about everything (laughter). So like at the minute I'm really supporting the students in Florida. About the school shooting. Repeal the Eighth. Like all this stuff" (girl, IE, 17). Twitter usage may vary across country though: "in Poland it's less common to use Twitter in total. Generally, for example, more English-speaking people than from other countries, I have at least the impression that there are a lot of people who speak English more than any others" (girl, PL, AGE 17); "I used [Twitter], [but] in Romania, few use it" (boy, RO, 16). Twitter was also not a large topic of conversation in focus group discussions in Hungary, France, and Sweden.

While some focus group participants were keen to have political discussions online and offline, there were others who reserve talking about politics with their offline friends only, as they do not trust digital culture for this: *"[I]… wouldn't express my opinion about such stuff online, because it's something that I'd rather talk about with friends…"* (boy, AT, 16). Others contribute in *"anonymous forums"* where they *"only use a nickname"* (boy, SE), the reason being personal security: *"if you're a politician, maybe you need to express your opinions publicly, but if you're 16, you need to stay safe"* (boy, SE, 15). Some highlight other social media outlets for participation and discussion. One participant stated that when it comes to *"… politics and feminism, I think especially Instagram is exciting, because you not only read through something, but you also get into contact with other*

⁴⁷ 15 year old boy, Sweden.

people and you can discuss things..." (girl, AT, 17); another participant echoed the exploratory allowances of Instagram: "... if you follow certain accounts, then you find similar accounts." (girl, AT, 16).

Although many young people are vocal about political issues⁴⁸, distrust of politicians amongst them is paramount: "politicians are not to be trusted and have only interests; I don't trust political speeches" (boys, FR, 17). Youth's scepticism also extends to voices online though: one participant noted that everyone has an opinion, "the intelligent and the less intelligent... rarely you see people who really know what they are talking about" (boy, RO, 18). "On Twitter, the spirit is giving an opinion even if you have no idea about the topic and making those who read it angry ... it is not only me! In Twitter, this is the standard!" (boy, ES, 15). When asked what can be done so that digital

technologies support youth participation, some expressed frustration at not being involved in decision-making: "Young people may express themselves, but they don't feel that their opinions truly amount to something. That's why it is not a matter of using digital technologies to improve their involvement, it's about involving young people in decision-making" (girl, FR, 15). Similarly, other participants wondered if their youth is used against them when it comes to taking their opinions into serious consideration: "It's true that we are the future but they forbid us to express our opinion because they say: 'They are young, they have other things to think about', they don't take us seriously. So... if there's no one else on the other side listening to us,

Expert interviews: Youth political participation - experts cited multiple reasons why girls and boys do not participate in politics online: youth are too occupied with other interests or extracurricular hobbies, they are not interested, fear retribution, feel too young, or they do not have the tools, as they have not been taught in school how to participate politically online. At the same time, experts quite universally acknowledged that governments are not adequately involving youth in participatory politics (via consultations, for example), and that they need to be more innovative in their approach, perhaps less hierarchical and more visual rather than text-based. Overall, there was a variation of gender knowledge among experts: while a few experts claimed that there are little or no gender differences in the digital sphere, others pointed out specific gender differences already corroborated by this report; furthermore, several experts expressed the opinion that government youth initiatives are typically gender-blind. Experts listed activities that girls and boys participate in online, including in flashmobs, crowdsourcing, signing petitions, and organising protests, but they were divided on how many youth are participating in such things. While some referred to such activities as political participation, others referred more to activism, civic participation, and contributions to social environment, indicating that classifications about what activities constitute what action may vary significantly among experts.

change is not possible" (girl, IT, 17).

Participants discussed what they perceive as limitations of online politics and displayed great awareness of disinformation related to political issues online and reluctance toward online politics.

⁴⁸ Among the political topics mentioned during focus group discussion were terrorist attacks in Western Europe (France, UK, ...), conflict in Syria and the threat of the Islamic state, Repeal the 8th Amendment in Ireland, Orlando nightclub shooting, politics in Venezuela.

Simultaneously, they expressed being afraid of the lasting impacts of their posts and activities online, fearing that they will exist forever and may impact their adult life. Finally, the focus group discussions show that youth self-censor in order to avoid being labelled or attacked verbally, something which girls may do disproportionately. *"I'm too frightened to express my opinions online. I keep them to myself because I know that there will always be someone out there who won't like what I post."* (girl, SE, 15). Overall, fewer boys expressed such fear: *"I don't express my opinion, because I'm really afraid of the feedback. Especially among strangers... people on the internet can be cruel and arrogant, they can just say that you are wrong. And then you don't want to express your opinion anymore. I never really had that wish, to be honest. I don't know if I'll ever have it, maybe I will" (boy, EE, 16).*

Such findings from focus group discussions enrich the conversation about youth's political participation online. Literature remains divided as to whether online communities will "lead to echo chambers or facilitate exposure to divergent views" (Kahne et al., 2012). Regardless, there is increasing consensus that online political participation constitutes political participation, given that the majority of news and peititions are online, as well as the fact that mobilising occurs online (Kahne, Lee, & Feezell, 2013). Despite ongoing scepticism from adults and youth alike about the effects of online political participation, studies are showing that such participation does translate to further civic and political participation offline (Kahne et al., 2013). Involvement in interest-related activities online (for example, gaming, chat-rooms) is also shown as likely to lead to online political participation, given that users are exposed to diverse points of view (as compared to usage of social media where friends are more carefully selected) (Kahne et al., 2012). The precise pathways and links between online and offline political participation may remain unclear, but findings in the quantitative section as well as from the focus group discussion show that online political participation is gendered, a topic which remains underexplored in the context of online participation research (Vochocová, Štětka, & Mazák, 2016). One case study looking at Facebook activity in the context of the 2013 Parliamentary Election campaign in the Czech Republic, for example, found that men are more likely than women to comment on posts as well as post negative comments (Vochocová et al., 2016). More studies like this are necessary to further substantiate the gendered dimensions of online political participation.

Weighing the risks and benefits of digital activism: "When you speak about such important topics online, I like to give my opinion but you are very exposed to bullying"⁴⁹.

Participants were asked their opinions about online activism, using the #MeToo movement as an example.⁵⁰ Both girls and boys reflected on and debated the efficacy of online movements. More girls, though, stressed the potential that such social media activism has in raising awareness and empowering women: "I also think that it [#MeToo] has become that big because of social media and that's good, because the internet just offers the option to speak publicly... if you go directly to the public, there will be always people who listen to you and who understand you and you then also

⁴⁹ Girl, ES, 17.

⁵⁰ Levels of awareness of the #*MeToo* movement varied. Participants of a couple groups seemed to have unanimously heard about the movement, whereas other groups were unaware. In most focus groups there were mixed responses within the group.

support you" (girl, AT, 17). Campaigns such as these were also viewed as enhancing further mobilisation and paving the way towards gender equality: "I think these campaigns are important. Social media is now a way of expression, so you can make people think differently. In the case of women, the goal is reaching total equality" (girl, ES, 18); "now with social media, with these campaigns, you can share more information. I think we should not stay silent but to help for a change. It is the first step. I cannot do anything for those girls but public reporting is necessary. So it

is good to do these campaigns" (girl, ES, 17). Some boys, albeit fewer than girls overall, also expressed clear about positivity the #MeToo movement: "I believe that these online campaigns are verv important to break the silence. People may themselves express through such campaigns and reveal the truth... women feel ashamed to talk about sexual abuse. Such movements encourage them not to feel ashamed" (boy, FR, 18). "I think it's brought a lot of good because from so many people doing the #Me Too, like following the #Me Too campaign, it's then given people who wouldn't have the strength beforehand to

Expert interviews: Digitalisation's role in globalisation and the expression of multiculturalism – digital media offers young people the opportunity to connect accross distance and time zones. In focus group discussions, both girls and boys spontaneously mentioned that benefits of digitalisation include being able to stay in touch with family members and friends who live far away, as well as learning about cultures other than their own. A 17-year old boy from Ireland noted that "...even through playing a certain game you'll meet people interested in the same things, then you can learn new things off them, like different cultures", something which other girls and boys from a few countries echoed (girls, AT; girl, FR; boy, IE). Experts from numerous countries also noted that digitalisation affords the possibility of a cosmopolitan worldview. Not only do online spaces foster opportunities for global exchange, but digitalisation also allows for the expression of multilingualism and/or multiculturalism. One girl from France noted that as she "speak[s] Arabic too, I also have a Facebook page in Arabic for my family members and friends who are from Arab countries. We share family news, Arabic songs or videos... it is all in Arabic." As illustrated in the quantitative findings of this report, however, online spaces also prove to be a medium for hate speech. Through a case study on Moroccan-Dutch youth, Leurs (2012) confirms such marginalisation and also substantiates how minority, migrant and non-mainstream youth nonetheless carve out spaces of subversion for themselves in order to mediate their daily lived experiences. Moving forward, such topic should be explored and included in the discourse of digitalisation.

come out with this, to actually come out and talk about their experiences" (boy, IE, 17).

A minority of participants expressed cynicism toward the movement: "do you talk about it [harassment] because you want to feel the relief and help others, or you talk about to get attention, so that people would think 'oh, he/she is so brave'?" (girl, EE, 15). Boys were slightly more cynical than girls: "some people [i.e. celebrities] have done it for the attention"; others [i.e. everyday people] to get more 'likes' (boys, PL). "What happens with these claims afterwards? In the end there are so many cases and we don't know which of them are true. Men might think, 'Are there really so many of us who behave like that?' and they may feel as if they are being accused as well. I'm sure there are cases that are true, but they are very hard to differentiate from the lies" (boy, EE, 18). "I am sure that some people have done it for the attention" (boy, PL, 18). A girl from Sweden recalled facing this

cynicism in person: "The thing that bothers me with #MeToo is when boys mock the movement. Like, if they hug you and then go, 'Oh sorry, I guess this will be #MeToo now' and they laugh" (girl, SE, 17-18 age range). In this regard, it is clear that the #MeToo movement polarised youth and that male youth in particular (although not all) speculated that #MeToo stories might be fabricated, reflecting the sexism and doubt in women's testimonies seem in society in general.

When it comes to participating in online activism (including but not limited to #MeToo), it seems that girls are disproportionately concerned about the risk of backlash. Many participants point out that they prefer to abstain from supporting a cause or uttering their opinion upon an issue because "there will be somebody answering you. That is why I prefer not to speak. When they speak about chauvinism, I don't like it, but I don't say anything" (girl, ES, 16). Some specified that they do not shy away from criticism, as long as it comes from peers: "if it's on Snapchat I can post anything, even if someone will disagree. Because then I'm among people my age. It's the middle-aged men I'm afraid of... white, middle-aged men who comment aggressively." (girl, SE, 17).

These fears were related to both anonymous online aggression (e.g. hate speech) and cyberbullying/harassment from known peers. Some mentioned hate speech and threats in particular from "white cis men"⁵¹ (SE, multiple girls): "It's so strange. People comment on accounts with many followers, it can be anything, 'I'm going to rape you'. That's not at all unusual. And if you check their [the hater's] account it's not like they're young children who don't know what they're writing. They have jobs, family, a mother, a daughter and still they write this stuff" (girl, SE, 17). "When you speak about such important topics online, I like to give my opinion but you are very exposed to bullying. You can defend your ideas but people attack you saying you are a feminist and it was not your intention. You can support something but be careful because people label you or misinterpret you" (girl, ES, 17).

Others wonder about the efficacy of online activism: Regarding #MeToo, "It's not useful if everything stays the same" (boy, RO,16); "there are millions of campaigns like this on the net, sometimes you look at this and then you don't care" (boy, IT). Some see a disconnect between online and offline activism: "It's like active unsocial empathy, so through the internet we can empathise with someone and it makes us feel good but... we have no action. So if you're going to talk about something in order for that to make any difference... you have to follow it up with an action" (girl, IE, 17); [movements] are "raising awareness only online, but not in real life" (boy, RO, 16).

In summary, girls and boys expressed interest in online activism, but there is genuine doubt among them about whether online movements can actually affect change. Boys seem to be slightly more sceptical than girls in this respect, an interesting finding giving that the case study used was the #MeToo movement. Finally, the most important constraint to participating in online activism seems to be young people's fear of public reactions, insults and conflicts. This seems to be particularly relevant for girls. Literature discusses how digital platforms provide a medium for feminist ideas, allowing new discussion about gender and sexism and enabling creative modes of protest to develop (Baer, 2016). "Micro-activism," or using social media to raise awareness about certain issues, and online feminist activism can help young women to not feel isolated as feminists and can compensate

⁵¹ Cisgender relates to a person whose sense of personal identity and gender corresponds with their birth sex.

for the absence of like-minded peers in the 'real world' (Schuster, 2013). The use of the hashtag for feminist movements against sexism, violence and rape culture is currently a popular means of drawing attention to gender equality issues using technology.

These new forms of activism are unfortunately often accompanied by sexist responses (Drüeke & Zobl, 2016). As suggested by the Council of Europe, female bloggers in particular are targets of online (as well as offline) violence and hate speech (Council of Europe, 2016). Women's rights defenders face more attacks than male human rights activists, and sexist hate speech often takes place when women stand against discriminatory or traditional, cultural and religious beliefs or customs. Anonymous sexist hate speech is often called gendertrolling, malicious acts online involving "the sending or submission of provocative emails, social media posts, or tweets, with the intention of inciting an angry or upsetting response from its intended target" (Lumsden & Morgan, 2018, p. 122). Gendertrolling has included rape and death threats (Lumsden & Morgan, 2017). What sets gendertrolling apart from other one-off forms of online harassment is that it aspires to cultivate a following or foment dispute. This type of online harassment is a means of excluding and silencing women's voices from digital spaces.

Conclusion

Political citizenship often evokes a legalistic definition, but according to the Council of Europe it should be understood more broadly as "having the right, the means, the space and the opportunity and where necessary the support to participate in and influence decisions and engage in actions and activities so as to contribute to building a better society" (Council of Europe, 2003; Crowley & Moxon, 2017, p. 13). Furthermore, citizenship studies whose conception of public participation has been limited to political participation may benefit from an expanded range of civic activities, including participating in community activities and engaging with social issues and inequalities through volunteering or engaging with charities (Jones & Mitchell, 2016). As seen in this section, digital media offers new ways to contribute to building a better society through public conversations on political topics and digital activism.

Evidence suggests that young people do take an interest in politics, with many finding a voice and become active through new 'repertoires of action' such as online petitions, participation in various online activist initiatives, or through their presence in social media (Van Laer & Van Aelst, 2010). Data from focus group discussions suggest that girls and boys feel similarly about online political participation: they participate, but such participation is disparate accross youth, and there is a reluctance to be involved in politics through social media due to to distrust of digital culture in general and risks of conflicts and safety. Young people also expressed distrust of politicians and feelings of not being listened to, a factor which experts confirm as crucial for determining whether young people participate in public life. Risks of being politically active or involved in activism online and strategies to prevent these risks seem to differ depending on gender. Cyber-aggression and harassment from peers and strangers often push young people, especially girls, out of online spaces, making them unwilling to be politically active online. To avoid criticisms and abuses related to their identities, young women more than young men may modify or restrict their engagement (as they also do offline), a societal effect which hinders their ability to take full advantage of digital media and its potential for political activities. Greater attention to online political participation as a space of action for young women and men and involvement of women and men in decision making is necessary. Such understandings are required to account for and discuss young people's agency to

form opinions, take action and exert influence, factors which are requisite in decreasing the distrust of politicians among young people.

5 Conclusions

Most young women and men in the EU consider themselves sufficiently skilled to use digital technologies in their daily lives⁵². Nevertheless, more young men feel confident in using digital devices they are less familiar with than young women. A self-confidence deficit among young women is observed across a series of digital skills that are subjectively measured (e.g. own perceptions, confidence in problem solving, autonomy when downloading software). More than a difference in levels of skills, this deficit shows the effect of gender stereotypes related to technology. The implications are far-reaching. Girls' lower perception of their own capacity in using digital technologies makes it less likely they will enage in digital jobs in the future. In addition to establishing more equitable basis for online participation by girls and boys, adressing young women's self-confidence deficit would also help to combat gender segregation in education and the labour market.

Young people are the most active users of the internet⁵³ and social media. They are also among the highest consumers of online news. This level of access to information, exposure to different perspectives and involvement in social debates can greatly facilitate active involvement in public life and active citizenship. Research shows that social media and news outlets are likely to constitute important venues for youth opinion formation (Cammaerts, Bruter, Banaji, Harrison, & Anstead, 2014). Young people tend to agree that online social networks contribute to the public political debate. They also believe that political information on social media should not always be trusted and are aware of the risks of disinformation. They have a capacity for critical thinking and discerning judgement. Such capacities should be supported, in line with the objectives of the EU education ministers' Paris declaration on promoting social cohesion, democratic values and active citizenship of children and young people, which calls for "enhancing critical thinking and media literacy, particularly in the use of the Internet and social media, so as to develop resistance to discrimination and indoctrination"⁵⁴.

The high engagement of youth, particularly girls⁵⁵, with online social networks shows that the digital world is a space of intense socialisation. It operates differently for girls and boys, with a very strong emphasis on self-presentation for young women and girls, including more emphasis on physical appearance, greater concern with privacy, less active participation, and an effort to express non-offensive opinions. Girls and young women's socialisation from an early age to carefully curate self-

⁵² According to Special Eurobarometer 460, in 2017, 92 % of young women and men aged 15-24 consider to be sufficiently skilled in the use of digital technologies in their daily life.

⁵³ As shown in Figure 8, in 2017, 92 % of 16-24 women and 93 % of men of the same age group use internet daily.

⁵⁴ More information on the Paris declaration of EU Education Ministers and the measures taken towards its implementation can be accessed at this link: http://ec.europa.eu/education/news/20160316-paris-declaration-education_en

⁵⁵ As presented in Figure 12, in the EU-28, 82 % girls aged 15-16 use online social networks daily compared to 72 % of boys of the same age. As shown in Figure 11, 60 % of young women aged 16-24 have uploaded self-created content in the past 3 months compared to 56 % of men.

presentation both offline and online leads to girls' lower propensity to take part in civic and political debates, in line with their lower overall participation in online debates. This corroborates research showing that digital platforms operate as both spaces of empowerment and identity formation, but also as sites of surveillance and self-monitoring, especially in terms of gender norms linked to physical appearance (Baer, 2016; Carstensen, 2013; Consalvo & Paasonen, 2002; Levi-Sanchez & Toupin, 2014). In other words, girls are exposed to harsh criticism for having an open profile, or too many friends, or for posting too much information, which suggests that pre-existing discriminatory concerning women's public participation continue to police and curtail girls' capacity to fully participate online.

The access that girls and young women have to online information and their high use of social media networks does not necessarily translate into active participation. Data show that young women tend to be less involved in following debates and even less active in taking part in debates online than young men. Young women are similarly less likely to post opinions on political issues and take part in online consultations or voting. This lower participation can be linked to two phenomena. First, the experience of girls and young women illustrates how the "beauty myth" is reinforced online. The beauty myth has been described as a form of control over women's bodies and minds through imposition of unachievable standards of "beauty" on them (Wolf, 2013). Constant striving in pursuit of ideals of beauty, i.e. investing money and time in constructing a certain type of image, prevents women from participating in society and politics. The constant control exercised by social media is even more striking. Virtual reality reinforces the impact of the beauty myth and adds new demands linked to the pursuit of unachievable beauty standards. More generally, the strict standards applied to girls and young women in terms of conformity to gender norms (physical appearance, reputation, respectability) require considerable investment as they seek to maintain the expected online presence aligned with appropriate feminity; this too decreases the likelihood that women will engage in political activities (Heldman & Cahill, 2007).

Second, not only are young women more exposed to online abuse, the effect of such abuse is disproportionately felt by young women⁵⁶. Data show that young women are more likely to experience any kind of online harrassment than men (9 % of 15-24 women compared to 6 % of men have experienced online harassment⁵⁷). This over-exposure is confirmed by data for a younger age group on cyberbullying, showing that 15-year-old girls across Europe are more likely to experience cyberbullying(12 %) than boys of the same age (7 %). After witnessing or experiencing online hate speech/abuse, one woman out of two (51 %) in the EU hesitates to engage in social media debates due to fear of experiencing abuse, hate speech or threats.

For many focus group participants, aggressive behavior online is expected and normalised. As a result, young people have developed pre-emptive techniques and coping strategies when it comes to their behaviour in digital spaces. Girls and young women in particular restrict considerably what they express online for fear of harrassment, gossip and hateful comments. For boys, the tendency seems to be to ignore and minimise the abuse experienced. Some boys however may overestimate their own ability to handle problems online, and are less prepared than girls to seek and accept help,

⁵⁶ For example, have witnessed or experienced cases where abuse, hate speech or threats were directed at journalists, bloggers, and people active on social media.

⁵⁷ Figure 17: Individuals who have been a victim of any kind of online harassment by sex and EU country, 15-24, 2013

which is related to stereotypical standards whereby boys are expected to 'man up'.

Young people make the distinction between consensual sexting and non-consensual dissemination of nude photos or videos. Young people feel pressure to engage in sexting - young women to send sexually-explicit photos and young men to solicit them - as signs of maturity and social status. Although young men also experience non-consensual dissemination of nude photos, the consequences are usually less serious for them as they are for young women, who suffer substantial prejudice and damages to their reputation due to sexist double standards.

While the risks of digitalisation, including the gendered aspects of it, must be taken seriously, young people take the view that discussion of such risks should not be confined to restrictive and prohibitive messages. Internet safety policy should focus on empowerment and responsible online behaviour rather than restrictions. Mitigation of risks needs to be tackled through gender-sensitive approaches to digital media literacy, legal frameworks and policy.

Women still form a minority of decision-makers in Europe. For gender gaps in decision-making to close, particularly in the political arena, it is vital to allow girls and young women to fully access the opportunities offered by digital spaces in terms of learning, exposure to political ideas, debate, mobilisation and activism. Young people call for combatting gender stereotypes online and promoting diversity of voices, opinion and gender expression. For young people to grow into active citizens with the capacity to shape their societies, they need to tap into the full potential of digital technologies in a safe, empowering manner.

6. Policy recommendations

This chapter presents recommendations on measures to strengthen gender equality in the field of youth and digitalisation.

EU would benefit much from a strengthened gender perspective in digitalisation policies

Opportunities and threats of digitalisation to gender equality are rarely explicitly recognised in EU policy agendas on digitalisation. Current initiatives to bring more girls into the ICT sector and address specific labour market needs can be considered an initial step towards gender-aware policies. EU policy documents and initiatives such as the Digital Agenda for Europe, the Safer Internet Programme, European Safer Internet and Better Internet for Kids, Digital Education Action Plan, EU Cybersecurity Strategy, Europol Cybercrime Centre, as well as the Directive on Child Pornography and Sexual Exploitation could benefit from the following:

- establish a baseline and set and monitor gender specific targets;
- include awareness-raising sessions with teachers on the gender aspects of digitalisation (including gender-based cyber-violence, reproduction of gender stereotypes in digital spaces, sexist hate speech, tips on cyber hygiene) in the European Commission's Digital Education Agenda;
- update the European Code of Good Practices for Women in ICT to include gender-based cyberviolence;
- strengthen the role of the Safer Internet Centres in collecting evidence on opportunities and risks of digitalisation for gender equality and evaluating effectiveness of policy measures;
- include various forms of gender-based cyber-violence in the EU definitions of cybercrime.

Gender equality needs to become a consistent and structural part of the future EU youth strategy and policies

The current EU Youth Strategy 2010-2018 addresses gender inequality very narrowly, only in relation to the need to combat gender stereotypes via education and training systems. The EU Work Plan for Youth 2016-2018 does not include any actions to meet gender inequality challenges. Equality of all genders and gender-sensitive approaches in all areas of life of a young person are prominent goals in young people's vision for future youth policy in Europe⁵⁸. Young people acknowledge that gender-based inequalities and discrimination still affect many young people, especially young women. They call for policy actions to tackle gender-based discrimination and unequal opportunities in cultural, political and socio-economical life; to invest in awareness-raising of gender-based inequalities, particularly in the media; to combat gender-based violence; to challenge and eliminate stereotypical gender roles and embrace diverse gender identities in education systems, family life, the workplace,

⁵⁸ EU Youth goals incorporated the ideas and opinions of 49,389 young people across the continent who participated in consultations, debates, discussions and events on the topic "Youth in Europe: What's next?"

and other areas of life; to address gender-based structural inequalities and discrimination in the labour market, including the gender pay gap; to promote equal sharing of caring work; to ensure equal access to formal and non-formal education, and that the design of education systems follows gender-sensitive approaches. Structural inclusion of gender equality perspective in youth policies would significanlty decrease challenges of gender inequality among youth and engage young women and men in the planning and decision-making processes on policy actions.

Closing the gender divides across the level and composition of digital skills would address the bottlenecks in the labour market, increase competitiveness of the EU and reduce socio-economic inequalities

At the time of profound digitalisation, the EU faces major bottlenecks in its digital progress, including insufficient digital skills and shortage of ICT specialists. While women on average have a higher level of education than men in the EU, women's potential is not yet fully used in science, technology, engineering and mathematics (STEM) and especially in ICT. Only 17 % of the 8 million ICT specialists in the EU are women and barely any progress was observed in the last decade. The lack of people with the necessary digital skills can largely be attributed to persistent gender stereotypes and biases, which impact women's and men's educational and career choices.

Across the EU, girls and boys reveal differentiated strengths in levels and even more so in types of digital skills or engagement in digital activities. The gender gap in overall digital skills is mostly attributable to the gap in problem-solving digital skills (e.g. making informed decisions on the most appropriate digital tools, solving conceptual and technical problems, updating own and other's competences) to the disadvantage of girls. Information and communication digital skills among boys tend to be lower in comparison to girls. In addition, notable differences exist among girls and boys from different socio-economic backgrounds or rural/urban areas. For example, the EU gender gap (favouring boys) in use of internet for downloading software is notably smaller among youth with higher (1st quartile) compared to lower (4th quartile) family income.

EIGE's research shows that narrowing the gender gap in STEM education would lead to economic growth, with more jobs (up to 1.2 million by 2050) and increased GDP over the long-term (up to EUR 820 billion by 2050). The new STEM jobs are forecast to be highly productive and well-paid, resulting in improvement in EU competitiveness as well as gradual closure of the gender pay gap.

Gender gaps in digital skills should also be seen as a major factor influencing both, opportunities and outcomes of one's economic and private life and contributing to women's economic dependence and exclusion. Closing gender gaps in digital skills should therefore be set as a target and a prerequisite to inclusive societies. To address this, EU and national level monitoring of digital skills among girls and boys, especially from more disadvantaged backgrounds, is needed.

Policies targeting gender gaps in self confidence in digital skills would increase the relevance of education outcomes for economic growth

To address the shortage of digital skills, it is necessary to target children at an early age and boost confidence in the wider application of obtained digital skills. Focusing on youth, as they are the generation with the highest digital skills, and focusing on girls is of particular importance. Currently,

girls in the EU see few prospects in ICT careers, despite equal footing with boys in educational attainment. Lower aspirations of engaging in digital jobs go hand in hand with lower self-confidence of girls in regards to their digital skills. This shows how gender stereotypes affect young people's lives and occupational choices and lead to gender segregation at school and later in the labour market.

Gender gaps in digital skills call for a closer attention to the content of digital curriculum at schools. In parallel to re-development of STEM to STE(A)M⁵⁹ curriculum in higher education institutions to overcome gender segregation and shortage of STEM specialists, a comparable approach could be examined in order to advance both the level and range of digital skills of girls and boys. For example, as suggested by wider research on gender gaps in digital skills (Warschauer, 2007; Warschauer & Matuchniak, 2010), teaching content and methods could be better tailored to get girls' higher interest in digital subjects. Digital curriculum could cover broader range of topics, interests and activities, including those considered stereotypically attributed to girls. Digital technologies could be used in various courses to strengthen participatory approach and mutual learning, e.g. through collaborative games. As a result, boys' school achievements and girls' self-confidence in digital skills could be improved.

As noted in the European Pillar of Social Rights and the New Skills of Agenda for Europe, education and training systems need to become more effective, equitable and responsive to the new structure and demands of the labour market and societal needs. Closing the gender gaps in self-confidence and motivation in regards to digital skills is imperative for ensuring quality and relevance of education outcomes for economic growth and social well-being.

Promoting positive gender role models offline and online would support young women's full participation in digital spaces

Gender norms of femininity and masculinity are exacerbated in digital spaces, with important consequences on youth engagement. After witnessing or experiencing online hate speech/abuse, young women tend to disengage from debating, posting opinions and taking parts in consultations. Girls more so than boys engage in self-monitoring of their social media profiles, physical appearance and opinions.

Strengthening measures that promote positive gender norms and relations through education at both the EU and Member State level are therefore of high importance for reducing gender inequalities offline and online. In addition, further support to initiatives promoting safe and respectful use of the internet, raising awareness of impacts of online gender-based violence for both boys and girls, and involving men and boys in the fight against violence against women and girls is needed in order to bring on full digitalisation benefits not only to women, but to society as a whole. A number of successful initiatives, such as the appointment of a National Digital Champion, who acts

⁵⁹ The evolution from STEM to STE(A)M reflects recognition of the important interaction between STEM and the arts as a driving force to boost innovation and creativity within the STEM sectors through more multidisciplinary educational programmes (European Commission, 2017a). The growing demand for STEM professionals goes hand in hand with an increasing need not only for technological skills, but also for highly developed 'soft' skills such as foreign languages, management or communication (EIGE, EE report).

as an ambassador for the Digital Agenda for Europe, or the Safer Internet Day (SID)⁶⁰, which marks an effort in making the internet "a safer and better place for our children and young people", need to strengthen their gender dimensions.

The evolving opportunities and risks of digitalisation mark a new impetus for evidence-based and age-appropriate sexuality and gender equality education, including information on sexual orientation and gender identities that is free of religious intolerance, based on values of gender equality and human rights, addressing youth in all their diversities and promoting healthy, positive and respectful relationships with others. Higher attention could be paid to issues such as consent, dynamics of healthy relationships, critical judgement towards gender stereotypes and ability to identify gender-based violence.

Civil society organisations, in particular youth and women's organisations, supported by adequate resources, would enable more meaningful participation of girls in society and policy-making

Youth organisations provide supportive spaces, both physical and digital, to enable young people in all their diversity to develop, articulate and share their views on social, economic, cultural and political matters. They play a critical role in mobilising young people from all backgrounds, amplifying and carrying their voices at different levels of the public debate and policy making process. They also provide young people with essential services and opportunities to learn, mobilise and develop social, professional and leadership skills. Promoting the inclusion of a gender perspective in all aspects of civil society organisations' programmes and services would ensure the needs of young women and men are met and their concerns addressed. Consulting youth and women's organisations at all stages of policy-making on social, economic, cultural and political matters needs financial support to ensure sustainable and continuous work for young people's, in particular girls', voices to be heard.

Provide comprehensive, sustainable and continuous professional development of digital competences for teachers and educators

National policies often understand digitalisation only as an opportunity for economic growth and employability, disregarding the benefits of digitalisation in relation to providing inclusive education and promoting social inclusion and equal opportunities. This constitutes a significant gap. Teaching digital skills and media literacy in schools provides an opportunity to frame digitalisation within a broader framework of promoting citizenship, diversity, equal opportunities and gender equality. In this context, youth should be equipped not only with digital skills, but with skills to assess information critically, to act online responsibly, to manage their safety actively and to be aware of the potential outcomes of online actions. Internet safety messaging should focus on empowerment and responsible online behaviour rather than restrictions.

Teachers and educators with relevant skills are a prerequisite for successful and responsible digital

⁶⁰ The Safer Internet Day (SID)⁶⁰ is an international event taking place in February every year, which promotes a safer and more responsible use of online technology and mobile phones by children and young people across the world. In 2017, the European Commission and leading digital players have committed to work towards curbing harmful content, conduct and contact in an Alliance to Better Protect Minors Online. The Safer Internet Day (SID) 2018 was celebrated on Tuesday, 6 February 2018 with a theme of "Create, connect and share respect: A better internet starts with you".
and media literacy education of youth. The types of skills necessary are twofold, yet interconnected: the use of digital technologies within school settings and an awareness and ability to address the opportunities and risks which accompany online activities. Teachers and educators should have access to training and life-long learning activities (basic, post-graduate and in-service) on how ICT can be used for teaching and learning to provide an added value to education processes and inclusive education. Furthermore, training activities should be made available on how to identify and address digital risks. Since girls are particularly affected by gender-based cyber violence, they are a key group, which should be targeted in how to address online harassment and how to speak out against it. There is a need for comprehensive, sustainable and continuous professional development on gender equality for educators if digital skills and media literacy are to be promoted effectively within schools. A more active cooperation with the IT industry and Safer Internet organisations could be beneficial in rendering such professional development sustainable. Finally, exchange of experiences should be encouraged among teachers to build on exisiting practices on effective use of digital technologies in educational processes. The potential of digital technologies in alleviating teachers and educators administrative work should be further explored.

Legislation protecting girls from all forms of gender-based cyberviolence should be enforced

Mounting evidence suggests that cyber-violence is a growing phenomenon that disproportionally affects women and girls and has severe impacts on their real lives. The due diligence principle obliges states to combat all forms of violence against women and girls, online and offline. The EU and its Member States should ratify the Council of Europe Convention on preventing and combating violence against women and domestic violence (Istanbul Convention) and apply it to cases of cyberviolence against women and girls (Council of Europe, 2011). Legislation and policy responses need to recognise that cyberviolence is a form of violence against women and girls to ensure that cyberviolence survivors have access to justice and age-appropriate specialised support services.

The EU institutions and Member States should put in efforts to design comprehensive legal instruments and policy strategies to prevent gender-based cyberviolence, prosecute and punish perpetrators, and protect and support victims through legal provisions, law enforcement mechanisms, prevention measures, collection of gender-disaggregated data, awareness raising campaigns, and other measures. The transnational nature of cyberviolence against women and girls adds on to the need for EU wide legislative framework and legal instruments that would protect women and girls from violence in online and offline worlds.

EU institutions and Member States need to provide sustainable financial support for organisations providing first, secondary and tertiary prevention of gender based-violence, including cyberviolence. They should also support organisations working with gender-based violence to use digital technologies to ease their workload; reach for women and girls experiencing violence; and provide services and consultations.

The European Commission's dialogue with the IT industry on the code of conduct on illegal online hate speech could be expanded to include gender dimensions of digital risks

In 2016⁶¹, the Commission together with Facebook, Twitter, YouTube and Microsoft announced a code of conduct that includes a series of commitments to combat the spread of online hate speech in Europe. This was an important step towards engagement of the private sector and a recognition of the profound negative effects that online hate speech has on the targeted individuals, as well as on the overall democractic discourse on online platforms. By signing this code of conduct, the IT companies inter alia committed to continued development of internal procedures and staff training to guarantee that they review the majority of valid notifications for removal of illegal hate speech in less than 24 hours and remove or disable access to such content. Still, the gender dimension was not yet recognised and thereby remained invisible in the committments made. As a result, the ongoing assessment, implementation, the continuous monitoring exercise, as well as related projects, miss out on the opportunity to better capture and counter the gender dimension of online hate speech.

The future follow-up to the aforementioned code of conduct for the IT industry could take the gender dimension explicitly on board in order to counter online hate speech in all its forms more effectively and in order to raise a higher awareness on the root causes of its occurrence. Any implementation plan, programmes or monitoring mechanisms in relation to the code of conduct to the IT industry or other relevant policy documents and action plans need to explicitly reflect the gender dimensions of digital risks, in particular including sexist hate speech, cyberbullying, sexual solicitation and the use of degrading images online, the distribution on social media of private photos and videos without the consent of the people involved.

⁶¹ http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id=54300

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Annexes

Annex I: Methodology

1.1 Principal aim:

The overall aim of the study is to explore the status of the girl child with regard to the risk of violence, as well as opportunities for social and political participation in the digital domain. The topic of digitalisation is core to this study due to youth's ever increasing and evolving role in the phenomenon.

1.2 Objectives:

The objectives of the study are to:

- conduct a literature review in order to gain an in-depth understanding of extant research regarding the intersection of youth, gender equality and digitalisation;
- identify existing statistical data related to youth, gender equality and digitalisation; analyse gender gaps with regard to access to and/or usage of digital technologies, as well as skills;
- collect qualitative data on how girls and boys use (or do not use) digital technologies in
 order to participate socially and politically in society; gain up-to-date, first-hand knowledge
 from youth and experts regarding the gendered and intersectional risks that are associated
 with youth's usage of digital technologies.

1.3 Methodological approach:

EIGE, in collaboration with Open Evidence, developed the methodology for the literature review, quantitative analysis and qualitative data collection. OBS subsequently executed the qualitative study, following the methodological guidelines of EIGE.

1.3.1 Literature & Desk Review

The purpose of the literature review was to capture existing discourse on opportunities and risks posed by digitalisation through a gender lens. Furthermore, it revealed the interaction and evolution of research on gender equality, youth and digitalisation since 2000. The literature review sought to include both scholarly publications as well as project or policy reports from international and European institutions.

In order to be included in the literature review, scholarly articles and grey literature were required to:

- focus on children and youth (up to the age of 25) (studies which also included data about adults were considered in the literature review as long as data on youth and adults was analysed separately);
- involve the access to or use of digital technologies;
- take or include a gender perspective;

• be published no earlier than 2000 (this date was selected as it is recent enough to provide the latest information on technologies and their associated opportunities/risks and dated enough to capture some transformations and change in technologies).

Four databases were used in the production of the literature review: Business Source Complete (EBSCO), Communication & Mass Media Complete (EBSCO), ISI Web of Science, and Scopus. Boolean search strings ("AND", "OR", "NOT") were employed in order to create key word combinations capturing the research questions comprehensively. Once articles and grey literature were identified, based on the Boolean search strings, researchers subsequently screened titles and abstracts to ensure adherence to criteria. The review was not restricted to English materials, although most sources were in English. After initial screening, the following data was gathered on articles in order to maintain constancy in the documentation of the literature: study details; dimension and sub-dimension(s) related to research questions; indicator(s); main findings and conclusions; implications for policy-makers; strength of evidence.

Complementary Desk Review:

The complementary desk review focused on relevant secondary literature, including reports from international/national/EU projects, curricula and guidance documents, and other relevant sources from the grey literature that were deemed insightful and relevant to the topic but that do not necessarily appear on scholarly databases. Potential sources of secondary literature included works conducted and publicly accessible by: governmental agencies; universities; corporations; research centres; civil-society organisations; and professional organisations.

1.3.2 Quantitative Section

In the first phase, a comprehensive list of 255 indicators relevant to youth, digitalisation, and gender equality was generated. Then, based on the following four selection criteria, the list was narrowed down to 93 indicators:

- 1. **Availability** of data across Member States for the age group in question (16-24), and disaggregated by sex;
- 2. Relevance of indicators in relation to the research questions;
- 3. **Reliability** and assessment of limitations (e.g. if data is flagged as 'low reliability' by Eurostat, it is not included); data from Eurostat is preferred over that of Eurobarometers. Moreover, limitations on data are assessed;
- 4. More **recent** data is preferred. 2015, 2016 and 2017 data is used. In some cases, data from 2013 and 2014 has been included because the topic was particularly relevant and was not captured by other more recent indicators.

Indicators were divided into the following four primary categories for analysis of existence of gender gaps:

- 1. Access to use
- 2. Opportunities
- 3. Risks

4. Digital skills

1.3.3 Qualitative Section

To ensure that the qualitative case studies would reflect the variety of circumstances characterising EU countries in terms of children's access to digital technologies, risks and opportunities associated with such technologies and gender equality conditions, the selection of countries for expert interviews and focus group discussions has been based on three variables : the Gender Equality Index (2015)⁶², the Digital Economy and Society Index (DESI) (2017)⁶³ and the online risks from the EU Kids Online survey (2010). DESI is a composite index that includes 31 indicators on Europe's digital performance grouped in five dimensions: connectivity (e.g. Mobile Broadband Take-up), digital skills (e.g. Internet Users, ICT Specialists), use of internet (news, social networks, shopping, etc.), integration of digital technology (elnvoices, SMEs Selling Online), and eGovernment (e.g. eGovernment Users, Online Service Completion). The EU Kids Online survey (Livingstone et al., 2011) covered children between 9 and 16 years old and their parents in 23 EU countries plus Norway and Turkey. It explored children's and parents' experiences and practices regarding risky and safer use of the internet and new online technologies in Europe, thus its scope was closely related to the one of this report. The analysis covered different risks such as looking for new friends on the internet, sexual content, online bullying, negative user-generated content, and data misuse. Based on the study results, countries were categorised as with lower risk, with some risk, and with higher risk.

The table below presents EU countries classified according those three variables.

Table 1: Classification of EU countries on the basis of EU Kids Online toponomy of risks, DESI Index and Gender Equality Index.

		DESI Index							
		Higher				Lower			
	Online	Higher	Some	Lower	Not	Higher	Some	Lower	Not
	risks	risk	risk	risk	included	risk	risk	risk	included
r :y Index	Higher	DK, SE	FI, NL, UK, IE, ES	BE	LU	-	SI	FR	-
Gender Equality	Lower	EE, LT	PT	AT, DE	MT	CZ, BG, RO	CY, PL	HU, IT, EL	LV, SK, HR

Based on this classification, a selection of 10 EU Member State was made to include one country for most categories: Austria, Estonia, France, Hungary, Ireland, Italy, Poland, Romania, Spain and Sweden. In addition to those countries, Denmark was choosen as a pilot for the methodology for focus groups.

Following the selection of countries, the research instruments were developed. These consisted of:

a) guidelines for researchers conducting focus group discussions, including detailed

⁶² http://eige.europa.eu/gender-equality-index

⁶³ https://ec.europa.eu/digital-single-market/en/desi

protocol on informed consent and confidentiality, as well as a questionnaire based on topics and sub-topics informed by the research questions;

 b) guidelines for expert interviews, including detailed protocol on informed consent and confidentiality, as well as a questionnaire with core questions and questions for specific profiles (researchers and practitioners, teachers and educational specialists, and representatives of business).

The fieldwork for this research was piloted in Denmark before it was implemented in the ten EU Member States; piloting and data collection took place between between December 2017 and the end of March 2018. Experienced moderators and interviewers in each respective country carried out focus group discussions and interviews.

1.3.3.1 Focus group discussions:

Focus group discussions were conducted in 10 Members States with girls and boys. These discussions were separated by gender, a choice which was informed based on existing literature showing that girls tend to speak more freely when there are no boys present, particularly when it comes to sensitive issues such as online risks.

Eligibility & Recruitment:

In order to be eligible to participate in a focus group discussion, girls and boys had to:

- be between the age 15-16 or 17-18 years old at the time of the discussion (each age group represented approximately 50 % of the focus group discussions)
- have active social media accounts (including but not limited to Facebook, Snapchat, Instagram, Twitter)
- use social media daily, producing and interacting with content (e.g. posting, commenting, sharing, uploading, etc)

Girls and boys were recruited primarily (although not exclusively) from schools, and the risk of overlap was mitigated: no more than three participants of each focus group discussion attended the same school, and in the event that participants were from the same school, they were not in the same class nor did they know each other well. Girls and boys were recruited from schools reflecting the religious, socioeconomic, ethnic and cultural diversity of their respective countries.

In total, 20 focus group discussions were conducted, with 63 girls and 57 boys, in each of the country's respective national language. In focus group discussions with girls, 52 % of girls were in the age group 15-16 and 48 % were in the age group 17-18. Among boys, 44 % were in the age group 15-16 and 56 % were in the age group 17-18. Focus group discussions lasted for a duration of approximately 100 minutes, and time was divided equally among opportunities and risks. All focus group discussions were recorded and subsequently transcribed for the purpose of coding.

Research Ethics:

Particular attention was given to adherence to EU as well as national child safeguarding standards and ethical and safety guidelines for research with women and girls experiencing gender-based

violence. The primary ethical issues in this project centred on informed consent, rights to withdraw, anonymity and confidentiality. Other key issues related to the management of disclosures, and to participants' potential discomfort (e.g. talking about an experience that was distressing). Moderators conducting the discussions were prepared to handle the sensitive information which could arise regarding risks online. These moderators were instructed to avoid victimizing or victimizing those who may have experienced cyber harassment in particular. Moreover, at the end of the focus group discussion, moderators informed participants they could share confidential information with them if the participants wished, and they handed out a leaflet containing contact information on local safety centres for those experiencing gender-based violence.

Consent forms have been collected for all participants according to national legislation. Where required by law, ethics reviews took place before the focus groups were conducted. The transcripts of the focus groups were anonymised and all documents safely stored.

Data Analysis:

Focus group discussions were fully transcribed and translated into English. For the analysis of focus group discussions, a common coding manual was developed to ensure a common understanding of concepts and the way these were operationalised among the research team.

1.3.3.2 Expert Interviews:

The purpose of the expert interviews was threefold:

- to gain country-specific information on opportunities and risks of digitalisation for young people, with a gender perspective;
- to provide insight and contextualisation to aid in later analysing the contents of focus group discussions;
- to enrich understanding of initiatives and policies related to gender equality, youth an digitalisation.

Six expert interviews were conducted in each country, three on the topic of opportunities afforded by digitalisation and three on the topic of risks of digitalisation, all with a gender perspective. In some cases where it was appropriate, however, experts were interviewed on risks and opportunities.

The profile of interviewees included:

- Researchers working in the area of gender equality and ICT;
- Practitioners working with young people in the areas of digital skills, political and civic participation, internet safety or similar areas (e.g. educators, NGO representatives, activists, social workers, gender equality advocates, young leaders/activists, business representatives, etc.);
- Policy makers.

Experts identified were contacted via a letter from EIGE and OSB, requesting an interview. In total, 47 experts were interviewed, 68 % of which were women. In terms of the fields of expertise, 19 % were researchers, 13 % policy-makers or representatives from relevant government agencies, 11 % from Safer Internet awareness centres or helplines, and 57 % were practitioners. These semi-structured interviews lasted approximately 60 minutes, although in the event that an expert was interviewed about opportunities and risks, the interview lasted approximately 120 minutes. All interviews were conducted in the country's national language, and English summaries were subsequently made. As with focus group discussions, experts were assured anonymity and confidentiality of their data.

The analysis of the experts' interviews followed the themes and questions laid out in the interview guidelines, namely (i) opportunities and risks of digitalisation for young people from a gender perspective (including issues related to access, participation, education, addressing online violence, etc.); (ii) the public discourse in the respective country regarding digitalisation; and (iii) any relevant policy and legislative measures and recommendations of the experts in the field.

Limitations to Focus Group Discussions and Expert Interviews:

Every effort has been taken to reduce limitations in designing, administering and analysing the qualitative data. Inevitably, however, the project has limitations, and the following should be borne in mind when interpreting and using the results:

- *Limits on sampling*: Although a certain diversity was an important criterion for the selection of focus group participants, only two focus groups took place per country with six participants each, complemented by six experts' interviews. Thus, the findings do not necessarily present the diversity of opinions and experiences in the countries.
- *Questionnaire limits*: Given the necessary time restriction of the focus groups (approximately 100 min) and of expert interviews (approximately 60 minutes), there had to be a preselection of priority topics, informed by the research questions, covered. The opportunities part of the focus groups centred on social and political participation and the risks part was limited to cover cyber harassment and sexual messaging (sexting), while some room was given to participants to suggest topics of their own.
- Research context and bias: Moderators encouraged honest answers and ensured anonymity
 and privacy. However, any survey takes place within a social context and this must be taken
 into account when analysing and interpreting the results. In certain instances, for example,
 young people may give 'socially desirable' answers rather than their real views.Furthermore,
 the guidelines for the focus group discussions and expert interviews have been carefully
 designed to promote neutral and open questions and to avoid value judgements. It should
 be kept in mind, though, that the moderators/interviewers can never be fully neutral; they
 are a member of a racial group, an age cohort and a gender: any one of these factors can
 inhibit or promote openness within the group or the interviewee.

Annex II: Proposed list of BPfA indicators

Critical area of concern L: The girl child

The Council of the European Union took note of four indicators in the Area L proposed by the Slovenian (2008) and Estonian (2017) Presidencies. They respond to three out of nine BPfA strategic objectives in this area. The table below reviews the current situation and data sources⁶⁴.

	Strategic objectives of Area L	Existing indicators	Data Source
L1	Eliminate all forms of discrimination against the girl child	Sex and relationship education: parameters of sexuality-related education in schooling (primary and secondary)	International Planned Parenthood Federation (IPPF) and World Health Organisation (WHO)
L2	Eliminate negative cultural attitudes and practices against girls	Body self-image: dissatisfaction of girls and boys with their bodies	Survey of Health Behaviour in School aged Children (HBSC)
L3	Promote and protect the rights of the girl child and increase awareness of her needs and potential	 15-year-old girls and boys: performance in mathematics & science. Proportion of all and top performers girls and boys in science aged 15 expecting to work in science-related occupations at age 30. 	OECD PISA Survey
L4	Eliminate discrimination against girls in education, skills development and training		
L5	Eliminate discrimination against girls in health and nutrition		
L6	Eliminate the economic exploitation of child labour and protect young girls at work		
L7	Eradicate violence against the girl child		
L8	Promote the girl child's awareness of and participation in social, economic and political life		
L9	Strengthen the role of the family in improving the status of the girl child		

Table 1: Overview of objectives, indicators and data sources related to the Area L:

Digitalisation affects numerous areas of life, including relationships, body self-image, performance at school, as well as expectations to work in certain areas of the labour market, including science-related occupations. These areas are intrinsically linked to key dimensions of gender inequality across all Member States such as gender stereotypes and structural inequalities (e.g. gender-

⁶⁴ More information on Beijing Platform for Action indicators is available at EIGE's Gender Statistics database: http://eige.europa.eu/gender-statistics/dgs

segregation of study fields and labour markets) (EIGE, 2017c, 2018). This was recently reflected in the Council's call for action on reducing gender segregation in education and employment, inter alia via "introducing both girls and boys to ICT and care-related skills starting from an early age, with a particular focus on inspiring more girls to develop and maintain an interest and talent in the digital field and more boys to do the same in care-related fields"⁶⁵.

The analysis within this report stresses the importance to keep monitoring all current Area L indicators, given gender inequalities in the "offline" world are often further perpetuated and aggravated in digital spaces. In addition, consistent monitoring of specific gender impact of digitalisation on female and male youth is urgently needed. In this context, four new indicators are proposed. They cover both opportunities and risks of digitalisation and contribute to different strategic objectives of the area L:

- L3: Digital skills
- L3: Confidence in using digital technologies
- L8: Digital civic and political participation
- L7: Exposure to cyber violence

Description of new indicators

Indicator 1: Share of young women and men (aged 16-19) with above-basic digital skills

This indicator consists of four sub-indicators, which measure digital skills in four specific domains⁶⁶:

- a) Information skills;
- b) Communication skills;
- c) Problem solving skills; and
- d) Software skills.

Levels of digital skills not only determine how a person can use digital technologies, but also how and to what extent a person can engage in various acitvities online. Though digital skills in using Internet are evaluated on the basis of what a person actually does online, such skills reflect both digital competencies per se and motivation/ability to have certain types of digital engagement.

The large and growing role of digitalisation to the economy and society highlights a need of monitoring gender divides in the levels of digital skills. On the one hand, gender gaps in digital skills point to barriers in their attainment. On the other hand, unequal opportunities to utilise digital skills in the labour market, economy or private life lead to major problems of gender pay gap, women's economic dependence and exclusion. Closing gender gaps in digital skills is both a target of and a prerequisite to various dimensions of inclusive societies.

The proposed indicator enables the monitoring of objectively evaluated levels of digital skills in using internet by the EU youth. On the basis of Eurostat data, the indicator helps to trace progress of the overall level of digital skills and of the following specific digital skills: information, communication, problem-solving and software skills. As shown in the table below, the EU gender gap in overall digital

⁶⁵ http://data.consilium.europa.eu/doc/document/ST-14624-2017-INIT/en/pdf

⁶⁶ http://ec.europa.eu/eurostat/cache/metadata/en/tepsr_sp410_esmsip.htm

skills is currently highly associated with the gap in problem solving digital skills, which is predominantly to the detriment of girls. In majority of the EU Member States, boys have lower information and communication digital skills.

Since digitalisation is profoundly shaping labour market and job creation, possessing advanced digital skills across various domains is becoming critical in a growing number of professional sectors. Monitoring the level of skills among young people and gender gaps should help policy-making to ensure that all young people are equipped with the skills needed for their full professional and social inclusion now and in the future.

MS	Ove	erall digital	skills	In	formation sl	kills	Commu	nication s	skills	Probl	em solvin	g skills	So	oftware sk	cills
BE	42	43	-1	77	80	-3	89	90	-1	63	66	-3	56	57	-1
BG	25	21	4	64	57	7	85	83	2	41	38	3	41	36	5
CZ	54	50	4	89	84	5	98	94	4	76	78	-2	68	63	5
DK	71	79	-8	94	93	1	99	96	3	82	90	-8	83	85	-2
DE	60	61	-1	87	86	1	93	91	2	76	81	-5	80	77	3
EE	81	73	8	90	94	-4	98	94	4	95	88	7	94	87	7
IE	60	59	1	84	72	12	98	90	8	65	62	3	60	79	-19
EL	32	36	-4	83	84	-1	89	87	2	41	56	-15	70	62	8
ES	55	68	-13	85	84	1	88	91	-3	66	80	-14	80	87	-7
FR	62	62	0	89	82	7	80	78	2	77	80	-3	87	77	10
HR	52	65	-13	89	83	6	96	94	2	66	84	-18	76	80	-4
IT	:	:	:	:	:	:	72	70	2	:	:	:	:	:	:
CY	29	24	5	84	80	4	91	90	1	49	43	6	56	40	16
LV	74	62	12	94	90	4	97	89	8	93	82	11	85	78	7
LT	69	64	5	91	87	4	96	90	6	85	88	-3	80	71	9
LU	80	83	-3	95	94	1	97	97	0	87	88	-1	96	95	1
HU	36	54	-18	82	80	2	92	92	0	57	71	-14	58	62	-4
MT	81	67	14	89	100	-11	92	98	-6	85	90	-5	85	67	18
NL	75	79	-4	92	91	1	94	94	0	86	90	-4	81	86	-5
AT	74	80	-6	90	93	-3	97	94	3	84	95	-11	89	90	-1
PL	44	45	-1	81	77	4	94	87	7	59	64	-5	75	70	5
PT	66	67	-1	94	80	14	99	94	5	71	75	-4	90	88	2
RO	19	19	0	56	59	-3	81	80	1	47	45	2	35	35	0
SI	73	52	21	96	83	13	96	84	12	76	70	6	92	70	22
SK	48	68	-20	85	92	-7	90	94	-4	66	90	-24	69	76	-7
FI	82	81	1	96	97	-1	100	97	3	92	93	-1	88	91	-3
SE	63	73	-10	88	80	8	89	87	2	90	81	9	72	80	-8
UK	64	86	-22	79	86	-7	97	93	4	87	86	1	89	93	-4
EU28	55	59	-4	81	80	1	89	87	2	72	75	-3	77	75	2

Table 2. Share of young women and men (aged 16-19) with above-basic digital skills (%, 2017)

Source: Eurostat database (dataset isoc_sk_dskl_i)

Note: Data is missing for IT; Data is of low reliability for IE, HR, MT, SI, FI, SE, UK.

Definition of each domain, together with a list of activities used to measure digital skills in that domain, is presented in the table below:

	Information skills	Communication skills	Problem solving skills	Software skills
Definition of skill domain	Identify, locate, retrieve, store, organise and analyse digital information, judging its relevance and purpose.	Communicate in digital environments, share resources through online tools, link with others and collaborate through digital tools, interact with and participate in communities and networks, cross- cultural awareness.	Identify digital needs and resources, make informed decisions as to which are the most appropriate digital tools according to the purpose or need, solve conceptual problems through digital means, creatively use technologies, solve technical problems, update one's own and others' competences.	Create and edit new content (from word processing to images and video); integrate and re- elaborate previous knowledge and content; produce creative expressions, media outputs and programming; deal with and apply intellectual property rights and licences.
Activities to measure digital skills	Copied or moved files or folders; Saved files on Internet storage space; Obtained information from public authorities/se rvices' websites; Finding information about goods or services; Seeking health-related information.	Sending/receiving emails; Participating in social networks; Telephoning/video calls over the internet; Uploading self- created content to any website to be shared.	Transferring files between computers or other devices; Installing software and applications (apps); Changing settings of any software, including operational system or security programs. Online purchases (in the last 12 months); Selling online; Used online learning resources; Internet banking.	Used word processing software; Used spreadsheet software; Used software to edit photos, video or audio files. Created presentation or document integrating text, pictures, tables or charts; Used advanced functions of spreadsheet to organise and analyse data (sorting, filtering, using formulas, creating charts); Have written a code in a programming language.

Table 3. Definition of digital skills and summary of activities used to measure them

Source: http://ec.europa.eu/eurostat/cache/metadata/en/tepsr_sp410_esmsip.htm

It is assumed that individuals having performed certain activities have the corresponding skills. Therefore the indicator can be considered as proxy of the digital competences and skills of individuals. According to the variety or complexity of activities performed, two levels of digital skills ("basic" and "above basic") are computed for each domain. Individuals are considered to have above basic overall digital skills if they have above basic skills in all four domains.

Data source: Eurostat database. The data is collected through the Community survey on ICT usage by households and individuals. This is an annual survey collecting data on the use of information and communication technologies, the internet, e-government and electronic skills in households and by

individuals.⁶⁷ The survey questionnaire changes every year. The changes of questions are required by the evolving situation of information and communication technologies.⁶⁸

Published: The data is published in the online Eurostat database (http://ec.europa.eu/eurostat/data/database, dataset code isoc_sk_dskl_i)

Notes: Data collection on overall digital skills covers EU Member States, Candidate countries, Iceland and Norway. It is available since 2015 on annual basis. However, for some Member States, there may be issues with data reliability. For example in 2017, the data could not be published for Italy and published estimates were considered of low reliability for several countries (IE, HR, MT, SI, FI, SE, UK).

Indicator 2: Share of girls and boys (aged 15-16) who feel confident performing certain tasks with digital technlogies

This indicator consists of three sub-indicators:

- a) The share of girls and boys who feel comfortable using digital devices that they are less familiar with;
- b) The share of girls and boys who feel that they can start solving a problem with digital devices on their own; and
- c) The share of girls and boys who feel that they can install new software they need by themselves.

The indicator enables the monitoring of youth confidence in using digital technologies at age 15 and 16 as a relatively early indication of subsequent ability and aspirations to be digitally engaged, either for civic, political, career or personally-fulfilling aims. Confidence or self-efficacy in using digital technologies is not only influenced by gender stereotypes, but also plays a key role in how digital literacy is formed and subsequently applied. Knowledge of youth digital self-efficacy at this age can enable relatively early policy interventions in ensuring adequate school curriculum and peer advice that could also address gender stereotypes in private life and labour market afterwards. The report has shown that digital gender divides are numerous. In order to achieve a real progress towards more inclusive digital societies, both actual digital skills as well as perceptions about digital skills need to be addressed simultaneously.

The proposal is to monitor the selected dimensions of youth digital confidence as available within already existing surveys, such as on ICT familiarity, which is provided by OECD/PISA survey: 1) feeling comfortable to use a wide range of digital devices, 2) being confident enough to look for problem solving solutions by yourself and 3) being confident enough to install software on digital technologies by yourself. The gender gaps in all these dimensions are currently to the detriment of girls across all Member States (Table 3).

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http://ec.europa.eu/eurostat/statistics-

explained/index.php/Glossary:Community_survey_on_ICT_usage_in_households_and_by_individuals ⁶⁸ http://ec.europa.eu/eurostat/cache/metadata/en/isoc_i_esms.htm

Table 4. Share of girls and boys (aged 15-16) who feel confident performing certain tasks with digital technlogies in the EU Member States (%, 2015)

	ital technogies in the EO Member States (%, 2015)									
		eling comf			-	nt to start	Feeling confident enough			
	-	digital dev			solving a problem with			to install the software on		
	one	is less fam		digita	digital devices by yourself			digital technologies		
			Gender			Gender			Gender	
MS	Girls	Boys	gap	Girls	Boys	gap	Girls	Boys	gap	
BE	65	76	-11	70	83	-13	49	74	-25	
BG	60	68	-8	60	76	-15	40	66	-26	
CZ	70	79	-9	74	86	-12	28	67	-39	
DK	75	87	-12	68	86	-18	52	78	-26	
DE	58	73	-15	65	85	-20	50	80	-30	
EE	60	75	-15	56	82	-26	54	82	-29	
IE	66	75	-9	77	85	-8	54	71	-17	
EL	62	71	-8	62	77	-14	34	57	-23	
ES	68	76	-8	71	83	-11	57	74	-17	
HR	81	83	-2	81	87	-5	39	68	-28	
IT	57	66	-9	65	79	-15	52	71	-19	
LV	47	60	-13	59	78	-19	57	78	-21	
LT	56	61	-5	71	81	-10	56	74	-18	
LU	57	67	-10	77	86	-9	53	76	-22	
HU	77	81	-4	78	85	-7	43	77	-34	
NL	59	69	-10	75	87	-12	50	76	-26	
AT	37	53	-16	79	86	-7	50	75	-25	
PL	72	78	-6	82	88	-6	45	74	-29	
PT	78	87	-9	58	79	-21	40	67	-28	
SI	72	79	-7	54	77	-23	43	71	-29	
SK	65	73	-8	52	72	-20	31	62	-32	
FI	34	59	-25	70	86	-17	79	89	-10	
SE	70	82	-12	72	88	-17	55	82	-28	
UK	75	81	-6	74	86	-12	59	79	-20	
EU-28	63	73	-10	69	83	-14	49	73	-25	

Source: OECD, Programme for International Student Assessment (PISA; ICT familiarity). *Note: Data is missing for CY, FR, MT, RO.*

Data source: The calculation of the indicator is based on OECD PISA (Programme for International Student Assessment) data collection: http://www.oecd.org/pisa/. More specifically, the data is collected through the PISA 2015 ICT familiarity questionnaire. This optional questionnaire assesses students' interest in ICT, (self-determined) practices of ICT use and their perceived competence and autonomy in using ICT. Students can complete it in about five minutes, after they have completed the main student questionnaire.⁶⁹

Published: This indicator was calculated from PISA data available on the PISA website (http://www.oecd.org/pisa/data/2015database/) under the section 'Student questionnaire data file'.

Notes: In 2015, data covered all EU Member States (except Cyprus, France, Malta and Romania) and

⁶⁹ http://www.oecd.org/education/pisa-2015-assessment-and-analytical-framework-9789264281820-en.htm

other OECD member countries. The PISA data is collected every three years, with next data collection taking place during 2018. Included in the last three rounds of data collection (since 2009), the ICT familiarity questionnaire is a stable part of the PISA survey.

Indicator 3: Share of young women and men (aged 16-19) who use the internet for civic or political participation

The indicator enables monitoring of civic and political participation online by young women and men across the EU. Two aspects of civic or political participation are considered: posting opinions on civic or political issues via websites (e.g. blogs, social networks, etc.); and taking part in on-line consultations or voting to define civic or political issues (e.g. urban planning, signing a petition).

The indicator assesses young people's engagement with public affairs and democratic life, especially for an age group that has not necessarily reached the legal voting age. It supports the monitoring of gender differences in some forms of active citizenship of youth in the digital age. The report has shown that despite very high levels of engagement on online social networks of both female and male youth, young women tend to be less involved in following debates and even less so in actively taking part in debates online. They are similarly less likely to post opinions on political issues and take part in online consultations or voting. This shows a continuum of gender-related barriers affecting girls and young women's active political participation online and offline.

Table 5: Share of young women and men (aged 16-19) who use the internet for civic or politicalparticipation (%, 2017)

	Young	Young	Gender
MS	women	men	gap
BE	8	6	2
BG	13	12	1
CZ	8	5	3
DK	28	34	-6
DE	21	22	-1
EE	17	15	2
IE	21	3	18
EL	7	11	-4
ES	20	22	-2
FR	18	15	3
HR	12	28	-16
IT	21	21	0
CY	7	6	1
LV	13	9	4
LT	18	15	3
LU	35	36	-1
HU	3	12	-9
MT	44	39	5
NL	14	20	-6
AT	3	11	-8
PL	13	11	2

PT	17	23	-6
RO	8	13	-5
SI	4	7	-3
SK	4	14	-10
FI	8	19	-11
SE	27	34	-7
UK	13	35	-22
EU28	16	20	-4

Source: Eurostat database (dataset isoc_ci_ac_i) Note: Data is of low reliability for IE, HR, MT, SI, FI, SE, UK

Data source: Eurostat database. The data is collected through the Community survey on ICT usage by households and individuals. This is an annual survey collecting data on the use of information and communication technologies, the internet, e-government and electronic skills in households and by individuals.⁷⁰ The survey questionnaire changes every year. The changes of questions in the are required by the evolving situation of information and communication technologies.⁷¹

Published: The data is published in the online Eurostat database (http://ec.europa.eu/eurostat/data/database, dataset code isoc_ci_ac_i)

Notes: Data collection on civic and political participation covers EU Member States, Candidate countries, Iceland and Norway. It is available every second year since 2013. However, for some Member States, there may be issues with data reliability. For example in 2017, published estimates were considered of low reliability for several countries (IE, HR, MT, SI, FI, SE, UK).

Indicator 4. Share of girls and boys (aged 15) who have been cyberbullied by messages or by pictures at least once

This indicator consists of two sub-indicators:

- a) The share of girls and boys (aged 15) who have experienced cyberbullying by messages at least once (i.e. have received mean instant messages, wall-postings, emails and text messages)
- b) The share of girls and boys (aged 15) who have experienced cyberbullying by pictures at least once (i.e. posting unflattering or inappropriate pictures online without permission).

Participation in public and political life, whether online or offline, is still fraught for women. The report has shown that exposure to online abuse disproportionately affects young women. It can have far-reaching effects on their engagement online, including that of political and civic participation. After witnessing or experiencing online hate speech/abuse, 51 % of young women and 42 % of young men in the EU hesitate to engage in social media debates due to fear of experiencing abuse, hate speech or threats.

EIGE's qualitative research (focus group discussions with 15-18 years old girls and boys) also highlights that girls and boys have internalised the risk of agression online either from peers, including intimate partners, or from people they do not know. Girls are particularly aware of risks of

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http://ec.europa.eu/eurostat/statistics-
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explained/index.php/Glossary:Community_survey_on_ICT_usage_in_households_and_by_individuals ⁷¹ http://ec.europa.eu/eurostat/cache/metadata/en/isoc_i_esms.htm

having images of them disseminated without their consent. These risks need to be closely monitored to ensure that young people can use digital technologies safely and to the fullest, regardless of their gender.

The Health Behaviour in School-Aged Children (HBSC) survey by the World Health Organization has included cyberbullying for the first time in 2013. It asked school children aged 11, 13 and 15 if they have experienced cyberbullying, either through messages or through pictures. This indicator gives an indication on the level of prevalence of cyber violence against girls and boys.

The proposal is to monitor the share of 15 years old girls and boys who have experienced cyber bullying either by messages or by pictures at least once:

- 1) Cyberbullying by messages. Young people were asked whether they had experienced anyone sending mean instant messages, wall-postings, emails and text messages.
- 2) Cyberbullying by pictures. Young people were asked whether they had experienced anyone posting unflattering or inappropriate pictures online without permission.

The table below shows the higher levels of victimisation experienced by girls across two forms of cyberbullying.

	-	llying by sages	Cyberbullying by pictures		
MS	Girls	Boys	Girls	Boys	
BE (Flemish	15	6	8	5	
Community)					
BE (French	12	9	7	7	
Community)					
BG	18	16	10	15	
CZ	13	6	7	5	
DK	6	7	18	13	
DE	8	3	6	4	
EE	9	8	18	13	
IE	23	9	26	11	
EL	4	4	1	3	
ES	6	9	6	10	
FR	10	4	5	3	
HR	14	10	8	11	
IT	8	4	5	8	
LV	16	14	15	15	
LT	26	22	13	18	
LU	12	7	5	8	
HU	22	17	13	11	
MT	17	16	14	14	
NL	11	8	11	9	
AT	8	7	3	5	

Table 6: Share of girls and boys (aged 15) who have been cyberbullied by messages or by pictures at least once, by EU country (%, 2013/14)

	-	llying by ages	Cyberbullying by pictures	
MS	Girls	Boys	Girls	Boys
PL	15	11	13	10
PT	13	8	6	8
RO	18	11	6	6
SI	14	10	7	8
SK	12	10	10	10
FI	10	7	9	9
SE	9	4	7	6
UK	20	11	18	9
(England)				
UK	19	12	15	8
(Scotland)				
UK (Wales)	19	10	12	8
EU-27*	11.8	7.2	8.7	7.1

Source: EIGE's calculations from HSBC 2013/2014.

Note : *Cyprus is not included. Data for Nothern Ireland is not available. Available at

www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1 on page 273/274

Data source: The calculation of the indicator is based on the WHO Health Behaviour of School-Aged Children study

Published: This indicator was calculated from the data published in the report "Growing up unequal: gender and socio-economic differences in young people's health and well-being" from the 2013/2014 survey. The report is available at the following link and data is presented on pages 273/274: www.euro.who.int/__data/assets/pdf_file/0003/303438/HSBC-No.7-Growing-up-unequal-Full-Report.pdf?ua=1

Notes: For the 2013/2014 survey, data for Cyprus is not available so data for Europe is presented for EU-27. In addition, data for Northern Ireland is not available.

Annex III: Analysis of current data gaps

Access and use of digital technologies

Data on access to and use of digital technologies is well covered by Eurostat, providing information on whether youth access the internet and computers (daily computer and internet use) and the devices that they use to do so. However, due to the recent expansion of new technologies, some of the indicators are not incredibly relevant. For example, indicators referring to computer use may no longer be as pertinent given that now the Internet can be accessed via multiple devices. Moreover, a large part of the youth population replies affirmatively to whether they have used the internet in the last 3 months, and most also to whether they use it daily.

In order to analyse the level of use more in detail, it would be more useful to ask about how much time is spent daily on the internet, as does the EU Kids online survey that reports the number of minutes online per day.

To allow for an intersectional analysis, Eurostat data can currently be analysed according to level of income of the household and in terms of rural/urban divide. Additional intersections would be particularly welcome, however, regarding youth access to and use of digital technologies, especially among persons with disabilities and those with migration status. With the exception of the PISA ICT familiarity survey which presents data for native born, first generation and second generation migrant youth, migration breakdown is not currently available, thus depriving researcher and policy makers from important information on how digital technologies are (or are not) supporting social inclusion for marginalised youth.

Social and political participation online

The indicators already mentioned in regard to access and use would also be helpful in order to obtain more insights on the impacts that online risks may have on young women and young men. Eurostat already reports some reasons for not submitting completed forms to public authorities' websites (e.g. preference for personal contact, lack of skills or knowledge, concerns about protection and security of personal data). Likewise, the European Parliament Post-Election survey (2014) collects information on the reasons for not voting (e.g. no time or at work, lack of trust with politics in general, not interested in politics, perception that own participation has no impact). These elements could also be asked with regards to reasons for not engaging in online political and social participation in particular. In line with the literature review, other reasons for not engaging that could be investigated are unwillingness to post political content which is likely to offend or concerns about being a victim of online harassment, cyber stalking, or sexist hate speech.

Gender-based cyber violence

There is currently a lack of quantitative data on specific types of online harassment. Some indicators reflect the risks that girls and young women and young men can encounter online. However, only a few risks are covered: misuse of personal data, hate speech, material promoting racial hatred or

religious extremism, and online harassment. These are addressed from a general point of view and the gendered implications of them are not interrogated in depth. One exception is the indicator *Individuals who hesitate to engage in social media debates due to having heard, read, seen or experienced cases of abuse, hate speech or threats* (Special Eurobarometer 452). This indicator gives some insight on elements that could prevent young women and young men from political and social participation. That being said, the indicator itself remains too general and does not give information on the type of abuse, hate speech or threats and whether they refer to sexist hate speech. More indicators of a similar style would be needed to obtain a more comprehensive picture.

There are other risks of digital technologies affecting children and youth which are mentioned in the literature review but that are not currently covered by quantitative data, such as online intimidation involving threats of sexual violence, technological attacks that shut down feminist blogs and websites, sexting, online sexual solicitation, gendertrolling, cyber stalking, and non-consensual pornography (Albury & Crawford, 2012; Bailey et al., 2013; Baumgartner, 2017; Gurumurthy, 2014; Lumsden & Morgan, 2017; (EIGE, 2017a). There are no indicators, for example, to measure what percentage of young women and young men are experiencing these issues in EU countries, nor are there indicators on how it affects them.

Overal, data on cyber gender based violence in the EU is scarce and inconsistent across Member States; consequently, little is known about the actual percentage of victims of cyber VAWG and the prevalence of harm (EIGE, 2017a). The best information available at EU level comes from the European Agency for Fundamental Rights' (FRA) European Survey on Violence against Women (VAW), which included questions on cyber stalking and cyber harassment. However, this survey only interviewed adult women (FRA, 2014). For children, the Health Behaviour in School-Aged Children (HBSC) survey by the World Health Organization has included cyberbullying for the first time in 2013. It asked school children aged 11, 13 or 15 if they have experienced cyberbullying, either through messages or through pictures. This indicator gives an indication on the level of prevalence of cyber violence against boys and girls. This indicator is among the ones suggested by EIGE to be included in the monitoring of the Beijing Platform for Action. More details can be found in Annex II: Proposed list of BPfA indicators.

The latest version of the HSBC questionnaire has also included a question on perpetuation of cyberbullying. It will provide information on wether children have cyberbullied someone and how often. This development is likely to enrich the analysis of the gender dynamics of online violence.