

HOW MISINFORMATION AND DISINFORMATION ONLINE AFFECT THE LIVES, LEARNING AND LEADERSHIP OF GIRLS AND YOUNG WOMEN

TECHNICAL REPORT

THE STATE OF THE WORLD'S GIRLS 2 0 2 1

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ABBREVIATIONS

BJP	Bharatiya Janata Party
BLM	Black Lives Matter
CAPI	Computer Assisted Personal Interviewing
CATI	Computer Assisted Telephone Interviewing
CAWI	Computer Assisted Web-Interviewing
CBC	Canadian Broadcasting Company
CCDH	Centre for Countering Digital Hate
CEDAW	Convention on Ending Discrimination Against Women
CEFM	Child and Early Forced Marriage
EU	European Union
GGE	Girls Get Equal
IDG	International Day of the Girl
LGBTIQ+	Lesbian Gay Bisexual Transgender Intersex or Questioning
LOI	Below-acceptable Length of Interview
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
PISA	Program for International Student Assessment
MIL	Media and Information Literacy
SOTWG	State of the World's Girls Report ¹
SRHR	Sexual and reproductive health rights
STEM	Science, Technology, Engineering and Mathematics
UK	United Kingdom
UNCRC	UN Convention on the Rights of the Child
UN ICCPR	International Covenant on Civil and Political Rights

1. EXECUTIVE SUMMARY

This year, Plan International's annual State of the World's Girls report is based on surveys conducted across 26 countries with over 26,000 girls and young women and 22 interviews with female youth activists from 18 countries. The study aimed to understand how online access is contributing to and changing the way girls' and young women find information and learn in the world.

Our research demonstrates that being online is a fundamental part of girls and young women's daily lives, 55 per cent of girls and young women spend more than seven hours a day online; 16 per cent spend more than twelve hours a day online. They engage with array of important topics such as COVID-19, news and current affairs and health and physical wellbeing, to connect with like-minded people all over the world, access information on these topics and use the information to learn and enhance their activism. Girls and young women are also using online platforms to seek out information not readily available to them at home:

"On the issue of sexuality. I didn't really have a chance to get to talk about the issue, or what happens when you're growing up, because in my country, adults, they don't really talk about those issues. So, the only place I will learn about everything is through the internet." Lisa, 22, Malawi

Our youth activists revealed the **opportunities learning online had created** in their activism journey: online platforms are a resource for girls and young women both to gain and share knowledge on the topics that matter to them.

Being online has a huge influence on girls and young women, **93 per cent of girls and young women surveyed have been influenced by online information** and 43 per cent said it helped them understand and feel more confident about the topics they care about. Online spaces and information have played an even bigger role during the COVID-19 pandemic, causing five out ten girls and young women globally to change their behaviour during COVID-19 and seven out of ten in Africa and the Middle East.

91% of girls and young women surveyed are concerned about misinformation and/or disinformation online.

The topic that most girls and young women have seen misinformation and/or disinformation on is COVID-19 (59 per cent), followed by politics and elections (40 per cent) and news and current affairs (38 per cent). This is having real effects, for example, 40 per cent of girls and young women from Africa and the Middle East have questioned whether to get the COVID-19 vaccine because of misinformation online. Our youth activists highlighted that often the burden of concern goes back to them as they worry about accidently sharing wrong information.

Seven out of ten girls and young women who participated in the 26-country survey have seen misinformation and disinformation on social media platforms. Only 4 per cent of the girls and young women who participated in the survey think that no social media platform has misinformation and/or disinformation. The majority of girls and young women (65 per cent) believe that Facebook is the social media platform with the most misinformation/disinformation

While misinformation and disinformation effects everyone, the youth activists shared experiences of targeted gendered disinformation. False information particularly aimed at girls such as articles online saying using "tampons causing cancer". Additionally, we see how intersectionality, including gender and race, disability and gender, and gender and sexual identity attracts greater abuse and those from minority groups are more likely to be targeted with disinformation online

Girls and young women are resorting to their own methods to deal with the phenomena, changing their approaches to how they look for and share information, stopping using certain platforms or blocking those who shared misinformation and disinformation. However, some of the youth activists highlighted that they felt jaded and tired from the constant bombardment of wrong information.

Girls and young women have had to develop their own strategies to cross-check and validate information. Close to all girls and young women (97%) use at least one strategy to assess whether online information is truthful: about half cross-check online information with other sources or check if the source is backed up by evidence, while one in five use a fact-checking tool. Even when specifically asked who they sought help from, most of the young activists confirmed it was up to them alone to tackle the phenomena.

Misinformation and disinformation had a negative effect on 87% of the 26247 girls and young women we surveyed.

The negative effects of misinformation and disinformation are being felt by girls and young women across the world. About half of the girls and young women surveyed have felt sad, depressed, stressed, worried or anxious because of misinformation or disinformation online. The youth activists described experiences of online harassment for not sharing misinformation while others described being victims of blackmail and false rumours by abusers as a form of intentional disinformation against their reputations.

<u>Misinformation restricts girls' voices</u>: one out of four girls feel less confident to share their views and one out of five stopped engaging in politics or current affairs as a result of misinformation and/or disinformation online. Many of the girls and young women felt misinformation and disinformation had caused at least some barriers. Some of the youth activist noted they were afraid to disagree with people online because people often react aggressively, one of them shared that she was bullied online both by people she knew and didn't know for having different opinions in relation to a topic. Others stated that they avoid being active on politics.

Seven out of ten girls and young women have never been taught about spotting misinformation and/or disinformation at school or by family members. Importantly, girls and young women who have been taught about misinformation and disinformation are statistically significantly more likely to:

- feel able to spot misinformation/disinformation online (58%), compared to those who have never been taught about this (42%)
- have ever seen misinformation/disinformation online (92%) compared to those who have never been taught about this (79%)
- **be concerned about misinformation/disinformation online** (92%) compared to those who have never been taught about this (86%).

This highlights the importance of digital media literacy in tackling the issue. Girls and young women want social media companies (20 per cent), governments (18 per cent) and news and media companies (16 per cent) to take responsibility for identifying and countering misinformation and/or disinformation online.

Governments must:

- **Provide** comprehensive digital media literacy programmes, including in school curricula, to meet the specific needs of girls and young women and support gender equality
- **Meaningfully engage** girls and young women in discussions on digital media literacy and on regulation, ensuring that their experiences are reflected: and provide financial and technical support to young feminist organisations and groups working on girls' rights: digital, civil and political.

Online Platforms must:

• **Recognise and address** the implications of misinformation and disinformation on girls specifically, connecting this with efforts to address targeted online violence against women and girls.

"The first topic I like to research online is human rights to get informed about this topic: this is the main topic related to my activism, the human rights of girls and young women." Lisa, 15, Brazil

2. INTRODUCTION

This technical research report sets out detailed findings of a study conducted in 2021 by Plan International on how girls' and young women's exposure to online spaces is shaping how they learn about the issues that matter to them and how their knowledge and learning is positively or negatively affected by information and ideas on the internet. This technical research report forms the basis of the 2021 State of the World Girls Report (SOTWG).

The State of the World's Girls Report is released every year for International Day of the Girl on 11 October. The report contains the annual, signature research for Girls Get Equal (GGE), a Plan International campaign for girls' voice and power, championing their leadership in the drive for gender equality. For girls and young women to lead change themselves, people in power and decision-makers need to be held accountable to ensure girls have equal power and are able to make decisions that affect their lives, have equal freedom to speak up in public, and equal representation, with an end to the harmful gender stereotypes that hold girls back. These three aspects of gender equality – power, freedom and representation – that form the foundation of the GGE campaign are grounded in a human rights approach that stems from international instruments such as the UN Convention on the Rights of the Child (UNCRC) and UN Convention on Ending Discrimination Against Women (CEDAW).

As set out in the **Girls Get Equal** Strategic Framework, for the 'Equal Freedom Online' component, the GGE campaign is calling on 'governments and digital platforms to take active steps to make girls' and young women's safety online a reality,' so they can confidently and knowledgably engage in political, civic or social debates and be safe and active in the world.

To support this campaign, the research aims to understand how access to the internet is contributing to and changing the way girls' and young women learn in the world, acknowledging that online spaces can be positive and enhance how girls and young women shape their knowledge, perspectives and opinions. The aim of this study, set out in more detail below, seeks to uncover girls' and young women's experience of accessing information online – including misinformation and disinformation - to learn about the civic, political and social issues that matter to them most.

Scope and aims of the research

Adolescence is commonly defined as the second decade of life.^{2,3} The age of 10 to 19 years signifies a particularly critical phase in life for both girls and boys when many transitional social, economic, biological, and demographic events set the stage for adult life. However, girls still face major barriers to their development. Girls' unequal access to their rights and basic services from childhood to adulthood, such as nutrition, education, and healthcare, followed by their unequal access to economic and financial resources as they enter early adulthood, is well documented. While aged 10 to 24 years of age covers the entire journey through adolescence into young adulthood that girls need to navigate, we decided to focus this research on adolescent girls and young women aged 15 to 24 years. This is largely due to wanting to focus on girls and young women who were active on issues in the public sphere which we were more likely to find by investigating the issues with older adolescent girls and young women.

Adolescent girls' and young women's knowledge, opinions and civic dispositions are constituted through their relationships with their peers and family but also through their relationships with 'technology'. The internet serves as an information resource and a tool for civic engagement and political participation among young people, but it also offers complex challenges and opportunities. Young people are increasingly turning to online platforms, including social media to learn about, engage with, and share information about COVID-19, the erosion of civic freedoms, politics, and social movements like Me Too, Fridays for Future climate activism, Ni Una Menos and Black Lives Matter, just to name a few.

Technology offers unprecedented access to information – from legitimate information, to inaccurate information and even simply dangerous information and images – as well as the potential to support informed debate and decision-making. It is widely recognised that access to reliable information is being increasingly compromised, the internet and particularly social media has played an active role in increasing polarisation with trust being destabilised and healthy debate made increasingly difficult.

As such girls' knowledge and learning can be shaped positively or negatively by information and ideas on the internet. While online access is exponentially increasing year on year the digital gender gap

² World Health Organisation, 'Adolescence: a period needing special attention', World Health Organisation, 2014, retrieved 16 June 2021, <u>https://apps.who.int/adolescent/second-decade/section2/page1/recognizing-adolescence.html</u>.

³ J Pringle, K Mills, J McAteer et al., 'A systematic review of adolescent physiological development and its relationship with health-related behaviour: a protocol.' *Syst Rev*, vol. 5, no. 3, 2016.

remains high. There are 250 million fewer women than men online.⁴ In today's world, girls and boys need the skills and ability to deal effectively with a potentially endless stream of online information but also need the skills and critical thinking to be able to search, organise, and filter out misinformation and disinformation. If girls who do not have access to online devices and high-quality connectivity to verify information and learn online, they risk being left behind. The internet opens the whole world to girls and presents opportunities for learning beyond formal and informal education. It is imperative to ensure that this informal learning is grounded in truth and that girls and young women are in a position to avoid compromised information as they learn.

First, the overarching aim of the research is to understand how girls are accessing information related to current and civic affairs and other democratic information online and what are their behaviours and practices online when accessing this information. We aim to find out if girls are able to find accurate content and identify misinformation and disinformation online and what their concerns and fears are around navigating information online in order to enhance their learning. There is a tremendous amount of knowledge on the pitfalls of misinformation and disinformation, but there is little information on how this affects girls and young women as they navigate online spaces to learn and become more active on issues that are important to them.

Second, we therefore aim to understand if the internet acts as an enabler or barrier for engaging girls in the public sphere and creating new forms of political and civic participation among girls and young women. Are girls and young women ultimately able to make informed choices online to engage with civic topics and voice opinions when connecting confidently and knowledgably with peers and institutions on the issues they care about?

Finally, we seek to understand how to prepare girls and young women to navigate information online and discover what mitigation strategies girls and young women identify in order for them to be able to access safe reliable information.

To sum up, the research explores how adolescent girls and young women engage with political, civic or social topics online, the sources that they get information from, the influence of online information on their activism, their concerns about misinformation and disinformation online, the challenges brought about due to false information online, the impact of misinformation and disinformation and strategies for tackling the issue.

The research was conducted across 33 countries, involving a survey with over 26,000 adolescent girls and young women in 26 countries. It employed a mixed-method approach, including a large-scale survey as well as in-depth qualitative interviews, to determine scale and meaning in relation to the issues listed above.

For the purpose of the research, the following definitions have been used:^{5,6,7}

Table 1: Key definitions

Alternative news media	Alternative news media position themselves as correctives of the mainstream news media, as expressed in editorial agendas or statements and/or are perceived as such by their audiences or third-parties.			
Civic participation	Participation in one's community and developing the combination of knowledge, skills, values and motivation to make that difference to promote the quality of life in a community, through both political and non-political processes.			

⁴ OECD, 'Bridging the digital gender divide: Include, upskill, innovate', 2018, retrieved 23 June 2021, <u>https://www.oecd.org/digital/bridging-the-digital-gender-divide.pdf</u>

⁵ UNESCO, 'Journalism, 'fake news' and disinformation: A handbook for journalism education and training', 2017, retrieved 11 January 2021, <u>https://en.unesco.org/node/296002</u>

T Buchanan, 'Why do people spread false information online? The effects of message and viewer characteristics on self-reported likelihood of sharing social media disinformation', PLoS ONE, vol. 15, no. 10, 2020.

⁶ H Kristoffer & L Frischlich, 'Key dimensions of alternative news media', *Digital Journalism*, 2019, pp. 860-869.

⁷ T Ehrlich., 'Civic responsibility and higher education', *Orynx Press, Phoenix*, 2000.

Disinformation	False, misleading and often harmful information, which is shared deliberately to cause harm and/or for profit .
Fact checking tools	Fact-checking tools are sites that let people verify information they see in news stories, videos and other sources. ⁸
Misinformation	False, misleading and often harmful information, which is shared mistakenly by people .
Online platforms	Online platforms include internet websites, web applications or digital applications, including search engines, social media platforms, audio visual and music platforms, video sharing platforms and payment systems.
Political participation	Individual and collective actions and activities to influence decisions, processes or institutions of the government or public affairs.
Social topics	Issues of public concern that an individual aims to understand and engage with for the betterment of society.

In this report, we outline the focus of the research and research objectives, provide a brief outline of key existing global literature on the topic, give an overview of the methodology, before giving detail on a social listening exercise that gives an overview of the prevalence of misinformation and disinformation online in three key topic areas. The findings are presented in section six and the final section draws these findings together and outlines the key conclusions and recommendations that emerge.

3. LITERATURE REVIEW

There has been much written about misinformation and disinformation and learning online. These are phenomena that have become pervasive in what has been termed the information age – a time characterised by a shift from traditional industry to one when the economy is primarily based on information technology.⁹ The purpose of this section is not to replicate all that has been written about misinformation and disinformation as well as learning online, but to signal what is known about the phenomena in relation to the themes of the current study in order to give them context. This section will point to resources which have already extensively investigated and analysed misinformation and disinformation, but also show where there are gaps in knowledge, specifically in relation to issues which this study hopes to contribute thinking to.

The state of connectivity and access

While online access was not in the scope of this study, it is important at the start to understand the reach of online access globally in order to position how widespread the issue of misinformation and disinformation is, and the potential scale of its effects.

The Broadband Commission has hailed 2019 as a significant year in global internet adoption. It notes that 2019 marked the first full year when more than half of the world had begun to participate online; the 30th anniversary of the World Wide Web was celebrated; and the latest data estimate indicated that there were 21.7 billion connected devices, with over 74,500 GB of data being sent over the internet every single second.¹⁰ Compare this to 1995 when less than 1 per cent of worlds' population was

⁸ There are numerous fact checking tools online but it is important to state not all are verified and trustworthy websites.

⁹ J Birkinshaw, 'Beyond the information age', *Wired*, 2014, retrieved 22 May 2021, <u>https://www.wired.com/insights/2014/06/beyond-information-age/</u>.

¹⁰ The Broadband Commission, 'The state of broadband report 2019', *International Telecommunication Union and United Nations Educational, Scientific and Cultural Organization*, 2019, retrieved 7 July 2020, https://www.itu.int/dms_pub/itu-s/opb/pol/S-POL-BROADBAND.20-2019-PDF-E.pdf

connected to internet.¹¹ The Commission notes that the growth is continuing, due to new methods of connectivity, especially the expansion of 3 and 4G mobile networks across low-income and lower-middle income countries.

The growth of online users that has happened over the past year has also been staggering. As of April 2020, Statista claimed there were 4.57 billion active internet users and 3.76 billion active social media users with the global online penetration rate being 59 per cent.¹² In January 2021 Statista updated these figures to estimate that there were now 4.66 billion active internet users globally, constituting 59.5 per cent of the global population – a rise of 0.5 per cent of the global population in eight months.¹³ Out of the total global population of active internet users 92.6 per cent (4.32 billion) used mobile devices to access the internet.¹⁴

While growth of online users is positive progress, the metric most commonly used to measure internet access today is "someone having used the internet in any form in the last three months",¹⁵ this is not meaningful connectivity and masks the true nature of the digital gap. The internet's most useful features — video calling, streaming, education and health apps — demand a high quality of internet connection and many people who are online still lack meaningful connectivity.¹⁶

In the current state of the world, immersed in the global COVID-19 pandemic, the digital divide is being exposed like never before.¹⁷ In 2020 the Broadband Commission reported that despite increased adoption, there remain important digital inequalities and uneven access and adoption of the internet both between and within countries. This has proliferated disparities in access to high-speed connectivity and online safety since the global COVID-19 pandemic and the shift to digital ways of working and learning.¹⁸ The World Economic Forum notes that billions of people have been going online to stay in touch during the COVID-19 pandemic but still almost half of the world's population has no access to the internet, with fewer than 1 in 5 people in lower-income countries being connected and the digital gender divide widening.¹⁹ Prior to the COVID-19 pandemic, women were less likely to own devices such as mobile phones and tablets, or have access to the Internet. Even when women do own a digital device, the high cost of using mobile Internet remains a major barrier to their connectivity. In Middle East and North Africa, for example, the gender gap in mobile internet use is 20 per cent, in sub-Saharan Africa the gap is 37 per cent, and in South Asia it is 51 per cent.²⁰

While noting that there are multiple obstacles to online access such as urban versus rural geographies and income levels, the Broadband Commission highlights that gaps in access due to the digital gender divide continue to proliferate around the world and that country level gaps appear to be widest where

¹¹ The Broadband Commission for Digital Development, 'Cyberviolence against women and girls: A world-wide wake-up call, 2015, retrieved 3 December 2019, <u>https://www.broadbandcommission.org/publications/Pages/bb-and-gender-2015.aspx</u>

and-gender-2015.aspx ¹² Statista, 'Global digital population as of January 2021', retrieved 13 May 2021, https://www.statista.com/statistics/617136/digital-population-worldwide

¹³ Ibid.

¹⁴ Ibid.

¹⁵ M Roser, H Ritchie & Ortiz-Ospina, 'Internet', *OurWorldInData.org*, 2015, retrieved <u>https://ourworldindata.org/internet</u>

¹⁶ The meaningful connectivity target focuses on four components of connectivity: regular internet use; an appropriate device; enough data; and a fast connection. It sets minimum thresholds people need around each of these components in order to use the internet in useful and empowering ways. See A4AI, 'Meaningful connectivity – unlocking the full power of internet access', retrieved 17 June 2021, <u>https://a4ai.org/meaningful-connectivity/</u>
¹⁷ World Economic Forum, 'Coronavirus has exposed the digital divide like never before', 2020, retrieved 7 June

¹⁷ World Economic Forum, 'Coronavirus has exposed the digital divide like never before', 2020, retrieved 7 June 2020, <u>https://www.weforum.org/agenda/2020/04/coronavirus-covid-19-pandemic-digital-divide-internet-data-broadband-mobbile/</u>.

¹⁸ The Broadband Commission, 'The state of broadband report 2020', International Telecommunication Union and United Nations Educational, Scientific and Cultural Organization, 2020, retrieved 2 June 2021, <u>https://www.itu.int/dms_pub/itu-s/opb/pol/S-POL-BROADBAND.21-2020-PDF-E.pdf</u> ¹⁹ Ibid.

²⁰ GSMA, 'The mobile gender gap', 2020, retrieved 3 June 2021

https://www.gsma.com/mobilefordevelopment/wp- content/uploads/2020/05/GSMA-The-MobileGender-Gap-Report-2020.pdf

mobile adoption is the lowest.²¹ Men are 21 per cent more likely to be online than women but his rises to 51 per cent for countries in the global south.²² In 2019 male internet users continued to outnumber female internet users (typically measured as those aged 14+ or 16+) in every world region except the Americas.²³

However, the Global Kids Online study does give some insight into boys' and girls' online access (while noting that the target group studied only included children and adolescents who use the internet, and there are greater gender differences in who acquires internet access in the first place). The study examined internet use among 9–17-year-olds in 11 countries: Albania, Argentina, Brazil, Bulgaria, Chile, Ghana, Italy, Montenegro, the Philippines, South Africa and Uruguay:²⁴

- Home is the most common place for children of all age groups to access the internet, especially the youngest. Although it is important to note that in Ghana and the Philippines this was considerably lower at 50-60% compared to 90% in the other countries.
- A mobile phone is the device children most commonly use to access the internet with gender differences in internet access through a mobile phone being generally small and, if anything, tipped in favour of girls.
- There is a more marked gender difference in children's access to the internet via desktop computer as opposed to mobile phone, with more boys than girls gaining access in this way in all countries. The reasons for this are unclear but boys greater involvement in gaming might be one explanation.
- Boys have access to slightly more devices on average in most countries, with the largest gender gap seen in Italy, followed by Chile. Given the history of gender inequalities in digital access, it is perhaps more striking that such inequalities are relatively small, with Ghana and Uruguay the most equitable countries in this regard.

A 2018 report in the United States found that Snapchat and YouTube are the most frequently used social media platforms for adolescents aged 13 to 17.²⁵ Girls are more likely than boys to say Snapchat is the platform they use most often (42 per cent vs 29 per cent), while boys use YouTube as their main platform (39 per cent vs 25 per cent).²⁶ Adults in 11 emerging economies worldwide (Colombia, India, Jordan, Kenya, Lebanon, Mexico, Philippines, South Africa, Tunisia, Venezuela and Vietnam,) are most likely to use Facebook (median 62 per cent) and WhatsApp (median 42 per cent) as social media or messaging platforms.²⁷

The majority of TikTok's users are young people: 66 per cent of worldwide users are under 30 years old and in the United States, 60 per cent of monthly active users are 16 to 24 years old.³⁶

In understanding who is accessing news via social media, a study by Oxford University has shown that: $^{\rm 28}$

²¹ The Broadband Commission, 'The state of broadband report 2019', *International Telecommunication Union and United Nations Educational, Scientific and Cultural Organization*, 2019, retrieved 7 July 2020, https://www.itu.int/dms_pub/itu-s/opb/pol/S-POL-BROADBAND.20-2019-PDF-E.pdf

 ²² World Wide Web Foundation, 'Women's rights online: Closing the digital gender gap for a more equal world', 2020, retrieved 22 June 2021, <u>http://webfoundation.org/docs/2020/10/Womens-Rights-Online-Report-1.pdf</u>
 ²³ A Sey & N Hafkin, 'Taking stock: Data and evidence on gender equality in digital access, skills and leadership', the stock is the stock of the stock

United Nations University Institute on Computing and Society/International Telecommunication Union, 2019, retrieved 10 May 2021, https://www.equals.org/research

²⁴ S Livingstone et al., 'Global kids online: Comparative report', *UNICEF Office of Research - Innocenti*, 2019, retrieved <u>https://www.unicef-irc.org/publications/pdf/GKO%20LAYOUT%20MAIN%20REPORT.pdf</u>

²⁵ M Anderson & J Jiang, 'Teens, social media & technology', 2018, retrieved 23 June 2021, <u>https://www.pewinternet.org/2018/05/31/teens-social-media-technology-2018/</u>

²⁶ İbid.

²⁷ Silver et al., 'Mobile connectivity in emerging economies,' 2019, retrieved 23 June 2021, <u>https://www.pewinternet.org/2019/03/07/ mobile-connectivity-in-emerging-economies/</u>

²⁸ RK Nielsen et al., 'Navigating the 'infodemic': how people in six countries access and rate news and information about coronavirus', *The Reuters Institute for the Study of Journalism, University of Oxford*, 2020 retrieved 23 May 2021, <u>https://reutersinstitute.politics.ox.ac.uk/infodemic-how-people-six-countries-access-andrate-news-and-information-about-coronavirus</u>

- in the United States, over a quarter of 18 -24-year-olds used Instagram to access news content, while 19% used Snapchat and 6% used TikTok, only 17% of those polled used newspapers to get information
- in Germany, 38% of 18-24-year-olds used Instagram alone to get news on COVID-19
- in Argentina, it was as high as 49% of 18-24-year-olds who used Instagram alone to get news.

The aforementioned Global Kids online study also found children around the world use the internet to seek news, with between 43 and 64 per cent of children looking for news online.²⁹

The emergence of informal online learning

The literature of informal online learning shows that it takes many forms: from online discussions and participation where there is a structured formal learning experience; to 'lurking' in online discussion and learning through processing the ideas and information through the discussions;³⁰ and informal online learning through interactions with games, simulations and related technologies.³¹ Also, those who learn online are diverse themselves – from school children, to university and college students to adults engaged in adult education.

It has been noted, that teaching and learning has become more complex due to the fact that students learn across a wide range of both in person and technological and digital spaces.³² One study explored how high school students in the United States used *MySpace* for identity formation and informal learning, which revealed that it allowed students to formulate and explore various dimensions of their identity and demonstrate digital skills – but despite this, the students did not perceive a connection between their online activities and learning in classrooms.³³ This led the authors to argue that social network sites offer informal and non-formal learning contexts to supplement formal learning at school but that given the growing prevalence of online networking teachers need to help students "enact legal, ethical, responsible, safe and advantageous online community practices".³⁴

A year later, in 2010, it was acknowledged that despite the rise of "the Web 2.0- or the Social web" online educators still did not have the requisite knowledge or understanding to fully utilise the potential of the web as a learning platform.³⁵ Despite this, the authors point to a number of advantages that the Social Web has for both students and teachers, including the fact that users are in control of their experience instead of being passive recipients of information and students can select the content that they wish to engage with, while teachers have a much wider range of materials to use for teaching than the standard textbooks.³⁶

There is also a danger in expecting all students everywhere to be learning online or learning online in the same way. The Global Kids Online study provides some interesting insights into which children seek information online:³⁷

• Children who more frequently seek information online tend to be older, have access to more digital devices, receive more enabling mediation from their parent(s) and engage with a wider range of online activities.

²⁹ S Livingstone et al., 'Global kids online: Comparative report', *UNICEF Office of Research - Innocenti*, 2019, retrieved <u>https://www.unicef-irc.org/publications/pdf/GKO%20LAYOUT%20MAIN%20REPORT.pdf</u>

³⁰ S Gulati, 'Constructivism and emerging online learning pedagogy: a discussion for formal to acknowledge and promote the informal', *Paper presented at the Annual Conference of the Universities Association for Continuing Education - Regional Futures: Formal and Informal Learning Perspectives*, 5-7 April 2004, retrieved http://www.leeds.ac.uk/educol/documents/00003562.htm

³¹ S Downes, 'New technology supporting informal learning', *Journal of Emerging Technologies in Web Intelligence*, vol. 2, no. 1, 2010.

³² C Greenhow & B Robelia, 'Informal learning and identity formation in online social networks', *Learning, Media and Technology*, vol. 34, no. 2, pp 119-140, 2009.

³³ Ibid. ³⁴ Ibid.

³⁵ D Lemire & R Hotte, 'Introduction to the special issue on learning and the social web', *Journal of Emerging Technologies in Web Intelligence*, vol. 2, no. 1, 2010.

³⁶ Ibid.

³⁷ S Livingstone et al., 'Global kids online: Comparative report', *UNICEF Office of Research - Innocenti*, 2019, retrieved <u>https://www.unicef-irc.org/publications/pdf/GKO%20LAYOUT%20MAIN%20REPORT.pdf</u>

There are minor gender differences in terms of children's self-reported information-seeking • skills, with boys more often reporting strong information-seeking skills than girls (with the exception of one country out of the eleven countries surveyed in the study).

The Global Kids Online study is also interested in the issue of misinformation and disinformation, noting that critical thinking is of paramount importance in the digital age, owing to the constant flow of information to which both children and adults are subjected. Its findings show, however, that in all eleven survey countries, children claimed stronger information-seeking skills than critical evaluation skills, with between one quarter and three quarters of children being aware that they may be unable to evaluate the truthfulness of information they find online, depending on the country.³⁸

The issue of misinformation and disinformation in the context of online learning has been catapulted into the limelight during the COVID-19 pandemic where most learning institutions had to switch to "emergency online learning" while at the same time teachers were having to find means to "combat 'the infodemic', a wave of misinformation rolling over the world, affecting social and political life".³⁹

It is clear that students and children learn online in many ways, but that informal online learning, and its implications, has not been fully appreciated. Greenhow and Lewin note that scholars have acknowledged the potential of social media for integrating formal and informal learning, yet this is undertheorised.⁴⁰ In their earlier work, they have pointed to the risks associated with under-estimating the adverse consequences of online informal learning, as set out above, as have other authors, specifically in relation to misinformation.41

Online platforms can play an active role in creating civic space for youth. The use of social media for civic engagement has been referred to as "a game-changer for youth" by enabling them to "bypass adult structures and speak to the masses".42

In contrast, to the belief that political engagement by youth online is 'performative activism' and it does not correlate to offline political participation, research finds that youth who engage in politics in online spaces are much more likely to engage in institutional politics such as voting.⁴³ For example, one study of youth aged from 12 to 17 in five East Asian cities found a positive correlation between internet use and participation in civic acts such as community service.⁴⁴ Another study of young people aged 16-29 in Australia, the United States, and the UK found that social media use may be "softening patterns of political inequality" regarding the long-standing observation that higher socioeconomic status is correlated with higher political engagement.⁴⁵

Online platforms also present a way for girls and young women to be empowered in civic and political spaces in ways that may not be afforded to them in traditional civic spaces. One study in Indonesia found that young Muslim women are joining groups on Instagram, for community and expression as an alternative public sphere, especially since it may not be acceptable for them to engage in public "street

⁴² UNICEF, 'Rapid analysis: Digital civic engagement by young people', 2020, retrieved 23 June 2021, https://www.unicef.org/media/72436/file/Digital-civic-engagement-by-young-people-2020_4.pdf

³⁸ Ibid.

³⁹ C Scheibenzuber et al., 'Designing for fake news literacy training: A problem-based undergraduate online course', Computers in Human Behaviour, vol. 12, 2021.

⁴⁰ C Greenhow & C Lewin, 'Social media and education: reconceptualizing the boundaries of formal and informal learning', Learning, Media and Technology, vol. 41, no. 1, pp. 6-30, 2016.

⁴¹ E Hodgin & J Kahne. 'Misinformation in the information age: what teachers can do to support students', Social Education, vol. 8, no. 4, 2018.

⁴³ CJ Cohen & J Kahne, 'Participatory politics: New media and youth political action', 2012, retrieved 23 June 2021, https://dmlhub.net/publications/participatory-politics-new-media-and-youth-political-action-6ca85d2f-2387-4529-a282-1b198f6457d1/index.html 44 WY Lin et al., 'Becoming citizens: Youths' civic uses of new media in five digital cities in East Asia, *Journal of*

Adolescent Research, vol. 25, no. 6, 2010, pp. 839-857.

⁴⁵ UNICEF, 'Rapid analysis: Digital civic engagement by young people', 2020, retrieved 23 June 2021, https://www.unicef.org/media/72436/file/Digital-civic-engagement-by-young-people-2020_4.pdf

politics".⁴⁶ Often engaging online in political discussions, exploring current affairs, and organising with peers is some of the first exposure to exercising political agency.

Why is misinformation and disinformation an issue for adolescent girls and young women

Whilst the body of research on disinformation and misinformation online is growing rapidly, little of it applies a gender lens. However, the issue of disinformation is often gendered, with false, sexualised information and images being used to target and discredit female politicians to a greater extent than male politicians, as has happened in the Ukraine, Georgia, Poland and the Philippines.^{47,48} A recent analysis also found that, following Kamala Harris's nomination for the 2020 vice presidency in the U.S., false claims about her were being shared at least 3,000 times per hour on Twitter, in a coordinated attack.⁴⁹ Similarly, Amnesty International tracked abusive tweets, towards all female MPs in the UK, this included disinformation as an insidious form of abuse where false narratives are designed to undermine personal and professional credibility.⁵⁰ Half were directed at Diane Abbot, a Black female politician, this and the Kamala Harris example draw a direct correlation between disinformation, abuse and prejudice.⁵¹ Although this problem manifests across the world it can be particularly pernicious in the global south.⁵² An analysis by the Economic Intelligence Unit revealed that over 90 per cent of women interviewed in Latin America. Africa and the Middle East experienced misinformation and defamation as the most common tactics for undermining their legitimacy.53

In this way, gendered disinformation can be seen as part of wider violence and harassment against women online. Misinformation and disinformation are also gendered in less direct ways. Some proponents of false information online draw upon, and amplify, negative gender stereotypes - such as women and girls being victims in need of protection - in order to drum up support for the discrimination of people belonging to particular ethnic, racial, faith or national backgrounds.⁵⁴ In other instances, disinformation campaigns directly seek to undermine progress on gender equality by claiming that women's empowerment is western propaganda.55 Furthermore, false information and statistics that relate to key gender equality issues are shared, such as the false information circulated in Ireland linking abortion to depression, cancer and Downs syndrome around the time of the abortion referendum, or white supremacist groups sharing fake statistics on the perpetuation of violence against women and girls by immigrants.⁵⁶ As these examples show, an intersectional approach is required when studying

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/866351/How_t o_Guide_on_Gender_and_Strategic_Communication_in_Conflict_and_Stabilisation_Contexts_-January 2020 - Stabilisation Unit.pdf

https://www.washingtonpost.com/opinions/2020/10/07/kamala-harris-sexist-racist-attacks-spread-online/ ⁵⁰ Amnesty International UK, 'Black and Asian women MPs abused more online', 2017, retrieved 24 May 2021, https://www.amnesty.org.uk/online-violence-women-mps

⁵¹ Ibid.

⁴⁶ A Yue, E Nekmat & AR Beta, 'Digital literacy through digital citizenship: Online civic participation and public opinion evaluation of youth minorities in Southeast Asia', Media and Communication, vol. 7, no. 2, 2019, pp 100-114.

⁴⁷ UK Government, 'How to guide: Gender and strategic communications in conflict and stabilisation contexts', 2020, retrieved 26 May 2021,

⁴⁸ E Judson et al., 'Engendering hate: The contours of state-aligned gendered disinformation online', 2020, retrieved 10 May 2021, https://demos.co.uk/project/engendering-hate-the-contours-of-state-aligned-gendered-

disinformation-online/ ⁴⁹ K Tumulty et al., 'How sexist, racist attacks on Kamala Harris have spread online — a case study', *The* Washington Post, 7 October 2020, retrieved 8 April 2021,

⁵² Council on Foreign Relations, 'Gendered disinformation, democracy and the need for a new digital social contract, 2021, retrieved 23 June 2021, https://www.cfr.org/blog/gendered-disinformation-democracy-and-neednew-digital-social-contract

⁵³ The Economist, 'Measuring the prevalence of online violence against women', 2021, retrieved 23 June 2021, https://onlineviolencewomen.eiu.com/

⁵⁴ UK Government, 'How to guide: Gender and strategic communications in conflict and stabilisation contexts', 2020, retrieved 26 May 2021,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/866351/How_t o Guide on Gender and Strategic Communication in Conflict and Stabilisation Contexts -January 2020 - Stabilisation Unit.pdf

⁵⁵ Ibid.

⁵⁶ Ibid.

disinformation and misinformation, as false information campaigns are not only often sexist but also racist and xenophobic. For example, the disinformation campaign against Kamala Harris was racist as well as sexist.⁵⁷ Furthermore, disinformation agents specifically identify and exploit "pre-existing divisions among society" and then use "disinformation to sow further discord and distrust".⁵⁸ In the runup to the 2016 United States presidential election, for example, disinformation online deliberately sought to exacerbate racial tensions, in particular around the Black Lives Matter movement,⁵⁹ as well as religious,⁶⁰ and gender divides.⁶¹

There is little available research that pertains to girls' experiences of misinformation and disinformation online, and how this affects their civic and political participation. There are also few civil society efforts specifically seeking to support girls and counter this issue. The Economist Intelligence Unit studied online violence across 51 countries with Google, and found that 67 per cent of online harassment involves "rumours or slander to discredit or damage a woman's character" being spread online.⁶² They also found that young women (Generation Z and Millennials) were more likely to have experienced online violence than older women.⁶³ The Quint, an Indian news website, reported on several instances of this, such as the disinformation campaign online against 21 year old climate activist Disha Ravi, and the sexualised false information that was used to target Safoora Zargar, an MPhil student who had participated in protests.⁶⁴ Rana Ayyub, a journalist and author, was also subjected to a video being created with her face morphed onto a pornographic video which was then sent to her family and friends.⁶⁵

Research into COVID-19 related disinformation online confirmed that false information during the pandemic has often been gendered, either drawing on narrow and harmful gender stereotypes to support false claims about the virus, or by using the pandemic to drive home regressive views of gender roles and women's rights.⁶⁶ Similarly the UN supported HerStory network, noting the lack of reliable information on the impact of COVID-19 for women and girl in Arab States, established a taskforce to monitor social media in order to gather stories of the gender impact of the pandemic, and track occurrences of misinformation and harmful gender stereotyping.⁶⁷ In the first two months of the media monitoring, over 600 stories, articles and information pieces from news outlets and social media were documented in order to inform programme interventions to combat harmful stereotyping of women and men, and to address misinformation around COVID-19 and its impacts on women and girls.⁶⁸

⁵⁷ K Tumulty et al., 'How sexist, racist attacks on Kamala Harris have spread online — a case study', *The Washington Post*, 7 October 2020, retrieved 8 April 2021,

https://www.washingtonpost.com/opinions/2020/10/07/kamala-harris-sexist-racist-attacks-spread-online/ ⁵⁸ S Bradshaw, 'Influence operations and disinformation on social media', *Modern Conflict and Artificial Intelligence, Centre for International Governance Innovation*, 2020, retrieved 3 April 2021, https://www.cigionline.org/articles/influence-operations-and-disinformation-social-media/

⁵⁹ R DiResta et al., 'The tactics and tropes of the internet research agency', *White paper*, retrieved 3 April 2021, <u>https://apo.org.au/node/211296</u>

P N Howard, 'New media campaigns and the managed citizen', *Cambridge University Press*, 2006, retrieved 26 May 2021, <u>https://smpsebastiao.files.wordpress.com/2010/09/e-book_gcc_howard_nm-campains-and-managed-citizen.pdf</u>

⁶⁰ M Hindman & V Barash, 'Disinformation, 'fake news' and influence campaigns on Twitter', *Knight Foundation*, 2018, retrieved 7 April 2021, <u>https://www.mediebedriftene.no/siteassets/dokumenter/rapporter/kf-report-final2.pdf</u>

⁶¹ S Bradshaw, 'The gender dimensions of foreign influence operations', *Global Affairs Canada*, 2019.

 ⁶² The Economist Intelligence Unit Measuring the prevalence of online violence against women, 2021, retrieved 8
 April 2021, <u>https://onlineviolencewomen.eiu.com</u>
 ⁶³ Ibid.

⁶⁴ S Gupta, 'Women are targeted with fake news more than men – why?', *The Quint*, 2021, retrieved April 2021, <u>https://www.thequint.com/news/webqoof/explained-why-fake-news-misinformation-around-women-more-than-</u>men#read-more

⁶⁵ Ibid.

 ⁶⁶ MG Sessa, 'Misogyny and misinformation: An analysis of gendered disinformation tactics during the COVID-19 pandemic', retrieved 5 April 2021, <u>https://www.disinfo.eu/publications/misogyny-and-misinformation:-an-analysis-of-gendered-disinformation-tactics-during-the-covid-19-pandemic/</u>
 ⁶⁷ UN Women, 'Youth volunteers combat online misinformation on COVID-19 in Arab States', 2020, retrieved 10

⁶⁷ UN Women, 'Youth volunteers combat online misinformation on COVID-19 in Arab States', 2020, retrieved 10 May 2021, <u>https://www.unwomen.org/en/news/stories/2020/5/feature-youth-volunteers-combat-covid-19-misinformation</u>

⁶⁸ Ibid.

Prevalence and spread of misinformation and disinformation

In order to understand how children, in this case especially girls, might encounter misinformation or disinformation in an informal learning environment online, it is important to understand the different types and manifestations of the phenomena, as well as the prevalence and spread - to then determine when and how to address measures to prevent and combat it.

Whilst disinformation tactics date back as far as Ancient Rome, ⁶⁹ in light of recent cases such as Russian interference in the 2016 United States of America presidential election, the 2017 general elections in France, the 2017 general elections in Kenya and the UK European Union membership referendum,⁷⁰ investigations into "the rise of the misinformation society"¹¹ have risen sharply.

As of January 2019, it was determined that the share of global news consumers who have perceived to have seen fake news on television was 51 per cent while the share of global consumers who have perceived to have seen fake news in print media was 44 per cent. ⁷² As of February the same year, according to a global study in 27 countries, 62 per cent of respondents felt that there was a fair extent of or great deal of fake news on online websites and platforms. By comparison, 52 per cent said the same about TV, radio, newspapers, and magazines.⁷³ Data from a worldwide online survey in 2020 on the level of trust in selected media sources showed that 53 per cent of respondents stated that they trusted traditional media to provide general news and information, compared to just 35 per cent who considered social media trustworthy.⁷⁴

These statistics demonstrate that the perils of misinformation, disinformation, and online propaganda are truly a global issue. It has been noted by many commentators,⁷⁵ who detail case studies of "computational propaganda" around the world (including Brazil, Canada, China, Germany, Poland, Taiwan, Russia, Ukraine, and the United States), combining expert interviews with computational analysis of posts on a variety of social media platforms to find that in many political contexts, social media platforms are dominated by government-organized disinformation campaigns (e.g. in Russia and Poland).⁷⁶

Whilst in the past disinformation in the broadcast media could be traced to governments and other powerful actors more easily, in the digital age of online social networks it can be more challenging to identify those spreading false information, and their motives for doing so.⁷⁷ Disinformation campaigns taking place in countries across the world are either launched by foreign states, or by domestic actors within the country, including government representatives, political parties, populist politicians, hate

https://www.statista.com/statistics/685119/media-sources-trust-worldwide/

⁶⁹ J Posetti & A Matthews, 'A short guide to the history of 'fake news' and disinformation', *International Center for Journalists*, 2018, retrieved 5 April 2021, <u>https://www.icfj.org/news/short-guide-history-fake-news-and-disinformation-new-icfj-learning-module</u>

disinformation-new-icfj- learning-module ⁷⁰ N Persily & J Tucker, 'Social media and democracy: The state of the field, prospects for reform', *Cambridge University Press*, 2020.

A Bessi & E Ferrara,,'Social bots distort the 2016 US Presidential Election online discussion', 2017, retrieved https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2982233

J Weedon, W Nuland & A Stamos, 'Information operations and Facebook', 2017, retrieved 26 May 2021, https://i2.res.24o.it/pdf2010/Editrice/ILSOLE24ORE/ILSOLE24ORE/Online/ Oggetti Embedded/Documenti/2017 /04/28/facebook-and-information-operations-v1.pdf.

 ⁷¹ V Pickard, 'Media failures in the age of Trump', *The Political Economy of Communication*, vol. 4, no. 2, 2016.
 ⁷² A Watson, 'Fake news worldwide – statistics and facts', 2020, retrieved 26 May 2021, https://www.statista.com/topics/6341/fake-news-worldwide/

 ⁷³ A Watson, 'Perceived prevalence of fake news in media sources worldwide 2019', 2020, retrieved 26 May 2021, <u>https://www.statista.com/statistics/1112026/fake-news-prevalence-attitudes-worldwide/</u>
 ⁷⁴ A Watson, 'Trust in media sources worldwide 2020', 2020, retrieved 27 May 2021,

⁷⁵ AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform*, Cambridge University Press, 2020.

⁷⁶ Ibid.

⁷⁷ AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform*, Cambridge University Press, 2020.

groups, interest groups, profit-seeking individuals, independent trolls or conspiracy theorists. ⁷⁸ They are launched on various mediums, both online and offline, at different times and rely on a combination of 'natural reach' (enabled by humans and traditional media) and automation (enabled by bots and advertising).79

A particular instance of propaganda against a particular group is that which occurs against the LGTBIQ+ community, which commentators have shown to be targeted by anti-gay groups.⁸⁰ An example of this is illustrated through Reuters, which documented the sharing of online posts by social media users that falsely implied that the LGTBIQ+ community was accepting of 'pedosexuals' and falsely claimed that the community would add the letter P to the acronym.⁸¹ It was determined that common manifestations of the claim included a poster with the acronyms for LGBT, adding the letter "P" at the end, allegedly standing for "pedosexuals" and that the shared post came from a nowsuspended Twitter account called @EqualLuv4All, with Snopes reporting in 2017 that the graphic appeared to stem from a 4chan misinformation campaign from 2016.82

In the past year, in the time of the COVID-19 pandemic, there has been a particular plethora of misinformation and disinformation propagated about the spread of the pandemic, its treatment and anti-vaccination propaganda, with Facebook reporting that during March and April of 2020 it placed warning labels on approximately 90 million pieces of content because they were allied to COVID-19 misinformation.83 COVID-19 is regarded as the world's first social media pandemic - where the population has relied heavily on social media for information, and where the measures to contain the pandemic have isolated people who are searching for answers online - exacerbating the spread of misinformation and disinformation.⁸⁴ But while COVID-19 has led to much anti-vaccine rhetoric, this isn't the first time that vaccine hesitancy has been fuelled by misinformation and disinformation: studies have shown how Russian bots were instrumental in stoking the online debates about vaccines between 2014-2017, uncovering thousands of twitter accounts used to spread misinformation and anti-vaccine messaging in the United States.85

Bots are in fact one of the many ways that misinformation and disinformation spreads online through social media. In investigating how the phenomena spreads online, researchers have turned to Twitter and analysed retweet networks and by analysing these networks the research has identified key actors and methods in spreading misinformation and disinformation:86

Some of these studies have identified an amplifying role for social bots in these online networks. For example, using a Botometer machine-learning algorithm to detect social bots found that relatively few users - likely bots - account for a great deal of the traffic surrounding pieces of misinformation and these bots work to spread misinformation with specific strategies including singling out influential accounts and trying to leverage their influence by gaining their

⁷⁸ J Bayer et al., 'Disinformation and propaganda – impact on the functioning of the rule of law in the EU and its Member States', European Parliament, 2019 retrieved 7 April 2021,

https://www.europarl.europa.eu/RegData/etudes/STUD/2019/608864/IPOL STU(2019)608864 EN.pdf ⁷⁹ Ibid.

⁸⁰ E Schlatter & R Steinback, 'Battling the 'homosexual agenda,' the hardline religious right has made a series of incendiary claims. But they're just not true', Intelligence Report, Southern Poverty Law Centre, 2010, retrieved 28 May 2021, https://www.splcenter.org/fighting-hate/intelligence-report/2011/10-anti-gay-myths-debunked

⁸¹ Reuters, 'Fact check: The LGBTQ community is not adding "P" to their acronym, *Reuters*, 2020, retrieved 28 May 2021, https://www.reuters.com/article/uk-factcheck-lgbtg-community-p-acronym-idUSKBN2352J8 ⁸² Ibid.

⁸³ BBC, 'Social media firms fail to act on Covid-19 fake news', BBC News Online, 2020, retrieved 26 May 2021, https://www.bbc.co.uk/news/technology-52903680

⁸⁴ USA Today Tech, 'Welcome to the first social media pandemic: Here are 8 ways you can stop the spread of coronavirus misinformation', USA Today Tech, 2020, retrieved 26 May 2021,

https://eu.usatoday.com/story/tech/2020/03/19/coronavirus-covid-19-misinformation-social-media-facebookyoutube-instagram/2870277001/ ⁸⁵ H Phelan, 'The virus, the vaccine, and the dark side of wellness', *Harpers Bazaar*, 2021, retrieved 26 May

^{2021,} https://www.harpersbazaar.com/culture/features/a35823360/covid-19-vaccine-ganon-wellness-influencers/

⁸⁶ AM Guess & AL Benjamin, 'Social media and democracy', Cambridge University Press, 2020, retrieved https://www.cambridge.org/core/books/social-media-and-democracy/misinformation-disinformation-and-onlinepropaganda/D14406A631AA181839ED896916598500/core-reader

attention through replies and mentions, which in turn they do.⁸⁷ It has been noted that bots are responsible for roughly half of all online traffic, and are an example of how new technology places greater stress on democracy than has ever been seen before.⁸⁸

- Andrews et al identify "breaking news" sites (unofficial accounts that mimic legitimate news sources) as key spreaders of misinformation on Twitter, where Twitter users attribute trust to accounts that mimic legitimate news sources and have some semblance of authority, thereby allowing the "breaking news" sites to build large follower bases, to which they broadcast misinformation in a definitive tone.⁸⁹
- A combination of social media users themselves and algorithmic bias also leads to the proliferation of misinformation when the social media users place trust in their close friends and the news shared on social media by them - as research suggests that (a) the person who shared it matters more than the news organization that produced it and (b) platforms surface these close friends' posts in the name of engagement.⁹⁰

So, while social media companies can play a positive role in civic and political participation, including that of girls, by providing access to news and information, space for political debate and for galvanising action, as well as opportunities for politicians to campaign and connect with their constituents,⁹¹ "social media provides a plethora of actors with a quick, cheap and data-rich medium to use to inject disinformation into civic conversations."⁹² This is clearly illustrated by a study which found that in the United States election in 2016 the largest share (41.8 per cent) of traffic to disinformation sites came from social networks, while legitimate news sites were mostly reached by direct browsing (48.7 per cent).⁹³

While much of the research on dissemination and spread of misinformation and disinformation lacks individual-level data – as such limiting the kinds of conclusions that can be made about the types of people who are more likely to share online misinformation - there is a study that examined the individual-level determinants of fake news sharing behaviour on Facebook, and by combining anonymized profile data with a representative survey of Americans, it found that the most consistent predictor of sharing a fake news article to one's friends is age.⁹⁴ The study determined that those in the oldest age groups were much more likely to post links to fake news. And while research in the United States has shown that that most people don't want to share inaccurate information, and think that accuracy is important, they don't think enough about what they are sharing.⁹⁵

In addition, research has examined how untrue information spreads in comparison to accurate information. Vosoughi, Roy and Aral have found that "truth and falsity spread differently and factors of human judgment explain these differences."⁹⁶ They examined data on all fact-checked rumours on Twitter from its inception in 2006 through to 2017 and discovered that untruths travelled farther, faster, deeper, and more broadly on Twitter during this time; with misinformation spreading virally through

D Kreiss, 'Micro-targeting, the quantified persuasion', Internet Policy Review, vol. 6, no. 4, 2017.

⁸⁷ C Shao, G. L Ciampaglia, O Varol, A Flammini & F Menczer, 'The spread of fake news by social bots', 2017, retrieved 26 May 2021,

https://www.researchgate.net/publication/318671211 The spread of fake news by social bots

⁸⁸ SC Woolley, 'Automating power: Social bot interference in global politics', *First Monday*, vol. 21, no. 4, 2014. ⁸⁹ AM Guess & AL Benjamin, 'Social media and democracy', *Cambridge University Press*, 2020, retrieved <u>https://www.cambridge.org/core/books/social-media-and-democracy/misinformation-disinformation-and-online-propaganda/D14406A631AA181839ED896916598500/core-reader</u>

⁹⁰ Ibid.

⁹¹ J Hemsley, 'Followers retweet! The influence of middle-level gatekeepers on the spread of political information on Twitter', *Policy & Internet*, vol. 11, no. 3, 2019.

PN Howard, 'New media campaigns and the managed citizen', Cambridge University Press, 2006.

⁹² S Bradshaw, 'Influence operations and disinformation on social media', *Modern Conflict and Artificial Intelligence, Centre for International Governance Innovation*, 2020, retrieved 3 April 2021, https://www.cigionline.org/articles/influence-operations-and-disinformation-social-media/

⁹³ H Allcott & M Gentzkow, 'Social media and fake news in the 2016 election', *Journal of Economic Perspectives*, vol. 31, no. 2, 2017.

⁹⁴ AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker (Eds.). *Social media and democracy: The state of the field, prospects for reform*, Cambridge University Press, 2020.

 ⁹⁵ G Pennycook & D Rand, 'The right way to fight fake news', *New York Times*, 2020, retrieved 11 April 2021, https://www.nytimes.com/2020/03/24/opinion/fake-news-social-media.html
 ⁹⁶ Ibid.

peer-to-peer processes.⁹⁷ In addition, they also determined that false political news spread deeper and more broadly, and was more viral, than any other category of misinformation.

But online sources of misinformation and disinformation are not limited to social media, even though as seen above, the spread of the phenomena on social media is prolific. Some of the other means through which misinformation and disinformation is spread include:

- Often false information that is being shared is hosted on external websites and blogs. This includes fake news websites which are deliberately designed to look like traditional news media in order to spread false stories which advance political goals and generate ad revenues.⁹⁸ Alongside political motivations, the other main reason that disinformation websites and blogs exist is that they are financially lucrative ventures. Aside from being paid by actors to write misleading and false content, the other way these sites can make money is through advertising. It has been found that 60% of the largest "junk news" websites use Google Ads to generate money from disinformation.⁹⁹ The Global Disinformation Index similarly found that in a sample survey of nearly 50 sites carrying coronavirus conspiracies, Google provided ad services to 86% of these sites.¹⁰⁰ Another study by Global Disinformation Index (found that 37 per cent or \$86 million of Google's annual revenue came from running ads on websites spreading disinformation and misinformation. They argue that Google makes it easy to monetise websites anyone with a website can apply to use AdSense and if they're accepted start placing ads on their site.¹⁰¹
- As well as advertising technology services making disinformation, websites and blogs a financially attractive occupation, search engines also make these sites highly visible and findable on the Internet. It has been noted that search engines, like ad tech services, have received far less scrutiny than social platforms over their role in furthering disinformation and misinformation.¹⁰² Google has also been criticized for repeatedly serving up biased and misleading search results and driving traffic to junk news sources, which in turn can be monetized through advertising.¹⁰³ Jonathan Albright a professor at Elon University in, mapped how rightwing groups spread their messages online and found that rightwing sites have 'gamed' Google's PageRank system by linking their websites to other sites, creating a "vast satellite system of rightwing news and propaganda that has completely surrounded the mainstream media system".¹⁰⁴ On top of this, Albright found that people visiting these sites were then being tracked, which "enables data-mining and influencing companies like Cambridge Analytica to precisely target individuals, to follow them around the web, and to send them highly personalised political messages".¹⁰⁵
- There are a whole host of businesses that are profiting from propagating disinformation and misinformation. It has been determined that private firms operating in 48 countries deploying

⁹⁷ Ibid.

 ⁹⁸ V Pickard, 'Media failures in the age of Trump', *The Political Economy of Communication*, vol. 4, no. 2, 2016.
 ⁹⁹ E Taylor, LM Neudert, S Hoffmann & PN Howard, 'Follow the money: How the online advertising ecosystem funds COVID-19 junk news and disinformation', *Comprop working paper - Oxford Internet Institute*, 2020, retrieved 4 April 2021, <u>https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/93/2020/08/Follow-the-Money-3-Aug.pdf</u>

¹⁰⁰ Global Disinformation Index, 'Why is ad tech funding these ads on coronavirus conspiracy sites?', 2020, retrieved 4 April 2021, <u>https://disinformationindex.org/2020/03/why-is-ad-tech-funding-these-ads-on-coronavirus-conspiracy-sites/</u>

 ¹⁰¹ Global Disinformation Index, 'The quarter billion dollar question: How is disinformation gaming ad tech?', 2019, retrieved 7 April 2021, <u>https://disinformationindex.org/wp-content/uploads/2019/09/GDI_Ad-tech_Report_Screen_AW16.pdf</u>
 ¹⁰² E Taylor, LM Neudert, S Hoffmann & PN Howard, 'Follow the money: How the online advertising ecosystem

¹⁰² E Taylor, LM Neudert, S Hoffmann & PN Howard, 'Follow the money: How the online advertising ecosystem funds COVID-19 junk news and disinformation', *Comprop working paper - Oxford Internet Institute*, 2020, retrieved 4 April 2021, <u>https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/93/2020/08/Follow-the-Money-3-Aug.pdf</u>

Aug.pdf ¹⁰³ S Noble, 'Algorithms of oppression: How search engines reinforce racism', *NYU Press*, 2018. ¹⁰⁴ C Cadwalladr, 'Google, democracy and the truth about internet search', *The Guardian*, 2016, retrieved 8 April 2021, <u>https://www.theguardian.com/technology/2016/dec/04/google-democracy-truth-internet-search-facebook</u> ¹⁰⁵ Ibid.

computational propaganda on behalf of a political actor. ¹⁰⁶ Since 2018, **there have been more than 65 'strategic communications' firms offering computational propaganda as a service**, often creating sock puppet accounts, identifying audiences for micro-targeting, or using bot or other amplification strategies to prompt the trending of certain political messages.¹⁰⁷

• The rise of WhatsApp, and its potential to sow misinformation via its closed messaging system is of interest particularly in territories where the messaging app is especially popular - India and Brazil, for instance, are believed to be hotbeds of WhatsApp misinformation.¹⁰⁸ In the case of India in the lead-up to the 2019 election it was found that more than 25 per cent of the Facebook content shared by the Bharatiya Janata Party (BJP) and a fifth of the Indian National Congress's content was classified as junk news.¹⁰⁹ Similarly, political WhatsApp group text content during the 2018 Brazilian presidential campaign found that messages containing misinformation spread more quickly within groups but took longer to cross group boundaries.¹¹⁰

Effect of misinformation and disinformation

It has been noted that questions about misinformation's spread logically lead to questions of the effect of misinformation and disinformation: if it can spread so quickly, how great of a danger does it ultimately pose, and how, and to what extent, does it influence those exposed?¹¹¹

According to Gerber and Green, real-life experiments which could provide clear evidence are infeasible for ethical reasons, and so actual persuasive effects of online misinformation have been particularly difficult to study.¹¹² Nonetheless it has been argued, based on a number of studies, that the most important effects of misinformation may extend beyond direct persuasion and misinformation and may do most of its damage in increasing cynicism and apathy while at the same time driving extremism.¹¹³

Despite little evidence of the direct effect of misinformation and disinformation, there have been studies about the perceived effect. A 2020 Pew Research Centre study found that 64 per cent of Americans were of the opinion that social media has a mostly negative effect on the way things are going in the United States and of those, 28 per cent mentioned the spread of misinformation and made-up news as the main reason for their view.¹¹⁴

The immediate dangers of misinformation and disinformation are perhaps most relevant in the sphere of public health and clearly illustrated by anti-vaccine propaganda. In April 2019 a number of staged videos were posted to Twitter and Facebook in which a private school teacher is standing in a hospital in Peshawar, Pakistan. He is talking to the camera, gesticulating behind him to supposedly unconscious children, reporting how they became ill after receiving the polio vaccine when in reality

 ¹⁰⁶ S Bradshaw, 'Influence operations and disinformation on social media', *Modern Conflict and Artificial Intelligence, Centre for International Governance Innovation*, 2020, retrieved 3 April 2021, https://www.cigionline.org/articles/influence-operations-and-disinformation-social-media/
 ¹⁰⁷ Ibid.

¹⁰⁸ AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform*, Cambridge University Press, 2020.

¹⁰⁹ Ibid

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² AS Gerber & DP Green, 'Field experiments: Design, analysis, and interpretation', *W. W. Norton*, 2012. ¹¹³ AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker (Eds.), *Social media and democracy: The state of the field, prospects for reform*, Cambridge University Press, 2020.

¹¹⁴ B Auxier, '64% of Americans say social media have a mostly negative effect on the way things are going in the US today', *Pew Research Centre*, 2020, retrieved 28 May 2021, <u>https://www.pewresearch.org/fact-tank/2020/10/15/64-of-americans-say-social-media-have-a-mostly-negative-effect-on-the-way-things-are-going-in-the-u-s-today/</u>

he can be heard instructing the children to lie down.¹¹⁵ Many of the videos in Pakistan went viral almost instantly with clips of the staged scenes gaining more than 24,000 interactions on Twitter alone within 24 hours of being posted, and more being circulated on Facebook and WhatsApp.¹¹⁶ The effect can be seen in WHO polio reporting figures: in 2018 there were 33 cases of polio worldwide, 12 of which were in Pakistan but by 2019 144 cases were reported in Pakistan with 92 in the province where the videos originated.¹¹⁷ Similarly researchers at Oxford University found that those who believe conspiracy theories are also less likely to accept a vaccination, take a diagnostic test, or wear a facemask.¹¹⁸

A study was conducted by King's College London in 2020 on COVID-19 conspiracy theories, for example the symptoms of COVID-19 seem to be connected to 5G mobile network radiation and the COVID-19 pandemic was planned by certain pharmaceutical corporations and government agencies and found that 37 per cent of the study respondents believe there is a connection between 5G mobile network radiation and COVID-19; and were also found to believe that there is no good reason for the lockdown.¹¹⁹ The same study found those who subscribed to conspiracy theories were less likely to follow guidance to wash hands, socially distance and stay at home.¹²⁰

Attempts to deal with misinformation and disinformation

In an article for Global Partners Digital, Richard Wingfield argues that a human rights approach is essential when addressing disinformation and misinformation because legislation to tackle false information may also restrict freedom of speech.¹²¹ He suggests that in order to find a balance, some of the articles of the UN ICCPR (International Covenant on Civil and Political Rights) may provide guidance as to which aspects of false information online to regulate, and which ones to leave:

- Article 25 'The right to free and fair elections'
- - Article 12 'The right to health'
- - Article 17 'The right to freedom from unlawful attacks upon one's honour and reputation'
- Article 21 and 26 'The right to non-discrimination'
- - Article 19 'The right to freedom of expression'

Wingfield points out that the first four must be safeguarded but not at the expense of Article 19. He draws on the example of The Anti-Fake News Act in Malaysia, for example, which criminalises the publication and circulation of "fake news", defined to include any information which is "wholly or partly false"—even if no harm is caused—leading the UN Special Rapporteur on freedom of expression to observe that it would lead to "censorship and the suppression of critical thinking and dissenting voices."

In 2017, the United Nations Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Co-operation in Europe Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the African Commission on Human and Peoples' Rights Special Rapporteur on Freedom of Expression and Access to Information made a joint declaration on freedom of expression and "fake news",

¹¹⁵ L Morrish, 'How fake videos unravelled Pakistan's war on polio', *First Draft News*, 2020, retrieved 28 May 2021, <u>https://firstdraftnews.org/latest/how-fake-videos-unravelled-pakistans-war-on-polio/</u>

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Centre for Countering Digital Hate, '#willtoact: How social media giants have failed to live up to their claims on the Coronavirus 'infodemic'', *Centre for Countering Digital Hate*, 2020, retrieved 28 May 2021, <u>https://252f2edd-1c8b-49f5-9bb2-cb57bb47e4ba.filesusr.com/ugd/f4d9b9_17e9f74e84414524bbe9a5b45afdf77e.pdf</u>

¹¹⁹ D Allington, 'COVID-19 conspiracy theories present 'substantial' heath risk, new research finds', *KCL*, 2020 retrieved 28 May 2021, <u>https://www.kcl.ac.uk/news/covid-19-conspiracy-theorists-present-substantial-health-risk-new-research-finds</u>

¹²⁰ Ibid.

¹²¹ R Wingfield, 'A human rights-based approach to disinformation', *Global Partners Digital*, 2019, retrieved 11 April 2021, <u>https://www.gp-digital.org/a-human-rights-based-approach-to-disinformation/</u>

disinformation and propaganda.¹²² It contains 'General Principles', 'Standards on Disinformation and Propaganda', points for creating an 'Enabling Environment for Freedom of Expression', role of 'Intermediaries' and 'Journalists and Media Outlets', and 'Stakeholders' cooperation'. During the coronavirus pandemic in 2020, the UN has taken a number of steps to address the 'infodemic' – or widespread sharing of false information about the virus.¹²³ For example, the UN country teams and missions on the ground have used all available channels, such as radio and social media to dispel rumours and counter misinformation, and *Verified*, a UN initiative to encourage people to help people to spot misinformation and refrain from sharing it with others, was launched in May 2020 and includes the #PledgetoPause campaign.¹²⁴

Regulation

The EU is leading the charge in regulating online platforms over their role in perpetuating disinformation and misinformation. The European Commission recently released details of the Digital Services Act (DSA) which builds on the EU's voluntary Code of Practice, which despite some success was deemed not to go far enough in ensuring that online platforms address disinformation and misinformation.¹²⁵ The DSA includes the removal of illegal goods, services and content, advertising transparency measures and obligations for large platforms to take action against the abuse of their systems. Tech companies could face severe fines for noncompliance, with a very large online platform facing fines of up to 6 per cent of global revenue for a serious breach of the rules.¹²⁶ An oversight structure will also be established, with the ability to directly sanction platforms that reach more than 10 per cent of the EU's population of more than 45 million users.

One example of national legislation which attempts to regulate the phenomena is the NetzDG. In 2017 Germany passed the 'Act to Improve Enforcement of the Law in Social Networks (2017)'- known as NetzDG - due to increasing levels of internet hate speech, harassment and fake news. The law requires social media platforms like Twitter, Reddit and Facebook to remove hate speech and other controversial or offensive content (including disinformation) within 24 hours. The consequence of failing to remove banned content is up to 50 million Euros in fines. In 2020, Germany's lower house of parliament approved updates to NetzDG, requiring platforms like Facebook and Twitter to flag particularly egregious examples of hate speech - such as incitement to racial hatred - to law enforcement. The updated rule also makes it easier for users to report illegal content and challenge content decisions by platforms. The effect is that social media platforms are complying – for example Facebook has two deletion centres in Germany and employs 1200 workers to monitor content.¹²⁷ While such strident moves to hold the platforms accountable should be commended, it is a controversial law which has come under much scrutiny on the basis that it restricts freedom of speech.¹²⁸

In a piece for POLITCO, Janosch Delcker examined the pros and cons of the NetzDG legislation and notes that critics of the law say it could stifle political speech or be used as a model for authoritarian governments to crack down on online dissent, and privacy advocates are concerned that forcing platforms to reveal the identity of users will allow authorities to build up ever-growing databases of

¹²⁵ European Commission, 'Assessment of the code of practice on disinformation – Achievements and areas for further improvement', *European Commission*, 2020, retrieved 11 April 2021, <u>https://digital-strategy.ec.europa.eu/en/library/assessment-code-practice-disinformation-achievements-and-areas-further-</u>

¹²² Organisation for Security and Co-operation in Europe, 'Joint declaration on freedom of expression and "fake news", disinformation and propaganda', *Organisation for Security and Co-operation in Europe*, 2017, retrieved 11 April 2021, <u>https://www.osce.org/fom/302796</u>

¹²³ UN, '5 ways the UN is fighting 'infodemic' of misinformation', *United Nations*, 2020, retrieved 9 April 2021, <u>https://www.un.org/en/un-coronavirus-communications-team/five-ways-united-nations-fighting-'infodemic'-misinformation</u>

¹²⁴ Ibid

improvement

¹²⁶ Ibid.

¹²⁷ A Lam, '87% of Germans approve of social media regulation law', *Dalia Research*, 2018, retrieved 18 June 2020, <u>https://daliaresearch.com/blog/blog-germans-approve-of-social-media-regulation-law/</u>

¹²⁸ P Oltermann, 'Tough new German law puts tech firms and free speech in spotlight, *The Guardian*, 2018, retrieved 18 June 2020, <u>https://www.theguardian.com/world/2018/jan/05/tough-new-german-law-puts-tech-firms-and-free-speech-in-spotlight</u>

highly sensitive information.¹²⁹ On the other hand he points out that others say it's still too hard to take action against anonymous posters of hate speech and in addition, one of the key obstacles holding victims back from retaliating is that they have to advance the costs of legal proceedings — which is often several thousand euros.¹³⁰

Other governments have also put in place laws and policies to address disinformation and misinformation, as denoted on the map created by The Poynter Institute for Media Studies (below).¹³¹ As the map shows, whilst some of these actions address misinformation and disinformation in a way that safeguards freedom of speech, in some cases authoritarian regimes utilise this issue as a way to limit freedom of the press and protect themselves from criticism. For example, the map contains the example of a Government WhatsApp account created in the Democratic Republic of Congo, which recruited young people to report potentially false information being shared on the app so that "communications experts" could then "rebut" these "with accurate information via WhatsApp or local radio".¹³²

Figure 1: The Poynter Institute for Media Studies – Here's where governments are taking action against online misinformation



Here's where governments are taking action against online misinformation

(Map: Daniel Funke)

Social platforms taking action

Self-regulation and is favoured by online platforms to a greater extent than external regulation. Epstein argues that "one advantage of self-regulation is that media companies simply understand how they work best and are often motivated to provide effective self-regulation in lieu of potential

¹²⁹ J Delcker, 'Germany's balancing act: Fighting online hate while protecting free speech', *POLITICO*, 2020, retrieved 11 April 2021, <u>https://www.politico.eu/article/germany-hate-speech-internet-netzdg-controversial-legislation/</u>

¹³⁰ Ibid.

¹³¹ D Funke, & D Flamini, 'A guide to anti-misinformation actions around the world', *Poynter*, 2021, retrieved 5 April 2021, <u>https://www.poynter.org/ifcn/anti-misinformation-actions/</u>

¹³² L Spinney, 'Fighting Ebola is hard. In Congo, fake news makes it harder', *Science Magazine*, 2019, retrieved 5 April 2021, <u>https://www.sciencemag.org/news/2019/01/fighting-ebola-hard-congo-fake-news-makes-it-harder</u>

government action that could be more disruptive of their services or business".¹³³ The 2018 Digital News Report also found that most online news consumers feel it is the responsibility of publishers and platforms to identity real and false news and fix the issue rather than governments, but they nonetheless felt that governments could do more to combat the phenomena.¹³⁴ On the other hand, concerns have been raised that "self-regulatory regimes enable private censorship and lack democratic accountability",¹³⁵ especially when algorithms are used to execute decisions.¹³⁶ (Yeung, 2018). Furthermore, technical solutions applied to the issue of disinformation and misinformation are not always very effective, with some of the most commonly employed methods for combatting misinformation on social media—such as banners that display fact-checks—having little impact on people's likelihood to believe deliberately misleading news, and some even backfiring.¹³⁷

The rise of misinformation and disinformation relating to COVID-19 has forced many online spaces and platforms to strengthen their policies to tackle the issue with a new urgency. In a joint statement published on Facebook's website in March 2020, Facebook, Google and its subsidiary YouTube, Microsoft and its subsidiary LinkedIn, Reddit, and Twitter said that they would be working together to address the issue.¹³⁸ In a report written for the think- tank New America's Open Technology Institute, Singh and Bagchi reviewed whether they had successfully lived up to this statement and concluded that the majority of platform efforts during this time have centred on:¹³⁹

- Connecting users to authoritative information, for example Reddit started using banners to highlight content that has been verified and deemed legitimate on the Reddit homepage and in search results and YouTube announced that it would expand the use of its algorithmically recommended information panels to connect users to authoritative information when they search for COVID-19-related queries.
- Moderating and reducing the spread of misleading content, for example TikTok has introduced an enhanced in-app reporting feature. When users come across content they believe contains intentionally deceptive or misleading information, they can report it by selecting the new "Misleading Information" and WhatsApp placed new, stricter limits on the number of times a forwarded message can be shared.
- Altering advertising policies to prevent exploitation and the marketing of misleading products and items, for example Twitter is using its "Ads for Good" programme to provide advertising credit to non-profit organisations so that they can run advertising campaigns for fact-checking services and promote reputable health information.

In 2018, Google admitted that its search engine has a tendency to reinforce confirmation bias. The platform has launched a host of measures tasked with curbing the spread of disinformation—including some specifically tasked with combating the spread of Covid-19 falsehoods, for instance suggesting that its ranking system "serves as a strong defence against misinformation", including false articles relating to COVID-19.¹⁴⁰ Some of its other initiatives include funding a new programme - created by Google, YouTube and the Institute for Strategic Dialogue- through Google.org called Be Internet

¹³³ B Epstein, 'Why it is so difficult to regulate disinformation online', In WL Bennett and S Livingston (Eds.), *The Disinformation age: Politics, technology, and disruptive communication in the United States*, Cambridge University Press, 2020.

¹³⁴ R Fletcher, R., 'Misinformation and disinformation unpacked', *Reuters Institute*, 2018, retrieved 7 April 2021, www.digitalnewsreport.org/survey/2018/overview-key-findings-2018/

¹³⁵ R Medzini, 'Enhanced self-regulation: The case of Facebook's content governance', *New Media & Society*, 2021

 ¹³⁶ K Yeung, 'Algorithmic regulation: a critical interrogation', *Regulation & Governance*, vol. 12, no. 4, 2018.
 ¹³⁷ G Pennycook & D Rand, 'The right way to fight fake news', *New York Times*, 2020, retrieved 11 April 2021, https://www.nytimes.com/2020/03/24/opinion/fake-news-social-media.html

¹³⁸ T Sonnemaker, 'Facebook, Google, Microsoft, Reddit, and Twitter just said they're working together to fight coronavirus misinformation', *Business Insider*, 2020, retrieved 4 April 2021,

https://www.businessinsider.com/facebook-google- youtube-microsoft-reddit-twitter-fight-coronavirus- covid19misinformation-2020-3

¹³⁹ S Singh & KKJ Bagchi, 'How internet platforms are combating disinformation and misinformation in the age of COVID-19', *New America*, 2020, retrieved 2 April 2021, <u>https://www.newamerica.org/oti/reports/how-internet-platforms-are-combating- disinformation-and-misinformation-age-covid-19/</u>

¹⁴⁰ K DeSalvo, 'Putting Information first' during COVID-19', *Google*, 2020, retrieved 8 April 2021, <u>https://blog.google/technology/health/dr-karen-desalvo-covid-19/</u>

Citizens in conjunction with UK Youth. It is an educational programme designed to teach young people how to be safe and responsible online, alongside empowering them to learn, share and express themselves online.141

However, despite the above mentioned efforts, Singh and Bagchi conclude that social media platforms need to be more transparent, and therefore accountable, as to how effective these initiatives have been and how they are impacting users and their online expression by sharing data on this issue more widely with external bodies.¹⁴² The sheer quantity and global nature of the content that platforms have to moderate means that social media companies are struggling to be 100 per cent effective in moderating false information. A recent study by the Centre for Countering Digital Hate (CCDH) with the Canadian Broadcasting Company (CBC), reported 832 posts containing misinformation to Facebook. Instagram. YouTube and Twitter, and found that only 12.5 per cent (or one in eight) of these reports were acted upon.¹⁴³ Similarly another study by CCDH, this time with Restless Development relating to the COVID-19 pandemic, found that of 649 social media posts flagged and reported by volunteers, only 9.4 per cent were met with meaningful action. That means over 9 in 10 posts containing misinformation were not dealt with.¹⁴⁴

It can be argued that social media companies are doing more to address misinformation than disinformation. As Chandler argues, whilst Facebook announced in 2020 that it would warn users exposed to false coronavirus content, this is at odds with its policy of not banning or fact-checking political ads, and it is only by changing the systemic drivers - such as the advertising revenue which makes spreading disinformation profitable – that real change will become possible.¹⁴⁵ Likewise, drawing from the European Commission, Taylor et al. note that despite Google's global dominance, little information about its search and ranking algorithms is available publicly and regulators have demanded more transparency and accountability.¹⁴⁶ Unlike on Facebook and Twitter, Google does not provide any report buttons or fact-checker notices for search results.¹⁴⁷ Alternative search engines to Google have been set up to counter these concerns, such as StartPage, which pays Google for the use of its search algorithm but strips out the tracking and advertising that usually comes along with it.148

Digital and media literacy

It has been noted that although digital and media literacy both draw on the same core skill of critical thinking, the fact that most digital media are networked and interactive raises additional issues and requires additional habits and skills: media literacy generally focuses on teaching youth to be critically engaged consumers of media, while digital literacy is more about enabling youth to participate in

¹⁴¹ UK Youth, 'UK Youth launches new digital literacy programme with support from Google and YouTube', 2020, retrieved 10 May 2021, https://www.ukyouth.org/2020/02/uk-youth-launches-new-digital-literacy-programme-withsupport-from-google-and-youtube/ ¹⁴² AM Guess & BA Lyons, 'Misinformation, disinformation, and online propaganda', in N Persily & J A Tucker

⁽Eds.). Social media and democracy: The state of the field, prospects for reform, Cambridge University Press, 2020.

¹⁴³ M Landi, 'Social media firms 'failing to meet even minimum test' over Covid misinformation', The Evening Standard, 2021, retrieved 4 April 2021, https://www.standard.co.uk/news/uk/facebook-twitter-voutube-instagramgovernment-b927097.html

¹⁴⁴ Centre for Countering Digital Hate, '#willtoact: How social media giants have failed to live up to their claims on the Coronavirus 'infodemic", Centre for Countering Digital Hate, 2020, retrieved 28 May 2021, https://252f2edd-1c8b-49f5-9bb2-cb57bb47e4ba.filesusr.com/ugd/f4d9b9_17e9f74e84414524bbe9a5b45afdf77e.pdf

¹⁴⁵ S Chandler, 'Facebook's coronavirus misinformation policy at odds with political ads stance', Forbes, 2020, retrieved 7April 2021, https://www.forbes.com/sites/simonchandler/2020/04/16/facebooks-coronavirusmisinformation-policy-at-odds- with-political-ads-stance/?sh=7b62baff3610

¹⁴⁶ E Taylor, LM Neudert, S Hoffmann & PN Howard, 'Follow the money: How the online advertising ecosystem funds COVID-19 junk news and disinformation', Comprop working paper - Oxford Internet Institute, 2020, retrieved 4 April 2021, https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/93/2020/08/Follow-the-Money-3-Aug.pdf ¹⁴⁷ Ibid.

¹⁴⁸ K Komando, '6 Google search alternatives that respect your privacy', USA Today, 2020, retrieved 13 April 2021, https://eu.usatoday.com/story/tech/columnist/komando/2020/11/21/6-internet-search-engines-respect-yourprivacy/6306467002/

digital media in wise, safe and ethical ways.¹⁴⁹ While both are distinct, they have to work in parallel in order for people – in this case girls - to be fully aware of the perils of being online, but more importantly how they can make the most of online spaces and utilise them to their full potential. And the benefits of digital and media literacy seem clear: even brief exposure to some training can improve competencies in media literacy,¹⁵⁰ including a better understanding of news credibility,¹⁵¹ or a more robust ability to evaluate biases.¹⁵² It has been illustrated that media literacy has a stronger impact than political knowledge on the ability to evaluate the accuracy of political messages ¹⁵³ regardless of political opinion. In addition, digital media literacy reduces the perceived accuracy of false news,¹⁵⁴ and training remains effective when delivered in different ways¹⁵⁵ and by different groups.¹⁵⁶

Finland begins teaching information literacy and critical thinking to children in kindergarten as well as running media and information literacy classes for older people. Its aim is to make sure that everyone - from school students to journalists, teachers and politicians - can spot various forms of misinformation, disinformation and malinformation.¹⁵⁷ This has resulted in Finland topping a European index of nations in being the most resistant nation to fake news.¹⁵⁸ In 2014, the government embedded media literacy into the curriculum, teaching children from the age of six to read sources critically.¹⁵⁹ Teachers encourage children to evaluate and fact check websites, ask students to hunt for dubious news and find its source, and demonstrate how easy it is for statistics to be manipulated, and this is taught across all disciplines - in art children are shown how images can be digitally altered; in history propaganda campaigns are analysed; and in science vaccine disinformation is put to the test.¹⁶⁰

Programmes like *Be Internet Citizens* - the one created by Google and YouTube - which cover key areas important to teaching young people digital awareness, safety and responsibility should be assessed for success and used. *Be Internet Citizens* focuses on:¹⁶¹

- Media Literacy which explains fake news, echo chambers and filter bubbles, to aid participants in becoming more confident in forming their own opinions.
- Emotional manipulation to help develop an increased level of critical awareness.
- Polarisation which enables an understanding of how powerful 'us vs them' divisions can be.

¹⁴⁹ Media Smarts, 'The intersection of digital and media literacy', *Media Smarts*, retrieved 10 May 2021, <u>https://mediasmarts.ca/digital-media-literacy/general-information/digital-media-literacy-fundamentals/intersection-digital-media-literacy</u>

¹⁵⁰ TC Helmus, JV Marrone, MN Posard & D Schlang, 'Russian propaganda hits its mark: Experimentally testing the impact of Russian propaganda and counter-interventions', *RAND Corporation*, 2020, retrieved https://www.rand.org/pubs/research_reports/RRA704-3.html

¹⁵¹ EK Vraga, M Tully, H Atki & H Rojas, 'Modifying perceptions of hostility and credibility of news coverage of an environmental controversy through media literacy', *Journalism*, vol. 13, no. 7, 2012.

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¹⁵³ J Kahne & B Bowyer, 'Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation', *American Educational Research Journal*, vol. 54, no. 1, 2017.

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¹⁵⁵ SC Kong, 'Developing information literacy and critical thinking skills through domain knowledge learning in digital classrooms: An experience of practicing flipped classroom strategy', *Computers & Education*, vol. 78, 2014.

¹⁵⁶ SH Jeong, H Cho & Y Hwang, 'Media literacy interventions: A meta-analytic review', *The Journal of Communication*, vol. 62, no. 3, 2012.

¹⁵⁷ M MacGregor, 'Empowering young people – and adults – to tell fake news from facts', *DW Made for Minds*, 2020, retrieved 10 May 2021, <u>https://www.dw.com/en/empowering-young-people-and-adults-to-tell-fake-news-from-facts/a-55128051</u>

¹⁵⁸ Ibid.

 ¹⁵⁹ H Barber, 'Finland's secret weapon in the fight against fake news: its kindergarten children', *The Telegraph*, 2021 retrieved 10 May 2021, <u>https://www.telegraph.co.uk/global-health/climate-and-people/finlands-secret-weapon-fight-against-fake-news-kindergarten/</u>
 ¹⁶⁰ Ibid

¹⁶¹ UK Youth, 'UK Youth launches new digital literacy programme with support from Google and YouTube', 2020, retrieved 10 May 2021, <u>https://www.ukyouth.org/2020/02/uk-youth-launches-new-digital-literacy-programme-with-support-from-google-and-youtube/</u>

• Free speech & hate speech to teach participants how to recognise and react to hateful content online, including the use of tools such as reporting, flagging and blocking.

But more importantly, as Marin Lessenski, Program Director of the European Policies Program at the Open Society Institute states "We need to engage young people as catalysts for change, as cocreators and co-leaders of media and information literacy development and dissemination."¹⁶²

4. METHODOLOGY

The research collected primary mixed-methods data through a large-scale survey, qualitative interviews and social listening to online platforms.

Survey

Questionnaire: The questionnaire had 16 closed questions; most of them allowed respondents to select multiple answer codes. Questions were structured around three areas 1) demographic (age and minority group); 2) online engagement with social topics; 3) misinformation and disinformation. The survey questionnaire was translated into different languages (see Table 1).

Timeframe: Data was collected from 5 February to 19 March 2021.163

Data collection: Data was collected by two marketing research companies: Ipsos collected data in 21 countries¹⁶⁴ and GeoPoll in 5 countries.¹⁶⁵ Three different methodologies were used to collect the data (See Table 1 for an overview of methods by country).

- **Computer Assisted Telephone Interviewing (CATI), i.e. telephone calls**: interviewers conducted telephone interviews in the respective countries.¹⁶⁶ They used GeoPoll's proprietary CATI Mobile Application to record responses. Respondents could opt out of the call or request a call back at another time.
- Computer Assisted Personal Interviewing (CAPI), i.e. face-to-face interviews: interviewers conducted face-to-face interviews with the help of tablets or large screen mobile phones to fill the survey. Initial screener questions were asked to the respondent. Then the device was handed over to the respondent to complete the survey.
- **Computer Assisted Web-Interviewing (CAWI), i.e. online survey**: Respondents filled in an online survey on a dedicated website. The survey was programmed to be filled in on smart phones or other devices.

Training and testing: All data collectors were trained, which included theoretical and practical sessions. All tools were pre-tested by staff. The CAWI tools were soft-launched for one day in each country with 30 participants.

Quality assurance and data monitoring: During the CATI live calls, supervisors randomly listened to a percentage of the ongoing calls. They monitored enumerator performance daily and checked the data. Any interviews with a below-acceptable length of interview (LOI) – in this case eight minutes – were dropped. All CAPI interviewers were supervised by the field team supervisor to maintain the general compliance in data collection. CAWI data was also monitored on a daily basis, including checks for completes, terminates, quits, and quotas. Checks were in place to verify participants' identity and to ensure that participants only participated once.

¹⁶² M MacGregor, 'Empowering young people – and adults – to tell fake news from facts', *DW Made for Minds*, 2020, retrieved 10 May 2021, <u>https://www.dw.com/en/empowering-young-people-and-adults-to-tell-fake-news-from-facts/a-55128051</u>

¹⁶³ 9 February to 7 March 2021 (Ipsos) and 27 February to 19 March 2021 (GeoPoll)

¹⁶⁴ Brazil, Canada, Colombia U.S, UK, France, Germany, Finland, Netherlands, Spain, Sweden, Italy, Indonesia, Philippines, Vietnam, Australia, Nepal, Jordan, Ecuador, El Salvador, Peru

¹⁶⁵ Burkina Faso, Kenya, Malawi, Togo and Zambia

¹⁶⁶ Usually, this is done in call centres but because of COVID-19 enumerates operated remotely.

Sampling: The target was to collect responses from 1000 girls and young women aged 15-24 in each country. In all countries except for the United States,¹⁶⁷ non-probability sampling with a quota sampling approach was used. The data collection teams conducted a comparison of population estimates to recent census results, where available, to define the sampling frame. Benchmarks¹⁶⁸ for each country were obtained to select samples with representative distribution of respondents in terms of region and age. Both firms relied on large pools of survey respondents who had previously agreed to participate in surveys in a specified mode. For CATI, an automated script/algorithm randomly pulled the appropriate amount of phone numbers needed using known demographic information from GeoPoll's proprietary database of over 250 million users. For CATI and CAPI, Ipsos provided quotas to panel providers in the different countries.

Table 2 summarises the data collection mode, language used and sample size.

Region, Country	Mode	Language	Company	Sample size
Africa and the Mid	dle East			
Burkina Faso	CATI	French, Moré	GeoPoll	1020
Jordan	CAPI	Arabic (localised)	Ipsos	1000
Kenya	CATI	English, Swahili	GeoPoll	1120
Malawi	CATI	Chichewa, English	GeoPoll	1041
Togo	CATI	French	GeoPoll	1021
Zambia	CATI	English	GeoPoll	1029
Asia and Pacific			·	
Australia	CAWI	English (localised)	Ipsos	1000
Indonesia	CAWI	Bahasa Indonesia	Ipsos	1000
Nepal	CAPI	Nepali	Ipsos	1016
Philippines	CAWI	English, Tagalog	Ipsos	1000
Vietnam	CAWI	Vietnamese	Ipsos	1000
Europe		L		
Finland	CAWI	Finnish	Ipsos	1000
France	CAWI	French (EU)	Ipsos	1000
Germany	CAWI	German	Ipsos	1000
Italy	CAWI	Italian	Ipsos	1000
Netherlands	CAWI	Dutch	Ipsos	1000
Spain	CAWI	Spanish (EU)	Ipsos	1000
Sweden	CAWI	Swedish	Ipsos	1000
UK	CAWI	English (localised)	Ipsos	1000
Latin America and	the Caribb	ean		
Brazil	CAWI	Portuguese (localised)	Ipsos	1000
Colombia	CAWI	Spanish (localised)	Ipsos	1000
Ecuador	CAWI	Spanish (localised)	Ipsos	1000
El Salvador	CAWI	Spanish (localised)	Ipsos	1001

Table 2: Mode, Language, Survey company, sample size by Region and Country

¹⁶⁷ The United States survey data collection was conducted on Ipsos' KnowledgePanel®, a probability-based web panel designed to be representative of the United States. Benchmarks from the 2020 Supplement to the United States Census Bureau's Current Population Survey were used to select a demographically and geographically representative sample.
¹⁶⁸ Geopoll: A sampling frame was initially designed to reach a 50/50 split of urban and rural residents, and a

¹⁶⁸ GeopolI: A sampling frame was initially designed to reach a 50/50 split of urban and rural residents, and a 50/50 split of the younger (15-19) and older (20-24) age groups, but this was later adjusted to a 70/30 split of urban/rural and a 70/30 split of older/younger age groups due to difficulty in reaching the younger cohort in five countries. Ipsos: For sampling quotas, they were set up to screen for females age 15-24. Specific age splits for quotas/benchmarks used in field were 15-17, 18-21, and 22-24.

Peru	CAWI	Spanish (localised)	Ipsos	1000
North America				
Canada	CAWI	English, French (localised)	Ipsos	1000
United States	CAWI	English	Ipsos	1000

Incentives: CATI participants were compensated with an incentive of USD \$0.50 airtime credit upon successful completion of the questionnaire. CAWI and CATI participants received points for their participation which they can redeem on a dedicated panellists' website for a variety of reward; they were also able to participate in prize draws.

Data analysis: Data cleaning, merging and analysis was conducted using Stata. Data analysis included the creation of basic summary statistics, often disaggregated by age group, region, income classification and intersectional characteristics; and bivariate statistics, such as correlations and group comparisons. We also carried out proportion tests to explore differences between groups. When we report differences in the report, we refer to statistically significant differences at the 1 per cent level or less (p< 0.01). All percentages are rounded up when the decimals are 0.50 or higher and rounded down when the decimals are smaller than 0.50.

Qualitative Interviews

Interview questions: The interview questions were structured into three sections that asked: 1) the topics the girls and young women engage with online and their behaviours and practices when learning and engaging online; 2) their experience of misinformation and disinformation online; and 3) education and digital media literacy. Section one had ten questions, two had twenty questions and section three eight questions. The interview questions were conducted in a semi-structured format meaning not every question was asked to all girls to allow space for an open-ended discussion with the interviewee and the ability to be explorative in the exchange.

Timeframe: The interview questions were piloted the week of the 8 March and final changes to the interview questions made the following week. Data was collected 24 March to 5 May 2021.

Data collection: The interviews varied in time but usually lasted about 45 minutes to an hour and were conducted via Microsoft teams, Zoom and WhatsApp. The girls and young women were given the option to choose the mode that suited them most. These platforms were used as they offered convenience for making lengthy international calls and were accessible. A list of possible dates and times were given to the girls to choose from, in order to fit around their schedules and respective time zones. Interviews in Burkina Faso, Brazil and one of two interviews in Indonesia were conducted with the help of translators into French, Portuguese and Bahasa. Interviews in Benin, Dominican Republic, Egypt, Nepal (one of the two interviews only), Peru, and Spain were conducted directly in French, Arabic, Nepali and Spanish and translated after the point of transcription. All other interviews were conducted in English.

Sampling: The interviewees were a varied global group of young female activists with intersectional characteristics. Overall, interviews were conducted with 22 girls and young women aged between 15-24 across 18 countries: Bangladesh, Benin, Brazil, Burkina Faso, Dominican Republic, Egypt, Germany, Indonesia, Ireland, Kenya, Malawi, Nepal, Nigeria, Peru, Spain, Sudan, Wales and United States.

These girls and young women were purposely selected from a call out shared with Plan International Country and National Offices through various youth engagement networks in the country. The call out requested for girls and young women aged between 15 to 24 who used online spaces to access and share information in relation to social, political or civic issue to take part in interviews. Girls who wanted to participate were asked to list their age, their country and why they wanted to take part. This helped the researchers to choose girls and young women from various backgrounds and with a wide array of interests when more than one girl or young woman had applied in a country. Girls and young women with disabilities, trans girls and women, indigenous girls and women and those living in crisis contexts were encouraged to apply. Whilst it is not possible to differentiate the girls' intersectional

characteristics, it is possible to deduce from the content of the interviews that they displayed differences in age, culture and context, ethnicity, race, and religious and social views.

Data analysis: Following the interviews, the recordings were transcribed verbatim (excluding filler words like "um") into English using the platform rev.com. For interviews not using a translator Plan International staff who conducted the interview transcribed it in the relevant language and following completion, translated it into English. Internet connectivity was sometimes problematic during conversations. All interviews were completed and despite pauses due to reconnection of the calls this did not seem to affect the quality of answers or the flow of the discussions. Unfortunately, due to technical problems one transcript was excluded from the study with only the rough notes being used.

Qualitative data analysis was undertaken through thematic and sentiment analysis using NVivo software to conduct the coding. The initial interview template was initially reviewed to make a qualitative codebook which considered possible themes related to the overall sections of the questionnaire. This was made into four overarching categories within the software:

- learning about social topics online
- misinformation and disinformation online
- education and digital media literacy
- tackling the issue.

The transcripts were initially read to get key understandings from the interviews. Using the NVivo software deductive coding was applied, and transcripts were divided into key themes and interconnected sub-themes in each of the relevant categories. The initial codebook was developed using a hierarchal coding frame to help organise and structure the data and enable key findings, themes and arguments to be identified within and across each node. This codebook was used as a guide for the researchers, but the codebook was developed and changed as new themes emerged, and codes were added or deleted and categories re-organised. When initial coding was completed, contents of each node were reviewed to ensure consistency, accuracy and minimise the risk of misinterpretation, consequently some content were either removed or re-coded. Overarching memos were written for each category to connect and interrelate the data and allow for interpretation and create explanatory accounts. The initial qualitative write up was structured into the aforementioned four sections and comprehensively featured the researchers interpretation and overview of the finding per section, various quotes from the girls and young women and the frequency of the experience or view among the participants.

The qualitative sections of this report are referred to as 'Insights from youth activists'. However, please note the girls and young women included a broad range on the activist spectrum. Some of the girls and young women considered themselves to be activists, for example, they were leading an organisation on a key issue or were activist leaders in their community. Others, considered themselves to be activist with a small 'a' – speaking out from time to time on an issue or topic they were passionate about or volunteering around certain issues but for the sake of cohesiveness they are referred to in one section.

Please note that the names of the girls and young women in this report have been changed to ensure anonymity, in nearly all cases they themselves chose the names they would like to use in this report.

Social listening

Social listening tool: This is an online tool that gathers information to see what people are saying in regard to a certain topic across social media platforms including blogs, Facebook, Twitter, forums, YouTube, aggregator,¹⁶⁹ reviews (including forum replies, comments, images and videos) - looks at open profiles or finds information using hashtags.

¹⁶⁹ A site that pulls content from another site and reproduces on its site word-for-word with or without giving credit. Keep in mind this doesn't include blogroll sites or sites that cross-post their content to other blogs or websites.

Timeframe: Data was collected from 15 March to 14 April 2021.

Data collection: A search was carried out on a weekly basis for a four-week period. Relevant information was pulled from the seven days previous into a dashboard that we created. Data was pulled from the following media types: blogs, mainstream news, Twitter, forum and forum replies, comments, images, YouTube, Facebook.

The search was based on a list of primary key words around misinformation and disinformation; the key words were as follows: deep fake videos,¹⁷⁰ disinformation,¹⁷¹ harmful information, misinformation,¹⁷² misled, wrong information, factcheck,¹⁷³ propaganda, lies,¹⁷⁴ conspiracy,¹⁷⁵ media, fake news¹⁷⁶ and rumour.

These primary words were searched against words in three areas:

- Politics and Elections the key words were democracy, elections,¹⁷⁷ vote,¹⁷⁸ governments,¹⁷⁹ politics¹⁸⁰ and QAnon.
- **COVID-19** the key words were vaccine, virus, COVID-19,¹⁸¹ pandemic, guarantine and lockdown.
- Sex and sexual health the key words searched were sexual health.¹⁸² sex education, sex positive, sexual wellness, pleasure, sexually transmitted diseases¹⁸³ and human immunodeficiency virus.184

All primary key words and secondary words were also searched for in French and Spanish and pulled into separate French and Spanish language dashboards.

Data analysis: Data was downloaded from the dashboard and analysed in excel after each weekly search. Data was analysed to see the country breakdown that the information was sourced from, the frequency of the media types and the sentiment of the posts. A post's sentiment, which is the overall tone of the post, is classified into three categories: Negative, neutral and positive. The words in the post are assigned a pre-determined score value. These values are added, and the resulting score is compared to an overall sentiment category range. Examples of the types of information and posts being pulled were also put into the excel for analysis.

Quantitative data was analysed for the frequency of posts in relation to the key words both for region and media type. These were also compared to frequency by gender, e.g., seeing how many women or girls had posted against the same search criteria. This was also analysed against overall sentiment for the topic. As well as identifying top words through word clouds and pulling examples of posts for gualitative analysis in relation to the types of posts being shared in relation to misinformation and disinformation on the three topics.

Limitations to methodology

Survey and gualitative interviews

¹⁷⁰ Including variations: 'deep fakes' 'deep fake 'deep fake videos' and deep fake videos'.

¹⁷¹ Including variation: 'dis-information'

¹⁷² Including variation: 'mis-information'

¹⁷³ Including the word 'fact' on its own.

¹⁷⁴ Including singular – 'lie'

¹⁷⁵ Including variations: 'conspiracy theory' 'conspiracy theories'

¹⁷⁶ Also included: 'mainstream news' and 'alternative news'

¹⁷⁷ Including singular – 'election'

¹⁷⁸ Including variation: 'voted' 'voting'

¹⁷⁹ Including singular – 'government' and short-hand 'govt'

 ¹⁸⁰ Including variations: 'political'
 ¹⁸¹ Including variations: 'COVID19' 'covid19' 'covid-19' 'coronavirus' 'covid' 'COVID' and 'corona'.

¹⁸² Including the word 'sex' only.

¹⁸³ Including abbreviations 'STDs' and singular 'sexually transmitted disease' (STD' as well as alternative 'sexually transmitted infection' 'sexually transmitted infections' 'STI' 'STIs'.

¹⁸⁴ Including abbreviation: 'HIV' 'hiv'

- Most of the data for the survey and interviews was collected remotely, and only girls and young women who had sufficient access to devices that have internet or phone connection could participate as respondents. This means that girls who do not have sustainable access to the internet or phone connections, often the girls who are the most vulnerable, were not able to share their experiences. For the interviews, some countries provided data bundles to make it accessible for the girls and young women to participate in the interviews via WhatsApp or Zoom but they still needed access to a mobile phone.
- The sample did not include boys.
- Even though we know that early adolescence (aged 10-14 years) is a critical period in a girls' life, we conducted data collection with girls and young women between the age of 15 to 24 due to ethical and practical considerations.
- In the quantitative analysis, we aimed to explore intersectional differences but were unable to do this comprehensively. For example, we were unable to test differences between different sexual orientation and gender identities or ethnic/racial backgrounds. We conducted proportion tests to assess whether differences were statistically significant. However, this method does not account for how different intersectional identities may relate.
- For the qualitative interviews, conducted with the help of translators or conducted directly in the chosen language and translated after the point of transcription into English, the original meaning of some concepts that the girls and young women mentioned during the interview might have been lost in translation.
- With the exception of the survey data collected in the United States, the data is not nationally representative since the online panels were recruited from non-probably sources and the CAPI countries were surveyed in locations that were not randomly selected.
- Different survey data collection methods were used in different countries which may bias the data.
- We cannot verify that participants in the CAWI methodologies were who they said they were. Family members or friends who were not female could have filled in the survey or there may have been someone present while they filled out their answers which may have impacted their answers.

Social Listening

- The social listening tool pulls from platforms with open platforms so it will not capture what users are saying on a private platforms or private pages or accounts on a platform.
- Social listening is based on keywords and queries which means that the quality of the results will depend directly on whether the combination of the right keywords was broad and specific enough to find relevant data. This inside-out approach limits the findings and increases the risk of missing important learnings.
- The social listening tool is heavily skewed towards the North America region and Twitter platform which means it risks missing important findings from other regions and platforms.
- Social listening dashboard features are limited when it comes to doing deep analysis and largely based on frequency of posts.

Ethics and safeguarding

Research ethics approval was granted from two international child rights academics from the Department of Public Law and Jurisprudence, University of Western Cape in South Africa and Professor of Children's Rights in the Developing World, University of Leiden in the Netherlands.

Survey: The contractors had to sign a code of conduct confirming that they will adhere to Plan International's global Safeguarding Policy. Consent was obtained from all participants and from parents/guardians of 15 to 17-year-old participants. The survey form and interview scripts emphasised that participation was voluntary and that consent could be withdrawn. Robust privacy protection and data security was assured.

Interviews: In line with ethics and safeguarding procedures, qualitative interviews were conducted by two members of Plan International staff. Plan International staff who conducted the interviews were from Monitoring Evaluation Research and Learning Teams and Youth Engagement teams across Plan International who have completed safeguarding courses. Prior to the interviews a meeting was held for interviewers to go over safeguarding and referral processes. Information sheets were

provided ahead of time, and informed parental consent and assent sought for girls under 18. For girls and young women aged 18 and above informed consent was sought prior to the interviews; verbal consent was also given to record the interviews. Anonymity and confidentiality were ensured throughout the data collection, analysis and write up process.

Social listening: All data used was taken from the public domain and quotes were anonymised. Quotes were also cross-checked so that they were not traceable, this was done via search engine searches and where identifiable, quotes were not used or paraphrased so no longer traceable. A secure password protected platform was used for the dashboards with suitable encryption for data storage and transfer. When data was downloaded to excel it was stored on secure password protected Microsoft Teams location.

5. SOCIAL LISTENING EXERCISE

In order to see the kind of misinformation and disinformation girls and young women could be exposed to online, we conducted a social listening exercise across three topics: politics and elections, COVID-19, and sex and sexual health. As mentioned in the <u>Digital</u> and media literacy

It has been noted that although digital and media literacy both draw on the same core skill of critical thinking, the fact that most digital media are networked and interactive raises additional issues and requires additional habits and skills: media literacy generally focuses on teaching youth to be critically engaged consumers of media, while digital literacy is more about enabling youth to participate in digital media in wise, safe and ethical ways. While both are distinct, they have to work in parallel in order for people – in this case girls - to be fully aware of the perils of being online, but more importantly how they can make the most of online spaces and utilise them to their full potential. And the benefits of digital and media literacy, including a better understanding of news credibility, or a more robust ability to evaluate biases. It has been illustrated that media literacy has a stronger impact than political knowledge on the ability to evaluate the accuracy of political messages regardless of political opinion. In addition, digital media literacy reduces the perceived accuracy of false news, and training remains effective when delivered in different ways and by different groups.

Finland begins teaching information literacy and critical thinking to children in kindergarten as well as running media and information literacy classes for older people. Its aim is to make sure that everyone - from school students to journalists, teachers and politicians - can spot various forms of misinformation, disinformation and malinformation. This has resulted in Finland topping a European index of nations in being the most resistant nation to fake news. In 2014, the government embedded media literacy into the curriculum, teaching children from the age of six to read sources critically. Teachers encourage children to evaluate and fact check websites, ask students to hunt for dubious news and find its source, and demonstrate how easy it is for statistics to be manipulated, and this is taught across all disciplines - in art children are shown how images can be digitally altered; in history propaganda campaigns are analysed; and in science vaccine disinformation is put to the test.

Programmes like *Be Internet Citizens* - the one created by Google and YouTube - which cover key areas important to teaching young people digital awareness, safety and responsibility should be assessed for success and used. *Be Internet Citizens* focuses on:

- Media Literacy which explains fake news, echo chambers and filter bubbles, to aid participants in becoming more confident in forming their own opinions.
- Emotional manipulation to help develop an increased level of critical awareness.
- Polarisation which enables an understanding of how powerful 'us vs them' divisions can be.
- Free speech & hate speech to teach participants how to recognise and react to hateful content online, including the use of tools such as reporting, flagging and blocking.

But more importantly, as Marin Lessenski, Program Director of the European Policies Program at the Open Society Institute states "We need to engage young people as catalysts for change, as cocreators and co-leaders of media and information literacy development and dissemination." Methodology section, key words in each topic area were searched against keywords for misinformation and disinformation. For each of the topics, our social listening tool found the following number of posts over a month-long period through our keyword search:

- politics and elections **3,014,933**
- COVID-19 2,321,945
- sex and sexual health 1,170,393

The area of politics and elections had considerably more posts than the other two categories and the ratio of male to female posts was 58 per cent to 41 per cent. It is difficult to know whether this is an access issue or if females feel less confident in posting about politics and elections. The difference between males and females was less for COVID-19 posts (52 per cent compared to 48 per cent) and split equally at 50 per cent to 50 per cent for sex and sexual health.

For all three categories the majority of posts stemmed from the North America region and from the social media platform, Twitter; probably because Twitter has more public profiles than Facebook and Instagram. The latter two social media platforms offer users the option of making their profiles private and therefore social listening methods would not be able to access those posts.¹⁸⁵ However, the full reason behind the predominance of Twitter in the social listening results is not known and only speculative.





¹⁸⁵ The language limitations of French, English and Spanish also meant that relevant posts in other languages would be omitted from the search.

Figure 3: COVID-19 – Region and media type breakdown







The majority of posts were considered to have a negative sentiment. A post's sentiment, which is the overall tone of the post, is classified into three categories: negative, neutral and positive. The words in the post are assigned a pre-determined score value. These values are added, and the resulting score is compared to an overall sentiment category range.

Figure 5: Sentiment analysis



The posts for politics and elections had the most negative sentiments, many of the posts demonstrated tensions between different parties along the political spectrum, a large amount from the United States contained accusations of election rigging from the most recent presidential election. Examples were:

"Democracy dies in Democrat propaganda masquerading as news."

In general posts around politics and demonstrated the mistrust people had in politicians and political institutions:

"Remember that during elections politicians will heat up the atmosphere only because it is in their interest for the election result. Advice ignore their a***s. It's all lies." [Translated from Spanish]

"A "kakistocracy" is a system where the government is run by the worst, least qualified, or most unscrupulous citizens – this is the government my country has right now"

Posts related to COVID-19 also often overlapped into the area of politics and online platforms often seemed a way to vent users' frustrations with government mandated rules as well as the overall handling of the pandemic:

"Covid-19 has caused African-American life expectancy to drop by 2.7 years- an unparalleled demographic catastrophe in recent US history- yet this is not discussed in the media or politics."¹⁸⁶

"What they don't say on government media is that our government lied so much to us about this pandemic that WE DON'T BELIEVE THEM ANYMORE WHAT THEY SAY."

Overall posts around COVID-19 had the most examples of misinformation and disinformation:

"Bill gates is funding 'DNA' mining through COVID tests and vaccines."187

"People need to understand, the government is running a complete experiment on everybody who took the vaccine, they're hoping that it works against the virus but still have no evidence only have a year of trials and information on it, bunch of sheep. They told everybody."

¹⁸⁷ Ibid

¹⁸⁶ This wording of this quote has been slightly changed to protect identities without changing the aim and meaning of the quote.
Examples of misinformation and disinformation could also be found in the area of politics and elections and sexual health but they were less frequent: Examples included:

"Sex education encourages teenagers to have sex."

Contrastingly, users' frustration on the amount of misinformation and disinformation online were also clear and there were frequent posts warning about false information online:

"Vaccine misinformation is being underestimated in Kenya there's a significant issue of vaccine hesitancy. Another stupid consequence of American style conspiracy theories and influences with Kenya society."

"Unfortunately, there's misinformation circulating around this #HIV vaccine study. A person CANNOT get HIV from the study HIV vaccines because these study vaccines do not contain real HIV ."¹⁸⁸

In all three areas under investigation, posts containing misinformation and disinformation that also reinforced harmful gender norms could also be found:

"Women in political life is a disaster and for them too- whenever I see political change there are a pack of fibromyalgia ridden middle-aged office worker women trying to crack their way into high places."

"Fun fact: During the tradition ceremony there is a function loosely translated as "sex free". During this time, you can have sex with any woman of your desire, married or not."

This finding aligns with the growing issue around misinformation and disinformation in Latin America, with anti-rights groups that make an important effort to disseminate non-scientific information, false information and information that promotes hatred towards women, LGBTIQ+ community and feminists.¹⁸⁹

That is not to say, that all the posts found through the social listening exercise were negative, positve posts could be found in all three topic areas such as warnings against financial scams which had increased during pandemic or the need for us to talk about issues outside social media:

"More community spaces for political education are needed as social media is not enough to talk about such important issues!"

Sex and sexual health had the most positive sentiment score of the three categories, and this corresponds with the sample of posts reviewed. Many posts were trying to raise awareness around sexual health, a large number of posts were from charities and community organisations:

"How to better support women in your life! Men specifically, you can take this step by purchasing pads or tampons and have them available in your bathrooms!"

"We provide conseling services and voluntary tests to detect #HIV. For more information contact us through.. "[Translated from Spanish]

Online platforms were also utilised by people to talk about issues around sex and sexual health:

"What intrigues me about his tweet is how men always describe sex as something that is done to women, not an intimate moment that they both share, but rather something that is done to women and taken away from them." [Translated from French]

¹⁸⁸ Ibid

¹⁸⁹ The Observatory on the Universality of Rights, 'Rights at risk – time for action – Observatory on the Universality of Rights trends report', 2021, retrieved 23 June 2021, <u>https://www.awid.org/sites/default/files/rightsatrisk_timeforaction_ourstrendsreport2021.pdf</u>

"There is a line between smashing taboos around women's health, public health education and being 'offensive'. Far too often, social media is shadow banning shutting accounts and censoring content."

Although the keywords sought to bring up content around misinformation and sex and sexual health, the search inadvertently brought up a lot of posts around sexual harassment - intractably linked online with a number of issues. This is demonstrated by the number of women and girls who used the online spaces to voice their concerns around issues of harassment and assault:

"A lot of man are triggered bc they're now realising that their past behaviours were in fact sexual harassment."

"Even my mum was sexually harassed at work, she's in her 50s. I really hate men I'm sorry but I do. I understand the not all men thing but the fact I've endured sexual assault and sexual harassment since I was 11. I can't change how much I fear men."

What became clear through the social listening exercise is that, even when directly looking for links for topics to misinformation and disinformation, online platforms do offer a lot of benefits for analysing information and finding out more about many issues. Numerous posts shared had information about posts that were useful and informative. While the search did return lots of posts containing misinformation and disinformation there were also a number helping to combat the issue by flagging false content. This was especially the case in the areas of sex and sexual health where women and girls posted concerns around sexual health and sexual harassment.

However, it was still all too easy to find numerous posts in all three topics that contained misinformation and disinformation and these were only the posts that were obviously identifiable as such. There were also a considerable number of posts that were categorised as grey areas, where it was hard to decipher what was true or not. For example, posts containing information around local politics in a country that the researchers didn't have enough information or familiarity with to determine its veracity. But this is precisely what girls and young women, have to contend with on a daily basis when learning online informally.

The sheer vastness of information is overwhelming – the search drew over 6 million posts. As many girls and young women highlight in the findings below, online it can be extremely difficult to decipher what is true or not, thus hampering their learning opportunities and undermining their confidence in information.

6. FINDINGS FROM THE SURVEY AND INTERVIEWS

Overview of the survey respondents

Survey data was collected from 26,249 girls and young women (aged 15 to 24) across 26 countries.

Countries and regions: 30 per cent of the survey respondents live in Europe; 24 per cent in Africa or the Middle East; 19 per cent in Asia and Pacific region; 19 per cent in Latin America and the Caribbean and 8 per cent in North America. See Table 2 for an overview of the regions in each country.¹⁹⁰

¹⁹⁰ We only have information about the rural/urban location for Burkina Faso, Kenya, Malawi, Togo, the United States and Zambia. In these countries, 71 per cent of the survey participants lived in an urban and 29 per cent in a rural area.

Figure 6: Regional distribution of survey participants



Total 26249

Table 2: Geographical coverage by country

Region,	Sample	Geographical coverage	je	
Country	size			
Africa and t	the Middle E	ast		
Burkina Faso	1020	Hauts-bassins – 134 Centre – 429 Cascades – 45 Cente-est – 75 Est – 37	Centre-sud – 44 Nord – 37 Boucle du mouhoun – 80 Sud-ouest – 8	Centre-nord 43 Plateau central 5 Centre-ouest 74 Sahel 9
Jordan	1000	Amman – 359 Balqa – 59 Zarqa – 150 Madaba – 26	Irbid – 205 Mafraq – 53 Jerash – 37 Ajloun – 24	Karak – 37 Tafielah – 15 Ma'an – 20 Aqaba – 15
Kenya	1120	Murang'a -23 Taita-taveta -9 Kericho -19 Nairobi -191 Nakuru -80 Kisii -28 Nyeri -21 Meru -49 Kiambu -92 Uasin gishu -60 Mombasa -40 Homa bay -15 Migori -13 Tharaka-nithi -10 Machakos -25 Bomet -21	Kilifi – 18 Wajir – 8 Bungoma – 21 Kajiado – 35 Lamu – 3 Makueni – 8 Kisumu – 31 Embu – 19 Kirinyaga – 21 Baringo – 12 Trans nzoia – 53 Marsabit – 3 Mandera – 1 West Nandi – 23 Busia – 13 Mandera – 1	West Nandi – 23 Busia – 13 Garissa – 6 Nyandarua – 3 Kitui – 16 Narok – 9 Vihiga – 9 Tana river pokot – 11 Siaya – 14 Laikipia – 15 Elgeyo-marakwet – 8 Kwale – 19 Kakamega – 16 Turkana – 5 Isiolo – 13 Nyamira – 9
Malawi	1041	Southern – 464	Central – 418	Northern – 159
Тодо	1021	Plateaux – 60 Maritime – 828	Kara – 71 Centrale – 21	Savanes – 41
Zambia	1029	Lusaka – 296 Copperbelt – 192	Southern – 131 Eastern – 70	Northern – 45 Luapula – 47

		Muchinga – 37	Western – 40	North-western – 38
		Central – 133		
Asia and Pac	ific			
Australia	1000	New South Wales – 300 Victoria – 288	South Australia – 69 West Australia – 91	Northern Territory – 5 Australian Capital
Australia		Queensland – 216	Tasmania – 20	Territory12
	1000	Java – 603	Maluku Islands – 10	Sulawesi – 230
Indonesia		Kalimantan – 63 Lesser Sunda Islands – 60	Papua – 15	Sumatera – 19
Nepal	1016	Eastern – 221 Central – 352	Western – 197 Mid-Western – 147	Far-Western – 99
Philippines	1000	Luzon – 570	Mindanao – 243	Visayas – 187
Vietnam	1000	Central Highlands – 68 Mekong River Delta – 164 North Central Coast – 108	South Central Coast – 74 Northeast – 50	Northwest – 222 Red River Delta – 96 South East – 218
Europe	1			
Finland	1000	Pohjois- ja Itä-Suomi – 248 Länsi-Suomi – 219	Helsinki-Uusimaa – 301 Etelä-Suomi – 226	Ahvenanmaa – 6
France	1000	Nielsen I (Ile de France) – 207	Nielsen III - North West & West – 183	Nielsen V - South – 226
France		Nielsen II - North & North East – 204	Nielsen IV - Centre & East – 180	
Cormony	1000	Nielsen I – 176 Nielsen II – 236	Nielsen IIIb – 141 Nielsen IV – 155	Nielsen VI – 55 Nielsen VII – 57
Germany		Nielsen IIIa – 136	NielsenV(a+b) – 44	Nielsen vii – 57
ltoby	1000	Nord-Ovest – 199	Centro(i) $-$ 194	Isole – 199
Italy		Nord-Est – 136	Sus – 272	
Netherlands	1000	Noord&Oost Nederland – 347	West-Nederland – 447	Zuid-Nederland – 206
Spain	1000	Noroeste & Noreste – 285 Madrid and Centro – 258	Este – 170	Sur and Canarias – 287
Sweden	1000	Norrland – 65 Mellansverige – 253	Stockholm – 256 Västsverige – 198	Södra Sverige – 228
UK	1000	North&Yorkshire – 132 NorthWest – 111 Midlands – 167	SouthWest England & Wales – 131 SouthEast & Anglia – 218 Greater London – 132	Scotland – 82 Northern Ireland – 27
Latin America	a and the	Caribbean		
Brazil	1000	Norte – 99 Nordeste – 293	Sudeste – 398 Sul – 132	Centro-Oeste – 78
Colombia	1000	Centro Oriente – 351 Caribe – 202	Pacífico – 154 Eje Cafetero – 180	Centro Sur – 68 Llano – 45
Ecuador	1000	Pichincha – 280 Guayas – 241	Azuay – 51 Manabí – 73	Resto – 327 Tungurahua – 28
El Salvador	1001	San Salvador – 306 La Libertad – 168	Santa Ana – 89	Otros – 438
Peru	1000	Costa Centro – 28 Costa Norte – 189 Costa Sur – 55	Lima – 394 Selva – 48 Sierra Centro – 84	Sierra Norte – 33 Sierra Sur – 169
North Americ	a			
Canada	1000	Alberta – 104 British Columbia – 111 Manitoba – 37	Newfoundland and Labrador – 14 Nova Scotia – 23	Prince Edward Island – 3 Quebec – 233 Saskatchewan – 25
United States	1000	New Brunswick – 24 Northeast – 163 Midwest – 253	Ontario – 421 South – 360	West – 224

Income classifications¹⁹¹: The largest number of respondents are from high-income economies (42 per cent) and the smallest number are from low-income economies (12 per cent).





Total 26249

Age and gender: All survey respondents are female. They are aged between 15 and 24 years. The majority (60 per cent) are aged 20 to 24 years and 40 per cent are 15 to 19 years.



Figure 8: Age groups

Total 26249

¹⁹¹ Following the World Bank classification (<u>https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups</u>) countries were classified as follows: low-income economies: Burkina Faso, Malawi, Togo; lower-middle income economies: El Salvador, Kenya, Nepal, Philippines, Vietnam, Zambia; upper-middle income economy: Brazil, Colombia, Ecuador, Indonesia, Jordan, Peru; high income economies: Australia, Canada, Finland, France, Germany, Italy Netherlands, Spain, Sweden, UK, United States.

Intersectional characteristics: 33 per cent of girls and young women who participated in the survey identify with at least one of the listed intersectional characteristics.

- 11% identify as LGBTIQ+
- 10% of respondents identify as belonging to a racial or ethnic minority
- 10% identify as belonging to a religious minority
- 4% identify as having a disability
- 3% identify as a displaced person or refugee.

Time spent online

55% of girls and young women spend more than seven hours a day online; 16% spend more than twelve hours a day online.

Girls and young women spend a striking amount of time online¹⁹². This might be related to COVID-19 restrictions increasing girls' time spent in digital spaces.¹⁹³ Only 4 per cent of the survey participants spend less than an hour a day online. 81 per cent of girls and young women spend more than four hours online and 55 per cent spend more than 7 hours a day online. Almost one in five girls and young women spend more than 12 hours online. However, this could be due to the fact that data collection took place at a time where many countries still had remote schooling and time for online schooling could have been factored into their answers. Only one person out of over 26000 participants said that she did not use the internet.¹⁹⁴





Total 26249

Differences by age

¹⁹² Girls and young women were asked 'How much time do you spend online on an average day? Please note this includes any online activity on phone, computer or other device.'

¹⁹³ L Geddes & S Marsh, 'Concerns grow for children's health as screen time soars during Covid crisis', *The Guardian*, 2021, retrieved 21 June 2021, <u>https://www.theguardian.com/world/2021/jan/22/children-health-screen-times-covid-crisis-sleep-eyesight-problems-digital-devices</u>

¹⁹⁴ The survey was ended for the survey respondent who did not have access to the internet and their responses were not included in the analysis.

20 to 24-year-olds spend more time online than 15 to 19-year-olds.

Young women, aged 20 to 24, are more likely to spend over seven hours online (56 per cent), compared to 15 to 19-year-olds (52 per cent). 13 per cent of 15 to 19-year-olds spend more than 12 hours online, compared to 18 per cent of 20 to 24-year-old women.

Differences by region and income classification

Girls and young women from Latin America and the Caribbean spend most time online: 70% spend more than seven hours and 45% more than ten hours a day online.

Girls and young women in Latin America and the Caribbean in particular spend a lot of time online, with 45 per cent of the survey respondents spending more than ten hours a day, and 70 per cent spending more than seven hours a day online. This is likely to be the case because COVID-19 restrictions mean that education is delivered online in Latin America and the Caribbean.¹⁹⁵ It does not necessarily mean that girls and young women in Latin America and the Caribbean all have access to the internet. On the contrary, Latin America has low access to the internet particularly in rural areas.¹⁹⁶





Girls and young women from low-income economies spend less time online than those from other countries: 40 per cent of girls and young women from low-income economies spend more than seven hours a day online, compared to 57 per cent of girls and young women from other countries.

Differences by intersectional characteristics

Girls and young women who identify as belonging to at least one minority group are statistically significantly more likely to spend more than seven hours online (59 per cent) than those who do not (53 per cent).

¹⁹⁵ J Mendoza, 'Distance education and delivery systems used amidst the COVID-19 in Latin America and the Caribbean in 2020', *Statista*, 2020, retrieved 21 June 2021, <u>https://www.statista.com/statistics/1184168/distance-education-delivery-systems-coronavirus-latin-america/</u>

¹⁹⁶ M Krumholtz, 'At least 77 million in Latin America's rural areas have no internet access', *Latin America Reports*, 2020, retrieved 21 June 2021, <u>https://latinamericareports.com/at-least-77-million-in-latin-americas-rural-areas-have-no-internet-access/4785/</u>

Those who identify as LGBTIQ+ spend particularly much time online: 69 per cent of LGBTIQ+ youth spend more than seven hours a day online, compared to 53 per cent of participants who do not identify as LGBTIQ+.

Engaging with social topics online

Nine out of ten girls and young women regularly engage with social topics online, with COVID-19 being the topic most girls engage with.

The very large majority (89 per cent) of the survey respondents regularly engage with social topics online¹⁹⁷. The topic that most girls and young women engage with is COVID-19 (55 per cent), followed by news and current affairs (45 per cent) and health and physical wellbeing (42 per cent). About a third of the surveyed girls and young women, regularly engage with climate change, gender equality and sexual health online.

Table 3: Do you regularly engage with any of the following topics online?

Do you regularly engage with any of the following topics online? (select all that apply)	Frequency	Percent
COVID-19	14329	55%
News and current affairs	11764	45%
Health and physical wellbeing	11066	42%
Mental health	9512	36%
Climate change	8359	32%
Gender equality and feminism	8360	32%
Sex and sexual health	7322	28%
Gender-based violence	6996	27%
Politics and elections	6402	24%
Economic inequality	5344	20%
Racial justice	5348	20%
LGBTIQ+ rights	5197	20%
Other topic	3989	15%
I don't engage with topics online	2948	11%

Total: 26249

Differences by age

Compared to 15 to 19-year-old girls, young women, aged 20 to 24, are statistically significantly more likely to regularly engage with all the listed topics online, in particular with:

- politics and elections online (27% compared to 20%)
- news and current affairs (47% compared to 41%)
- sex and sexual health (30% compared to 25%)
- COVID-19 (57% compared to 51%)
- mental health (39% compared to 32%).

Differences by region and income classification

Girls and young women in Latin America and the Caribbean are statistically significantly more likely to regularly engage in online (96 per cent), compared to participants from other regions (87 per cent). Girls and young women from North America, on the other hand, are statistically significantly less

¹⁹⁷ As described on p. 6 we define social topics as issues of public concern that an individual aims to understand and engage with for the betterment of society. The list was compiled based on discussions between Plan International campaigns, communications and research teams and aimed to reflect topics that could be related to civic and political participation as well as thematic areas for Plan International's work.

likely to engage with social topics online (71 per cent) compared to girls and young women from other regions (90 per cent).

Girls and young women from high-income economies are statistically significantly more likely to engage in online topics related to mental health (40 per cent compared to 34 per cent), racial justice (26 per cent compared to 16 per cent) and LGBTIQ+ rights (26 per cent compared to 16 per cent), compared to girls and young women from middle- or low-income countries. Compared to girls and young women from middle or high-income countries, girls and young women from low-income economies are less likely to engage with online topics related to:

- mental health (9% compared to 40%)
- racial justice (10% compared to 22%)
- LGBTIQ+ rights (6% compared to 22%)
- climate change (22% compared to 33%)
- gender equality and feminism (22% compared to 33%)
- economic inequality (11% compared to 22%).

Differences by intersectional characteristics

Girls and young women who belong to a minority group are more likely to engage with social topics online, especially with mental health topics.

Six out of ten survey participants who identify as LGBTIQ+ regularly engage with mental health topics online, compared to three out of ten of those who do not identify as LGBTIQ+.

This is aligned with numerous pieces of research that found that LGBTIQ+ youth are at high risk for compromised mental health and while the reasons are complicated may include having to face experiences of stigma, discrimination, social isolation and exclusion and rejection.^{198,199}

Girls and young women who identify **as belonging to a minority group** are statistically significantly more likely to engage with social topics online (94 per cent), compared to those who do not identify as belonging to a minority group (86 per cent). They are particularly likely to engage in mental health topics online (44 per cent) compared to those who do not identify as belonging to a minority group (32 per cent).

- 59% of those who identify as LGBTIQ+ engage with mental health topics online (compared to 33% of those who do not).
- 43% of those who identify as an ethnic or racial minority engage with mental health topics online (compared to 36% of those who do not).
- 52% of participants who identify as having a disability²⁰⁰ engage with mental health topics online (compared to 36% of those who do not).

Survey participants who identify as LGBTIQ+ are six times more likely to engage in online topics related to LGBTIQ+ rights and nearly twice more likely to engage in topics related to gender-based violence, sexual health or gender equality than those who do not identify as LGBTIQ+.

Intersectional identities influence what topics girls and young women engage with online. Compared to girls and young women who do not identify as LGBTIQ+, survey participants who identify as LGBTIQ+ are statistically significantly more likely to engage in online topics related to:

• LGBTIQ+ rights (72% compared to 13%)

¹⁹⁸ ST Russell & JN Fish, 'Mental health in Lesbian, Gay, Bisexual, and Transgender (LGBT) youth', *Annual Review of Clinical Psychology*, vol. 12, no. 1, 2016, pp. 465-487.

¹⁹⁹ Mind, 'LGBTIQ+ mental Health', *Mind*, retrieved 1 June 2021, <u>https://www.mind.org.uk/information-support/tips-for-everyday-living/lgbtiqplus-mental-health/about-lgbtiqplus-mental-health/</u>

²⁰⁰ When interpreting this finding it is important to keep in mind that only 1021 girls and young women identified as having a disability (4% of the survey participants).

- sex and sexual health (47% compared to 25%)
- gender-based violence (46% compared to 24%)
- gender equality and feminism (59% compared to 28%).

Girls and young women who identify as belonging to a **racial or ethnic minority group** are also statistically significantly more likely to engage in the racial justice topics online (36 per cent compared to 19 per cent).

Insights from youth activists

Almost half of the girls and young women in the interviews described being interested in **gender equality and feminism.** However, this is partly due to the 22 girls and young women being selected through Plan International Country, National Offices and networks, so they were likely to be interested in areas that Plan International is active in. However, the topics the girls and young women liked to explore in this area varied greatly. Some girls discussed feminism more generally²⁰¹ and others women's rights,²⁰² others included discussions on intersectional feminism,²⁰³ and Black feminism,²⁰⁴ Two of the girls and young women had specific areas of interest such as women in science, technology, engineering and mathematics (STEM),²⁰⁵ and girls' social entrepreneurship.²⁰⁶ Linked to gender equality and feminism but treated as separate categories for analysis, there were also six mentions of **sexual and reproductive health rights** (SRHR),²⁰⁷ which included discussions on menstrual health and hygiene and period poverty. Four of the girls and young women referred to **gender-based violence**,²⁰⁸ particularly the **elimination of child, early forced marriage and unions** (**CEFMU**).

"I am very interested to know the latest official efforts on women empowerment and fighting early marriage and also efforts to combat sexual harassment as this is a major issue for girls and women in Egypt." Gana, 24, Egypt

The second most discussed topic with the girls and young women was **politics** with nine of the girls and young women referring to it as one of the topics they like to go online to learn about.²⁰⁹ Most of the girls and young women liked to keep up to date on political and or governmental affairs but Rachel in the United States likes to focus specifically on women in politics and Lilly in Malawi focused on political justice.

Racism and climate change and were also mentioned as important issues, ^{210,211} the latter was referred to by girls and young women based in Europe and was usually mentioned in the context of the Black Lives Matter (BLM) protests in 2020, some of the girls mentioned trying to educate themselves to learn more about systemic racism in light of the protests. LGBTIQ+ rights were also mentioned as an area of interest by a few girls.^{212,213}

In terms of time spent learning about these topics, majority of the girls and young women,²¹⁴ mentioned it was usually every day or at least several times a week. However, there was a mixture of

²⁰¹ Lola, 18, Benin; Cripaam, 17, Spain; Lisa, 15, Brazil and Anchal, 21, Bangladesh.

²⁰² Saili, 17, Nepal and Rachel, 18, United States.

²⁰³ Charlotte, 24, Wales.

²⁰⁴ Lisa, 15 Brazil.

²⁰⁵ Anchal, 21, Bangladesh and Rachel, 18, United States.

²⁰⁶ Ana, 22, Dominican Republic.

²⁰⁷ Lisa, 22, Malawi; Rachel, 18, United States; Lily, 19 Ireland; Cripaam, 17, Spain; Lola 18, Benin; Mia, 20, Kenya, 20 and Lisa, 15 Brazil.

²⁰⁸ Lola 18, Benin; Dora, 15 Peru; Ana, 22, Dominican Republic and Gana, 24, Egypt,

²⁰⁹ Ana, 22, Dominican Republic; Nani, 19, Nepal; Tife, 22, Nigeria; Dira, 18, Indonesia; Nabila, 18, Germany; DF, 17, Indonesia; Lilly, 23, Malawi; Lily, 19, Ireland and Rachel, 18, United States.

²¹⁰ Nabila, 18, Germany; Abbie, 19, Ireland; Charlotte, 23, Wales and Lily, 19, Ireland mentioned racism.

²¹¹ Lola 18, Benin; Abbie, 19, Ireland; Cripaam, 17, Spain and Lisa, 22 Malawi referred to climate change.

²¹² Abbie, 19, Ireland; Cripaam, 17, Spain and Dora, 15 Peru.

²¹³ Other topics mentioned included current affairs, disability issues, economic inequality, bereavement, gun violence, sustainable fashion, youth emigration, youth leadership and human rights and conflict. These were mentioned by 1-2 girls each.

²¹⁴ Twenty of the girls and young women confirmed using every day or several times a week but two girls were not asked this question.

learning actively and passively. Some girls spoke about actively going online to research their topics while other discussed following groups or individuals on social media platforms that discuss these topics, so they passively see these issues when they scroll through their phone or laptop on a day-to-day basis.

"I'd say I engage with them most days in that, like on Twitter and Instagram, I follow accounts that would post about it most days. So, I'm kind of always reading about things, always seeing things." Abbie, 19, Ireland

Only Mia in Kenya, DF in Indonesia and Ámna in Sudan mentioned going online to learn about these topics less frequently, mentioning it was usually monthly, and Mia explained:

"I have to purchase data bundles so no, it's not regularly. Only for some time."

Their main motive for learning online about their chosen topics was **education**,²¹⁵ demonstrating how online platforms play a powerful role in education outside the classroom. Education was mentioned in two ways, either to **educate themselves** on a topic, for those that mentioned this, it was largely in the context of learning something new, one girl mentioned using it to educate herself for her studies, others for work or volunteering also. The other way education was referred to was to **teach or support others** around an issue by sharing their learnings and cascading information. Three girls and young women referred to a personal experience, Lisa in Malawi's father had passed away when she was a child from cancer which had motivated her interest in health, Charlotte from Wales had also experienced a personal bereavement which motivated her desire to run a bereavement support group and the organisation she is affilaited to she found via Instagram. While Ámna from Sudan was motivated to learn about mental health after the COVID-19 lockdowns.

Online platforms can also help girls and young women to explore 'taboo' subjects in certain contexts. Previous research suggests that the anonymity and accessibility of the internet may help to overcome some of the factors that have traditionally hampered access to sexual health information, including embarrassment and lack of confidentiality.²¹⁶

"On the issue of sexuality. I didn't really have a chance to get to talk about the issue, or what happens when you're growing up, because in my country, adults, they don't really talk about those issues. So, the only place I will learn about everything is through the internet." Lisa, 22, Malawi

Other reasons cited were to change people's opinions or perspectives on an issue,²¹⁷ to raise awareness on an issue,²¹⁸ and to see the global perspectives on a topic.²¹⁹

The most cited activities the girls and young women interviewed undertook when learning and engaging on their chosen topics was **reading articles or posts** and posting and **re-sharing content online**.²²⁰ Re-posting was largely done via Instagram stories,²²¹ but Gana in Egypt and Lisa in Malawi also discussed re-posting on Facebook, and WhatsApp was also mentioned for re-sharing

²¹⁵ This was mentioned by fifteen of the girls in and young women - Abbie, 19, Ireland; Cripaam, 17, Spain; Dora, 15 Peru; Lily, 19, Ireland; Mia, 20, Kenya; Alyra, 24, Burkina Faso; Gana, 24, Egypt; Ana, 22, Dominican Republic; Nani, 19, Nepal; Saili, 17, Nepal; Lilly, 23, Malawi; Lisa, 22, Malawi; Charlotte, 23, Wales and Lisa, 15, Brazil.

²¹⁶ S.S Patterson et al. 'What are the barriers and challenges faced by adolescents when searching for sexual health information on the internet? Implications for policy and practice from a qualitative study', *Sexually Transmitted Infections*, 95, 2019, pp. 462-467.

²¹⁷ Gana, 24, Egypt and Dora, 15, Peru.

²¹⁸ Nabila, 18, Germany and Abbie, 19, Ireland.

²¹⁹ Alyra, 24, Burkina Faso and Lilly, 23, Malawi,

²²⁰ Reading articles or posts were mentioned by Lola, 18, Benin; Alyra, 24, Burkina Faso; Gana, 24, Egypt; Ana, 22, Dominican Republic; Nani, 19, Nepal; Saili, 17, Nepal; Lilly, 23, Malawi; Lisa, 22, Malawi; Charlotte, 23, Wales; Dira, 18, Indonesia; Rachel, 18, United States and Lisa, 15, Brazil and re-sharing content online was mentioned by Rachel, 18, United States; Lola, 18, Benin; Abbie, 19, Ireland; 19; Mia, 20, Kenya; Alyra, 24, Burkina Faso; Gana, 24, Egypt; Lisa, 22, Malawi; Charlotte, 23, Wales; Dora, 15, Peru; Nabila, 18, Germany, DF, 17, Indonesia and Lisa, 15, Brazil.

²²¹ Lily, 19, Ireland, Abbie, 19, Ireland; Mia, 20, Kenya; Alyra, 24, Burkina Faso; Gana, 24, Egypt; Charlotte, 23, Wales; Rachel, 18, Unites States; Dora, 15, Peru and Lisa, 15, Brazil.

content by the girls and young women from Kenya, Peru and Nigeria. Seven girls and young women also mentioned engaging in online discussions,²²² this happened in a mix of ways; Ana from the Dominican Republic and Dira from Indonesia mentioned registering for discussion panels with other young people or peer to peer discussions online. Tife in Nigeria engaged in group discussions or chats via WhatsApp, Charlotte in Wales mentioned posting discussion threads, Nani in Nepal also mentioned commenting online on public issues. While, Ámna in Sudan attended more formal lectures or sessions online to discuss issues such as mental health. Other popular activities were using it for researching into an issue or joining online groups or networks.²²³

Overwhelmingly the most commonly discussed platforms for learning about their chosen social topics online were **social media platforms**. Although most of the girls and young women used a combination of platforms, the following were the most mentioned:

- Instagram (mentioned by 16)²²⁴
- Twitter (mentioned by nine)²²⁵
- Facebook (mentioned by eight) ^{226, 227}
- News websites (mentioned by eight)²²⁸
- Search engines, namely Google and Google Scholar (mentioned by seven girls)²²⁹
- YouTube (mentioned by four).^{230, 231}

When asked why they enjoy using these platforms it was generally because of **ease of use**,²³² which was mentioned by 14 of the girls and young women - reasons included the **speed of the platform**, that it was **easy to find and sort information**, the ability to **effortlessly engage with others** and **disseminate information**. Others found the platforms they used to be informative or useful,²³³ and others said that **online platforms provided a diverse audience**.²³⁴

Those that mentioned social media were also asked why they prefer to use social media platforms instead of more traditional sources of information online. Again, ease of use and accessibility were cited,²³⁵ such as the being able to follow accounts based on your

²²² Ana, 22, Dominican Republic; Dora, 15, Peru; Dira, 18, Indonesia; Tife, 22, Nigeria; Charlotte, 23, Wales; Nani 19, Nepal and Ámna, 20, Sudan.

²²³ It was used for researching an issue by Cripaam, 17, Spain; Gana, 24, Egypt; Dira, 18, Indonesia; Rachel,18, United States and for joining online groups or networks by Dora, 15, Peru; Anchal, 21, Bangladesh; Dira, 18, Indonesia; Lilly, 23, Malawi and Charlotte, 23, Wales.

²²⁴ Nabila, 18, Germany; DF,17, Indonesia; Lily,19, Ireland; Dora, 15, Peru; Cripaam, 17, Spain; Lola, 18, Benin; Tife, 22, Nigeria; Lisa, 15, Brazil; Ana, 22, Dominican Republic; Gana, 24, Egypt; Dira, 18, Indonesia; Abbie, 19, Ireland; Nani, 19, Nepal; Saili,17, Nepal; Charlotte, 23, Wales and Rachel,18, United States.

²²⁵ Nabila, 18, Germany; DF,17, Indonesia; Anchal, 21, Bangladesh; Lola, 18, Benin; Tife, 22, Nigeria; Dira, 18, Indonesia; Abbie, 19, Ireland; Ana, 22, Dominican Republic and Charlotte, 23, Wales.

²²⁶ Mia, 20, Kenya; Alyra, 24, Burkina Faso; Dora, 15, Peru; Lola, 18, Benin; Tife, 22, Nigeria, Lisa, 22, Malawi; Ámna, 20, Sudan and Ana, 22, Dominican Republic.

²²⁷ Other social media platforms mentioned were Tik Tok, although some girls mentioned this platform as more for fun (Mia, 20, Kenya; Dora, 15, Peru; Nani, 19, Nepal; Gana, 24, Egypt and Rachel, 18, United States) and Snapchat (Mia, 20, Kenya)

²²⁸ Nabila, 18, Germany; Lily, 19, Ireland; Anchal, 21 Bangladesh; Cripaam, 17, Spain; Dira, 18, Indonesia; Nani, 19, Nepal; and Saili, 17, Nepal

 ²²⁹ Anchal, 21 Bangladesh; Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Lily, 19, Ireland; Mia, 20, Kenya
 ²³⁰ Nabila, 18, Germany; Anchal, 21, Bangladesh; Ámna, 20, Sudan and Nani, 19, Nepal.

²³¹ Other platforms mentioned were NGO websites e.g., UN websites, FRIDA -the Young Feminist Fund, National Youth Network on Climate Change -Malawi (NYNCC) (Lilly 23, Malawi and Dira, 18, Indonesia), health organisation websites e.g., WHO (Mia, 20, Kenya and Gana, 24, Egypt), WhatsApp (Mia, 20, Kenya; Dora, 15, Peru and Tife, 22, Nigeria.

²³² Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Gana, 24, Egypt; Abbie, 19, Ireland; Lilly, 23, Malawi; Lisa, 23, Malawi; Nani, 19, Nepal; Saili, 17, Nepal; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales; Anchal, 21, Bangladesh; Cripaam, 17, Spain and Rachel, 18, United States.

²³³ Gana, 24, Egypt; Charlotte, 23, Wales; Nani, 19, Nepal, Lily, 19, Ireland; Dora, 15, Peru and Lola, 18, Brazil
²³⁴ Anchal, 21, Bangladesh; Lola, 18, Benin; Tife, 22, Nigeria; Charlotte, 23, Wales; Lilly, 23, Malawi and Rachel, 18, United States. Other reasons mentioned was the scale of information (Charlotte, 23 Wales and Anchal, 21 Bangladesh) and the ability to easily share opinions or knowledge (Charlotte, 23 Wales and Abbie, 19, Ireland).
²³⁵ Gana, 24, Egypt; Abbie, 19, Ireland; Lilly, 23, Malawi; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales; Rachel, 18, United States, Nabila, 18, Germany; Lily, 19, Ireland; Alyra, 24, Burkina Faso and Dora, 15, Peru.

interests, the fact that most people have access to social media platforms (according to the youth activists) and it is an easy way to share information. Other reasons were varied but included:

- faster-paced news²³⁶
- access to a younger audience or an audience of their peers²³⁷
- lower cost.²³⁸

Lisa in Malawi explained that social media was a low-cost option because Facebook was free on the phone network and internet websites costs lots of data. In many countries, Facebook has ensured it is easier and cheaper to access and has signed up almost half the countries in Africa (a combined population of 635 million) to its free internet service.²³⁹ This highlights the issue of access referred to in the literature review. Girls and young women are accessing information around the topics that matter to them on social media sites such as Facebook but, without meaningful access to an array of online platforms, they cannot fact check with other sources or read articles linked to news websites because of data access.

Abbie from Ireland said **traditional sources were less engaging** and Tife in Nigeria felt traditional sources were **less accessible** for example, the news on TV might be disrupted due to power outages but she can usually access her mobile phone. Lisa from Brazil mentioned non- traditional sources were where she looked first If she cannot find the information on Instagram she will then go and look for data on more traditional websites. Other reasons listed were:

- **ability to reach young people,** ²⁴⁰ for some, this was simply reaching their friends or peers and talking online about these topics but for others it was reaching a wide audience of young people with their messages
- global reach, ²⁴¹ enjoying speaking to others outside their country on different issues.
- **speed**.²⁴²

Sources to get information online

Mainstream news media and social media influencers are the top two online sources that girls and young women use.

Most girls and young women who participated in the survey use mainstream news media to access information on the topics listed in Table 3 (57 per cent). Social media influencers, including bloggers and vloggers, and online friends and peers were also listed as key sources of information for girls and young women, with more than half of the survey participants relying on these sources.

Table 4: Which sources do you use to get information on these topics online?

Which sources do you use to get information on these topics online? (select all that apply)	Frequency	Percent
Mainstream news media (e.g., BBC World Service and Aljazeera etc.) ²⁴³	13350	57%
Social media influencers (includes bloggers and vloggers)	12103	52%
Friends or peers	11996	52%
Family members or relatives	10631	46%
Alternative news media (e.g., WikiNews, Alternet) ²⁴⁴	8848	38%

²³⁶ Charlotte, 23 Wales; Tife, 22, Nigeria; DF, 19, Indonesia; Dora, 15, Peru; and Abbie, 19, Ireland.

²³⁷ DF, 17, Indonesia; Ana 22, Dominican Republic; Gana, 24, Egypt and Rachel, 18, United States.

²³⁸ Tife, 22, Nigeria; Lisa, 22, Malawi and Nani, 19 Nepal.

²³⁹ M Shearlaw, 'Facebook lures Africa with free internet - but what is the hidden cost?' *The Guardian*, 2016, retrieved 26 May 2021, <u>https://www.theguardian.com/world/2016/aug/01/facebook-free-basics-internet-africa-mark-zuckerberg</u>

²⁴⁰ Gana, 24, Egypt; Nani, 19, Nepal; Nabila, 18, Germany; Anchal, 21, Bangladesh; Alyra, 24, Burkina Faso and Dora, 15, Peru.

²⁴³ Localised examples were also given

²⁴⁴ Localised examples were also given

Educational institutions	8743	38%
National government	7814	34%
Celebrities	6574	28%
Charities or community organisations (e.g. Non-governmental organisations)	5899	25%
Politicians	4494	19%
Private businesses and companies	3835	16%
Religious or community leaders	3810	16%
Other	2070	9%

Total: 23290

Differences by age

Age also influences the sources young people use to access information online. **20- to-24-year-old young women** are statistically significantly more likely to get online information from mainstream news media (61 per cent compared to 51 per cent) and alternative news media (40 per cent compared to 34 per cent),²⁴⁵ while **15 to 19-year-olds** are more likely to rely on online friends (34 per cent compared to 24 per cent) and family members (40 per cent compared to 28 per cent).

Differences by region and income classification

Eight times more girls and young women rely on online information from religious or cultural leaders in Africa and the Middle East than in Europe.

The online sources girls and young people use also differ by region. For example, girls and young women from Africa and the Middle East are four times more likely to access online information from religious or community leaders (38 per cent) than girls and young women from other regions (10 per cent). They are also more likely to access online information from charities (40 per cent compared to 21 per cent) and national government (46 per cent compared to 30 per cent). Girls and young women from Europe are statistically significantly less likely to access online information from religious or cultural leaders (5 per cent) than those from other regions (21 per cent).

Girls and young women from low-income economies are statistically significantly more likely to rely on online information from friends (68 per cent compared to 49 per cent) or family (63 per cent compared to 43 per cent), charities (39 per cent compared to 24 per cent) and religious or cultural leaders (35 per cent compared to 14 per cent) than girls and young women from other countries. Girls and young women from high-income economies are statistically significantly less likely to get information from alternative news media (26 per cent) compared to girls and young women from other countries (46 per cent)

Differences by intersectional characteristics

Girls and young women who identify as **belonging to a minority group** are statistically significantly more likely to get information on social topics from charities (29 per cent) than girls and young women who do not identify as belonging to a minority group (23 per cent).

Intersectional identities shape where young people access information online. Only 8 per cent of **LGBTIQ+ youth** get online information from religious or community leaders, compared to 18 per cent of those who do not identify as LGBTIQ+. Survey participants who identify as LGBTIQ+ are also less likely to access online information from family members or relatives (39 per cent compared to 47 per cent). Girls and young women who identify as belonging to a religious minority, on the other hand, are more likely to get online information from religious or community leaders (33 per cent compared to

²⁴³ Localised examples were also given

²⁴⁴ Localised examples were also given

²⁴⁵ As described on p. 6 we define alternative news media position themselves as correctives of the mainstream news media, as expressed in editorial agendas or statements and/or are perceived as such by their audiences or third-parties. Each survey country used localised examples of alternative news media when explaining the question.

14 per cent) and family members (51 per cent compared to 45 per cent) than girls who do not belong to a religious minority.

Influence of online information on girls and young women

93% of girls and young women surveyed have been influenced by online information.

Almost all (93 per cent) of the surveyed girls and young women have been influenced by online information. About half of the girls and young women who participated in the survey feel that online information has helped them understand and feel more confident about the topics they care about, while 39 per cent have changed their opinion on a topic because of online information and 38 per cent have learned about a new issue online and began actively engaging in it.

Table 5: Has information online ever influenced you in any of the following ways?

Has information online ever influenced you in any of the following ways? (select all that apply)	Frequency	Percent
It helped me understand and feel more confident about the topics I care		
about	12990	49%
It changed how I behave during the COVID-19 pandemic (e.g. wearing a facemask, keeping distance)	12634	48%
I changed my opinion on a topic	10267	39%
I learned about a new issue and began actively engaging on it	9856	38%
It helped me access educational opportunities	9864	38%
It helped me connect with like-minded people	9842	37%
It helped me access health services	7391	28%
It helped me decide whether I get the COVID-19 vaccine or not	7059	27%
It helped me access economic opportunities	6165	23%
It informed who and what I voted for ²⁴⁶	5771	23%
I changed my political beliefs	3915	15%
Online information has never influenced me	1748	7%
Other	1566	6%
Total 26249		

I otal 26249

Differences by age

The internet seems particularly influential for older participants. Compared to 15 to 19-year-olds, young women aged 20 to 24 are statistically significantly more likely to have:

- accessed economic opportunities online (27% compared to 19%) •
- informed who they voted for (28% compared to 13%) •
- accessed health services online (31% compared to 24%) •
- learned about a new issue online and began actively engaging in it (40% compared to • 35%)
- changed behaviour during COVID-19 (50% compared to 45%).

Differences by intersectional characteristics

Girls and young women from a minority group are more likely to say that the internet has helped them connect with like-minded people.

"I think when you're a minority in our country, you have no other choice than searching for information on social media platforms and for searching your peers on social media... I don't think that maybe that I could never share the same experience

²⁴⁶ This option only appeared if a girl or young women was of voting age in that country.

as a Black friend. So it's totally normal that she talks to other Black peers and not to me about some topics.....How life is with a headscarf and it's normal because everyone always searches acceptance, and I think it's okay to not share everything with everyone. And I think social media is really, really helpful for finding your peers with the same experiences." Nabila, 18, Germany [Quote from qualitative interview]

The survey suggests that the internet has a particularly strong effect on girls and young women who identify as **belonging to at least one minority group**; compared to those who do not belong to a minority group, they are more likely to say that the internet has:

- helped them connect with like-minded people (43% compared to 35%)
- helped them learn about a new issue and began actively engaging on it (43% compared to 35%)
- helped them understand and feel more confident about the topics they care about (53% compared to 48%)
- changed their political beliefs (19% compared to 13%)
- informed who and what they voted for (28% compared to 20%).

Statistically significantly more survey participants who identify as LGBTIQ+ say that the internet has helped them connect with like-minded people (50 per cent compared to 36 per cent); learn about a new issue (51 per cent compared to 36 per cent), understand and feel more confident about the topics they care about (60 per cent compared to 48 per cent) or changed their opinion on a topic (48 per cent compared to 38 per cent).

Similarly, statistically more girls and young women who identify as belonging to a **racial or ethnic minority group** say that the internet has helped them connect with like-minded people (43 per cent compared to 37 per cent), learn about a new issue (43 per cent compared to 37 per cent), access economic opportunities (29 per cent compared to 23 per cent) or educational opportunities (42 per cent compared to 37 per cent).

Compared to girls and young women who do not belong to a **religious minority group**, those who do identify as belonging to a religious minority group say that the internet has helped them connect with like-minded people (44 per cent compared to 37 per cent), learn about a new issue (45 per cent compared to 37 per cent), understand and feel more confident about the topics they care about (54 per cent compared to 49 per cent), helped them access health services (37 per cent compared to 27 per cent), economic opportunities (35 per cent compared to 22 per cent) and educational opportunities (48 per cent compared to 36 per cent), changed how they behave during the COVID-19 pandemic (59 per cent compared to 47 per cent) and helped them decide whether to get the COVID-19 vaccine (35 per cent compared to 26 per cent).

Differences by region and income classification

Looking at regional differences shows that online information seems especially important to girls and young women from Africa and the Middle East, who are more likely to say that online information had helped them connect with like-minded people (47 per cent compared to 35 per cent), access economic opportunities (34 per cent compared to 20 per cent), educational opportunities (50 per cent compared to 34 per cent) and health services (41 per cent compared to 24 per cent health services).

Online information is especially important during COVID-19

Online information has made girls and young women change their behavior during COVID-19: five out of ten globally, and seven out of ten in Africa and the Middle East.

Online information has been especially important to girls and young women during the COVID-19 pandemic, with 48 per cent saying that it has changed how they behaved during the pandemic and 27 per cent saying that online information has influenced their decision about whether to get the COVID-19 vaccine.

Girls and young women from Africa and the Middle East are statistically significantly more likely to say that online information has changed how they behaved during COVID-19 (68 per cent), compared to girls and young women from other regions (42 per cent) – see Figure 11.



Figure 11: Online information changed behaviour during COVID-19 pandemic – by region

Using information online for activism

Insights from youth activists

The overwhelming majority of girls and young women interviewed felt that learning online created **opportunities in their journey to becoming an activist** or active on certain issues.²⁴⁷ Their reasons included the ability to have a wider audience reach for their activism, the ability to share information freely and easily, ample learning opportunities (especially during lockdown) or to learn about things outside your immediate bubble and connect with people across world. This demonstrates that online platforms can be a powerful tool in developing girls' activism and agency.

"It actually helped me be more engaged with youth activism, and I feel like online, since you don't have to travel to meet other people and you can even attend online events, you can chat on online forums, that the online platform really helped me a lot in my activism." Alyra, 24, Burkina Faso

"I definitely think it's brought way more opportunities than barriers because I think the whole point of, okay, so misinformation happens because it's so easy to freely share information, but it's really easy to freely share information. So that means that we can all learn and grow as well." Abbie, 19, Ireland

Four of the girls and young women,²⁴⁸ however noted, that even with more opportunities there were downfalls, examples were **increased vulnerability** in online spaces and the issue of **performative activism**, she used the example of people reposting infographics but not actively participating in grassroots community activism.

²⁴⁷ Nabila, 18, Germany; DF, 17, Indonesia; Lily, 19, Ireland; Mia, 20, Kenya; Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Lola, 18, Benin; Anchal, 21, Bangladesh; Charlotte, 23, Wales; Gana, 24, Egypt; Nani, 19, Nepal; Saili, 17, Nepal; Dira, 18, Indonesia; Abbie, 19, Ireland; Lilly, 23, Malawi; Lisa, 22, Malawi; Tife, 22, Nigeria; Ámna, 20 Sudan and Rachel, 18, United States.

²⁴⁸ Lola, 18, Benin; Charlotte, 23, Wales; Lily, 19, Ireland and Rachel, 18, United States.

"During the Black Lives Matter movement in the United States, there was a ton of people who were reposting all these infographics and all these posts, but they weren't necessarily donating to any funds that would actually have made concrete change in different communities around the country." Rachel, 18, United States

The young women and girls from Nigeria, Sudan, Peru and Bangladesh also noted **the digital divide** that not everyone in their country had this opportunity due to **limited internet access** and DF from Indonesia also referred to **limitations of the internet due to power outages**. Noting the opportunities that online platforms present in girl's activism, this access gaps risks girls and young women who do not have meaningful access being left behind in the digital age.

When the girls and young women were asked why they found online platforms useful for their activism in particular, the responses were mainly around the **accessibility of the platforms:** they were easy to use, with access to multiple different types of information, low cost and the ability to simplify complicated topics. This often overlapped with other reasons such as:

- Ability to reach young people:²⁴⁹ for some, this was simply reaching their friends or peers and talking online about these topics but for others it was reaching a wide audience of young people with their messages
- Global reach:²⁵⁰ enjoying speaking to others outside their country on different issues and;
- **Speed**:²⁵¹ Anchal in Bangladesh mentioned this being especially appealing in relation to campaign and movement building.

"I think the convenience it brings because in the past, maybe if I would like to share my opinion, I had to write a letter to the newspaper and then maybe they printed or maybe they don't, but now I have full power of how I want to share my opinion. And even if I want to share my opinion, this doesn't mean that everyone has to share their opinion, but I can do it so why shouldn't I do it?" Nabila, 18 Germany

"Online platforms made it easy for me to take several trainings to support me running my online advocacy initiatives as many information are accessible online and also the target is more reachable online." Gana, 24, Egypt

When online in general, most of the girls and young women felt it depended whether the information they access is reliable,²⁵² only four of the girls and young women trusted the information they accessed, although most caveated this was because they trusted the sources they were following.²⁵³ The reasons why they did trust or somewhat trust information was largely down to the person or the organisation they were receiving the information from; for example, official websites or verified accounts and also if the information was backed up by other information such as statistics or references. Anchal in Bangladesh mentioned verifying information herself using her analytical skills and also sometimes using a fact checking tool. Four of the girls and young women felt information online in general was not reliable with lots of information they accessed said to be misleading or wrong, such as fake news, hoaxes or manipulated videos.²⁵⁴

"Most of the information is just half truth. So, most times, people get misinformed. So that's why it's good to always verify the information and the sources you get the information from. So, you don't pass it on to people and misinform others." Tife, 22, Nigeria

²⁵¹ Abbie, 19, Ireland; DF, 17, Indonesia; Alyra, 24, Burkina Faso and Anchal, 21, Bangladesh.

- ²⁵³ Alyra, 24 Burkina Faso; Lily, 19, Ireland and Ana, 22, Dominican Republic.
- ²⁵⁴ Lola, 18, Benin; Mia, 20, Kenya; Nani, 19 Nepal and Lilly 23, Malawi.

²⁴⁹ Gana, 24, Egypt; Nani, 19, Nepal; Nabila, 18, Germany; Anchal, 21, Bangladesh; Alyra, 24, Burkina Faso and Dora, 15, Peru.

²⁵⁰ DF, 17, Indonesia; Anchal, 21, Bangladesh; Ana, 22, Dominican Republic; Dira, 18, Indonesia; Ámna, 20, Sudan and Charlotte, 23, Wales.

²⁵² Nabila, 18, Germany; DF, 17, Indonesia; Anchal, 21, Bangladesh; Cripaam, 17, Spain; Abbie, 19, Ireland; Lisa, 15 Brazil; Tife, 22, Nigeria and Ámna, 20, Sudan.

In relation, to finding accurate information for their preferred topics, over half the girls interviewed felt that, in relation to the topics they were active on, **information was easy to find**.²⁵⁵ This was mainly based on confidence with their familiarity on the subject and on using credible sources they trusted. Two girls said it varied, that sometimes it was difficult and other times easier.²⁵⁶ Two girls, found it difficult to decipher truth online.²⁵⁷ Tife used the example of the EndSARS protests in Nigeria as a time where it was very difficult to find information in a topic she was interested to know more about and that lots of the information online during the protest period was inaccurate and unreliable.

It was a mixed response in terms of whether this affected the girls and young women confidence in using the information when influencing for change online. Of the ten girls and young women who felt confident with the information they were accessing,²⁵⁸ it was usually because they had sources they relied on for dependable content but some felt confident with their knowledge on the issue. However, they often still cross-checked information before using it more widely for example. Alyra in Burkina Faso mentioned discussing it with a friend and deciding together if it was credible. One of the young women mentioned trusting an account more if it had more followers and another said she only followed accounts that complement her thoughts on an issue and didn't follow accounts opposed to her views.

Eight of the girls and young women were less confident with the information they used for their activism,²⁵⁹ mentioning it would depend on the source. They often felt the need to check with other sources and still couldn't be 100 per cent confident due to difficulty finding the truth online.²⁶⁰ Some girls and young women described offline information as being **clouded with personal opinions**, or that it could start off truthful and gradually vital information gets omitted or changed so that it was difficult to find the truth on platforms and that there was plethora of fake news which made them more wary or more careful when using it for activism online.

The girls and young women interviewed were also asked whether learning online had made societies more or less divided on different social and political issues. Nearly all of the girls and young women felt it had made **societies more divided in their context**.²⁶¹ They pointed to the issue that everyone thinks they have the right view and people refuse to see things from the other side. The girls and young women said that social media had affected how we absorb information, people are trusting what they see without thought and lies and false information are spreading. Alyra in Burkina Faso pointed out that, because online learning means you don't meet people face to face, no one holds back on their opinions and people say whatever they want without thinking of the person on the receiving end.

"I think it's made people more divided because people start to attach their identity to the thing that they believe in. So say even having a bio you'd have your name, 19, sexuality, BLM, climate change is real. And you've now attached that to who you are as a person. And even though personally, I think those are great things, they're good, but if somebody disagrees with one of them, for whatever reason, they now can't be bothered to even talk to you or reason with you. Because they just see you as so wholly different to them that there's no point. Your entire identity is completely opposed to them." Abbie, 19, Ireland

²⁵⁵ Lola, 18, Benin; Nabila, 18, Germany; Alyra, 24 Burkina Faso; Lily, 19, Ireland; Dora, 15, Peru; Gana, 24, Egypt; Rachel, 18, United States; Charlotte, 23, Wales; Ana, 22 Dominican Republic; Ámna, 20, Sudan; Abbie, 19, Ireland; Lisa, 15 Brazil and Saili, 17 Nepal

²⁵⁶ Dira, 18, Indonesia and Lilly, 23, Malawi.

²⁵⁷ Tife, 22, Nigeria and Lisa, 22 Malawi.

²⁵⁸ Ana, 22 Dominican Republic; DF, 19, Indonesia; Lola, 18 Benin; Mia, 20, Kenya; Alyra, 24 Burkina Faso; Anchal, 21, Bangladesh; Gana, 24, Egypt; Abbie, 19, Ireland; Nani, 19, Nepal and Amna, 20, Sudan.

²⁵⁹ Lily 19, Ireland; Cripaam, 17, Spain; Nabila, 18, Germany; Charlotte, 23, Wales; Lisa, 15, Brazil; Dora, 15, Peru; Dira, 18, Indonesia and Lilly, 23, Malawi.

²⁶⁰ Lola, 18, Benin; Mia, 20, Kenya; Nani, 19, Nepal; Abbie, 19, Ireland and Lilly, 23, Malawi.

²⁶¹ Lola, 18, Benin; DF, 17, Indonesia; Anchal, 21, Bangladesh, Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Dora, 15, Peru; Gana, 24, Egypt; Dira, 18, Indonesia; Abbie, 19, Ireland; Lilly, 23, Malawi; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales, Saili, 17, Indonesia and Rachel, 18, United States.

A few of the girls and young women mentioned specific topics they felt societies had become more divided on, these were **politics**,²⁶² **feminism**,²⁶³ ,environmental or climate issues,²⁶⁴ and religion.²⁶⁵ In the field of politics, Charlotte shared that in her small community people normally vote a certain way, normally how their parents had but now with social media people are engaging more and reading online and don't necessarily agree with their parents on political or social issues so she is seeing more family divides. Rachel in the United States also underlined that she is witnessing more extremism on both sides of the political divide because people are only consuming whatever political view they align with. While Lilly in Malawi said it is difficult to speak out on issues in her country as a woman but even still, she tries:

"Mostly here, it's gender-related. It's mostly men versus women, because it's very hard for women to speak up, for them to give them a platform. So when they speak out, the men are very angry and people are quarreling online, or something. So mostly, it's gender-related." Lilly, 23, Malawi

Two of the girls even remarked that **social tensions** or social conflict had increased because of misinformation, with Tife in Nigeria remarking on protests in her country where violence broke out:

"Some were fighting during the protest and everything. It even made people very, very... How would I say it? Quick to fight. Quick to just be insulting. And so they were always going at each other. They were just going against... These ones will push their own hashtags. The other ones from the other divide will push their own hashtags. So many people were confused, they didn't even know which ones to follow or to support. It really created a lot of enemies." Tife, 22, Nigeria

Others felt it was a bit of both,²⁶⁶ Lily in Ireland shared that the internet is a great place to learn about issues and spread awareness but that people also get very "*ruthless*" and "*brutal*" online because they can hide behind a screen and Nabila in Germany also remarked that in some ways it has helped us come together but in other ways it has separated people.

"It depends on how we use social media. If we use properly and correctly it will connect with other having different ideology, caste but if we misuse it will definitely divide." Nani, 19, Nepal

Mistrust in online sources

There is no online source that the majority of girls and young women surveyed trust: only one in three girls and young women trust national government websites and their friends or peers; and only one in ten trust online information from politicians, private businesses or celebrities.

The internet is an important source of information for girls and young women across the 26 survey countries. But the survey clearly shows that it is not always a safe and trusted space. There is no online source that the majority of surveyed girls and young women trust to provide information on the social topics listed above. The most trusted source is mainstream news media but less than half (48 per cent) trusts this source. Only 36 per cent of girls and young women trust online information provided by educational institutions. Girls and young women are particularly unlikely to trust politicians (8 per cent), private businesses (12 per cent), celebrities (12 per cent) and religious and community leaders (14 per cent) who provide information on social topics online.

²⁶² Lilly, 23, Malawi; Charlotte, 23, Wales; Ámna, 20, Sudan; Alyra, 24, Burkina Faso and Rachel, 18 United States.

²⁶³ Cripaam, 17, Spain; Anchal, 21 Bangladesh; Alyra, 24, Burkina Faso and Lilly 23, Malawi.

²⁶⁴ Lilly, 23, Malawi and Anchal, 21 Bangladesh.

²⁶⁵ Alyra, 24, Burkina Faso.

²⁶⁶ Lily, 19, Ireland; Nabila, 18, Germany; Lisa, 15; Brazil; Nani,19 Nepal; Gana, 24, Egypt and Charlotte, 23, Wales.

More girls and young women trust online information provided by news media than by friends or family.

Only 28 per cent of girls and young women trust their online friends and peers and 33 per cent trust their family members or relatives with the information they provide online. In fact, girls are more likely to trust mainstream or alternative news media (57 per cent) than friends or family (43 per cent).

Which of the following sources do you usually trust with the information they provide online? (select all that apply)	Frequency	Percent
Mainstream news media (e.g. BBC World Service and Aljazeera etc.)	12707	48%
Educational institutions	9402	36%
Family members or relatives	8673	33%
National government	8717	33%
Friends or peers	7386	28%
Alternative news media (e.g. WikiNews, Alternet, OneWorld)	6660	25%
Charities or community organisations (e.g. Non-governmental organisations)	5969	23%
Social media influencers (includes bloggers and vloggers)	5676	22%
Religious or community leaders	3761	14%
Celebrities	3156	12%
Private businesses and companies	3091	12%
Politicians	2565	10%
Other	2195	8%

Table 6: Which of the following sources do you usually trust with the information they provide online?

Total: 26249

Differences by age

While 15 to 18-year-olds are more likely to trust friends and family, 19 to 24-year-olds are more likely to trust mainstream news with online information.

Younger girls (15 to 18 years) are statistically significantly more likely to trust their online friends and peers (34 per cent), compared to 20 to 24-year-olds (24 per cent). Younger participants are also more likely to trust their family with online information (40 per cent) than older participants (28 per cent), while older participants are more likely to trust mainstream news (51 per cent comparted to 45 per cent).

Differences by region and income classification

There are regional differences in trust in online sources. Girls from North America (37 per cent) are statistically significantly less likely to trust mainstream news media and girls from Latin America and the Caribbean (54 per cent) are more likely to trust mainstream news media than girls and young women from other regions. Compared to girls and young women from other regions, girls and young women from Africa and the Middle East are more likely to trust online information provided by charities (33 per cent compared to 19 per cent), educational institutions (48 per cent compared to 32 per cent), religious or community leaders (33 per cent compared to 8 per cent) and governments (43 per cent compared to 30 per cent). Only 4 per cent of girls and young women in Europe trust religious or community leaders online.

Figure 12: Trust in online sources by region



Differences by intersectional characteristics

Girls and young women who identify as a **minority group** are statistically significantly less likely to trust online information provided by their family members or relatives (29 per cent) than girls and young women who do not identify as belonging to a minority group (35 per cent).

Survey participants who identify as LGBTIQ+ are less likely to trust community leaders (6 per cent compared to 15 per cent) and family members (23 per cent compared to 34 per cent), while girls and young women who identify as a religious minority are more likely to trust religious or community leaders (27 per cent) than girls who do not belong to a religious minority (13 per cent).

Insights from youth activists

Girls and young women interviewed were asked which sources they trusted with information online and which ones did they find untrustworthy. During the qualitative interviews mainstream media was also referred to as the most trusted source for information, with ten²⁶⁷ of the interviewees citing different mainstream news outlets as being trustworthy, often the main national news outlet was mentioned as being trustworthy although some alternative news outlets were also mentioned. Contrastingly, four girls also mentioned news organisations as being the most untrustworthy source.²⁶⁸ It is clear that trust with news organisations very much depended on the specific news

²⁶⁷ Lily, 19, Ireland; Abbie, 19, Ireland; Charlotte, 23, Wales; Cripaam, 17, Spain and Ana, 22, Dominican Republic.

²⁶⁸ It should be noted that even though the girls and young women were asked what source they trusted and what sources they didn't trust, the majority of girls and young women responded with who they trusted.

organisation, for example, if a newspaper was deemed 'right wing' by the interviewee, they usually said they trusted it less. Unlike the quantitative, a third of the girls and young women interviewed said they trusted charities and community organisations and organisations such as the United Nations (UN) and World Health Organisation (WHO) but this is also likely due to the sample being recruited from Plan International offices and networks who were likely to trust charities and community organisations through their direct involvement with them.^{269,270,271}

"So, I think that's one of the problems with online outlets. There's such a push to get people's attention instantly because there's so much other things that they could be reading and consuming online that there's a risk that things are presented very inaccurately." Charlotte, 23, Wales

In the interviews, the girls and young women spoke about their **concerns about the accuracy of information** online. Their reasons varied greatly but included; seeing biased and manipulating news,²⁷² people not checking where information comes from,²⁷³ that it is difficult to tell the accuracy of information online,²⁷⁴ not wanting to mislead others by they themselves posting false or inaccurate information,²⁷⁵ finding it difficult to address family and friends that do share misleading content,²⁷⁶ information being shared in increasingly misleading ways²⁷⁷ and the loss of trust due to inaccuracy of information online.²⁷⁸

"I think the online world...can be very, very vulnerable, and I think sometimes there's that lack of accountability in the online world where people can just do things without getting repercussions." Charlotte, 23 Wales.

They also spoke specifically about their **concerns with online sources for finding accurate information**. Five of the girls and young women related to sources having ulterior motives,²⁷⁹ for example that they are **manipulating their audience** by using carefully constructing headlines for engagement for example click bait headlines. Others mentioned the uncertainty about telling if the information sources they are sharing are correct and being misled or mistakenly misleading others by sharing,²⁸⁰ and people sharing things from online sources without actually reading the content.^{281,282}

"I am mostly worried about sharing information that might mislead the people I am sharing that information with, or that might even mislead me. For example, if there's an event, if the information is about an event taking place somewhere at a certain time, I am kind of scared of showing up somewhere and ... I am scared about my security, my personal security, and the personal security of the people I am sharing the information with." Alyra, 24, Burkina Faso.

²⁶⁹ Lola, 18, Benin; Nabila, 18, Germany; Alyra, 24, Burkina Faso; Dora, 15, Peru; Ana, 22, Dominican Republic; Gana, 24, Egypt and Anchal, 21, Bangladesh.

²⁷⁰ Other mentions of trustworthy sources were Google Scholar, the government, schools or universities' social media accounts, social media influencers, religious leaders, peers, celebrities, politicians, and family. These were mentioned by 1-2 girls each.

²⁷¹ Other untrustworthy sources mentioned were social media influencers, peers and friends and local websites. These were mentioned by 1-2 girls each.

²⁷² Nabila, 18, Germany

²⁷³ Abbie, 19, Ireland and Rachel, 18, United States.

²⁷⁴ Anchal, 21, Bangladesh

²⁷⁵ Alyra, 24, Burkina Faso and Cripaam, 17, Spain.

²⁷⁶ Dira, 18, Indonesia

²⁷⁷ Rachel, 18, United States

²⁷⁸ Lilly, 23 Malawi

²⁷⁹ Dira, 18, Indonesia; Charlotte, 24, Wales; Lily, 19, Ireland; Nabila, 18 Germany and Mia, 20, Kenya.

²⁸⁰ Nabila, 18 Germany; Alyra, 24, Burkina Faso and Ámna, 20, Sudan.

²⁸¹ Lily, 19, Ireland; Charlotte, 24, Wales and Lisa, 15, Brazil.

²⁸² Other concerns cited were the negative effects of misinformation and disinformation on young people, not knowing who they could trust, not knowing their own responsibilities in digital spaces, social media platforms having too big an influence, not knowing the methodology that sources used to get information and that sources are biased.

"But the one thing I am really afraid of is that maybe I will become, I will get manipulated without me noticing it. And then I will share misinformation." Nabila, 18, Germany

Concerned about misinformation and disinformation online

Of the girls and young women who participated in the survey, 91 per cent are concerned about misinformation and/or disinformation online. Almost half (40 per cent) are extremely or very concerned about it.

91% of girls and young women surveyed are concerned about misinformation and/or disinformation online.

"I think misinformation is something that's very prevalent. I feel like it does matter. I feel like it'll always matter. I think when it comes to sharing information, informing yourself and educating yourself, and also educating others, I feel like you have to trust what you're reading to be able to go on and then share with other people. I can't think of anything where misinformation would not be an issue" Lily, 19, Ireland [Quote from qualitative interview]





Total 26243

Differences by region and income classification

The very large majority of girls and young women from all regions are concerned about misinformation and disinformation online. Girls and young women from Africa and the Middle East (80 per cent) are less concerned than girls and young women from other regions (94 per cent) (see Figure 14).

Figure 14: Concerned about misinformation/disinformation online by region



Concerned about misinformation/disinformation online by region

Differences by intersectional characteristics

Survey participants who identify as LGBTIQ+ or a racial, ethnic or religious minority are more likely to be very or extremely concerned about misinformation/disinformation online.

Survey participants who identify as a minority group are statistically significantly more likely to be very or extremely concerned about misinformation/disinformation online (44 per cent), than those who do not (39 per cent):283

- Participants who identify as LGBTIQ+ are more likely to be very or extremely • concerned (50%) than those who do not (39%).
- Participants who identify as from an ethnic or racial minority are more likely to be very or extremely concerned (46%) than those who do not (40%).
- Participants who identify as a religious minority are more likely to be very or extremely concerned (44%) than those who do not (40%).

Topics with misinformation/disinformation

Nine out of ten girls and young women surveyed say they have seen misinformation and/or disinformation online, especially on COVID-19 (six out of ten).

Of the girls and young women who took the survey, 89 per cent say they have seen misinformation and/or disinformation online. The topic that most girls and young women have seen misinformation and/or disinformation on is COVID-19 (59 per cent), followed by politics and elections (40 per cent) and news and current affairs (38 per cent). Almost a third of girls and young women have seen misinformation on gender equality and feminism, health and wellbeing, sex and sexual health and climate change.

Table 7: Have you ever seen misinformation and/or disinformation online on any of the following topics?

Have you ever seen misinformation and/or disinformation online on		
any of the following topics? (select all that apply)	Frequency	Percent

²⁸³ 46 per cent of girls and young women who identified as LGBTIQ+ or from an ethnic, racial or religious minority were very or extremely concerned, compared to 38 per cent of those who did not.

COVID-19	15579	59%
Politics and elections	10577	40%
News and current affairs	9864	38%
Gender equality and feminism	7821	30%
Health and physical wellbeing	7514	29%
Climate change	7709	29%
Gender-based violence	7582	29%
Sex and sexual health	7392	28%
Racial justice	7132	27%
Mental health	6741	26%
LGBTIQ+ rights	6822	26%
War and conflict	6478	25%
Economic inequality	6518	25%
I have never seen misinformation and/or disinformation online	2924	11%
Other topic	2493	9%

Differences by age

Older participants (20 to 24 years) are more likely to have seen misinformation/disinformation online (91 per cent), compared to girls aged 15 to 19 (86 per cent).

Differences by region and income classification

Girls and young women from North America are twice as likely to have seen misinformation on racial justice online than girls and young women from other regions.

COVID-19, news and current affairs and politics and elections are the topics with most misinformation/disinformation in all regions, but there are some regional differences:

- North America racial justice and climate change: Compared to girls and young women from other regions, those from North America have seen online misinformation/disinformation on racial justice (47% compared to 25%) and climate change (42% compared to 28%).
- Europe climate change and racial justice: Compared to girls and young women from other regions, those from Europe have seen online misinformation/ disinformation on climate change (32% compared to 28%) and racial justice (30% compared to 26%).
- Latin America and the Caribbean gender-based violence and gender equality: Compared to girls and young women from other regions, those from Latin America and the Caribbean have seen more online misinformation/ disinformation on gender-based violence (36% compared to 27%) and gender equality (36% compared to 28%).
- Asia and the Pacific sexual and mental health: Compared to girls and young women from other regions, those from Asia and the Pacific have seen more online misinformation/ disinformation on sex and sexual health (29% compared to 23%) and mental health (26% compared to 24%).
- Africa and Middle East –health and physical wellbeing: Compared to girls and young women from other regions, those from Africa and the Middle East have seen more online misinformation or disinformation on physical health (36% compared to 26%).

Differences by intersectional characteristics

Girls and young women who identify as a **minority group** are statistically significantly more likely to have seen misinformation/disinformation online (94 per cent) than those who do not identify as belonging to a minority group (86 per cent). They are more likely to have seen misinformation on all the listed topics, except COVID-19.

- Girls and young women who identify as LGBTIQ+ are more likely to have seen misinformation on LGBTIQ rights (57% compared to 22%), sex and sexual health (44% compared to 26%), gender-based violence (43% compared to 27%) and gender equality and feminism (47% compared to 28%).
- Girls and young women who identify as a racial or ethnic minority group are more likely to have seen misinformation on racial justice (37% compared to 26%).
- Girls and young women who identify as having a disability²⁸⁴ are more likely to have seen misinformation on health and physical wellbeing (36% compared to 28%) and mental health (39% compared to 25%).

Platforms with misinformation/disinformation

71% of girls and young women surveyed have seen misinformation/disinformation on social media platforms.

Girls and young women rate mainstream and alternative news websites to have similar levels of misinformation/disinformation.

Seven out of ten girls and young women who participated in the 26-country survey have seen misinformation/disinformation on social media platforms. Other platforms where they spotted misinformation/disinformation are video sharing platforms (48 per cent) and instant messaging platforms (44 per cent). 27 per cent of girls and young women have found misinformation on search engines and 23 per cent on Wikipedia or other wiki pages. Charity websites (11 per cent) and government websites (12 per cent) are the platforms that the smallest number of girls and young women have seen misinformation/disinformation on.

Have you ever seen misinformation and/or disinformation online on any of the following <u>platforms or websites</u> ? (select all that apply)	Frequency	Percent
Social media platforms (e.g. Facebook, Instagram, TikTok, Twitter etc)	16453	71%
Video sharing platforms (e.g. YouTube, Vimeo)	11111	48%
Instant messaging platforms (e.g. WhatsApp, Telegram, Signal, Weibo and WeChat)	10350	44%
Search engines (e.g. Bing, Alibaba and Google)	6261	27%
Blogs (e.g. Tumblr, Medium and Wordpress)	5978	26%
Forums and message boards (e.g. Reddit etc)	5498	24%
Wikipedia or other wiki pages	5380	23%
Mainstream news websites (e.g. BBC World Service and Aljazeera etc.)	5103	22%
Alternative news websites (e.g. WikiNews, Alternet, OneWorld)	4840	21%
Women's/girls magazine websites	4090	18%
Official government websites	2837	12%
Charities or community organisations (e.g. Non-governmental organisations)	2503	11%
Other online platform or website	1896	8%

Table 8: Have you ever seen misinformation and/or disinformation online on any of the following platforms or websites?

Total 23296

Differences by age

Compared to younger participants (15 to 19), older participants (20 to 24) are more likely to have seen misinformation on instant messaging platforms (46 per cent compared to 41 per cent), forums

²⁸⁴ When interpreting this finding it is important to keep in mind that only 1021 girls and young women identified as having a disability (4% of the survey participants).

and messaging boards (26 per cent compared to 20 per cent) and Wikipedia or other wiki pages (25 per cent compared to 20 per cent).

Differences by region and income classification

Girls and young women from low-income economies are more likely to have seen misinformation on instant messaging platforms; and those from high-income economies on forums, blogs and wiki pages.

Girls and young women from low-income economies are more likely to have seen misinformation on instant messaging platforms (67 per cent) than those from other countries (42 per cent).

Compared to girls and young women from other countries, those from high-income economies are statistically significantly more likely to have seen misinformation on forums and message boards, such as Reddit (32 per cent compared to 18 per cent), blogs (32 per cent compared to 21 per cent) and Wikipedia or other wiki pages (27 per cent compared to 20 per cent).

Differences by intersectional characteristics

Youth who identify as belonging to a minority group are more likely to believe that forums and message boards (such as Reddit), blogs, mainstream news websites and search engines host misinformation or disinformation.

Even though social media is the platform that girls and young women believe to have most misinformation/disinformation, there are some important intersectional differences for the other platforms. Girls and young women who identify as belonging to at least one minority group are more likely to have seen misinformation on (among others):

- forums and message boards (such as Reddit) (29% compared to 21%)
- blogs (30% compared to 23%)
- mainstream news websites (25% compared to 20%)
- search engines (30% compared to 25%).

LGBTIQ+ youth are almost twice as likely to have seen misinformation on forums and message boards, compared to those who do not identify as LGBTIQ+.

LGBTIQ+ youth are particularly likely to have seen misinformation online. Compared to girls and young women who do not identify as LGBTIQ+, survey participants who identify as LGBTIQ+ are more likely to have seen misinformation or disinformation on forums and message boards (such as Reddit) (38 per cent compared to 22 per cent), blogs (40 per cent compared to 24 per cent) mainstream news websites (30 per cent compared to 21 per cent) and search engines (33 per cent compared to 26 per cent). They are also more likely to have seen misinformation on video sharing platforms (57 per cent compared to 46 per cent), Wikipedia and other wiki pages (30 per cent compared to 22 per cent), alternative news websites (27 per cent compared to 20 per cent) and women's and/or girls' magazines (25 per cent compared to 17 per cent).

Girls and young women who identify as belonging to a **racial or ethnic minority group** are more likely to have seen misinformation on forums and message boards, such as Reddit (28 per cent), compared to girls and young women who do not identify as belonging to an ethnic or racial minority group (23 per cent).

Girls and young women who identify as having a **disability**²⁸⁵ are more likely to have seen misinformation on forums and message boards, such as Reddit (35 per cent compared to 23 per cent), blogs (32 per cent compared to 25 per cent) and search engines (32 per cent compared to 27 per cent).

²⁸⁵ When interpreting this finding it is important to keep in mind that only 1021 girls and young women identified as having a disability (4% of the survey participants).

Social media platforms with most misinformation/disinformation

96% of girls and young women surveyed believe that social media platforms contain misinformation and/or disinformation. Facebook is considered the platform with most misinformation/disinformation – selected by 65%.

Only 4 per cent of the girls and young women who participated in the survey think that no social media platform has misinformation and/or disinformation. The majority of girls and young women (65 per cent) believe that Facebook is the social media platform with the most misinformation/disinformation, while 27 per cent of girls and young women feel that TikTok, YouTube and WhatsApp are the platform with most misinformation/disinformation. Only 8 per cent selected Snapchat.

Table 9: which of the following social media platforms have the most misinformation	and/or
disinformation?	

In your opinion, which of the following social media platforms have the most misinformation and/or disinformation? (select up to three options)		Percent
Facebook	17062	65%
TikTok	7010	27%
YouTube	7099	27%
WhatsApp	6976	27%
Instagram	6585	25%
Twitter	5870	22%
Facebook Messenger	3452	13%
Snapchat	2088	8%
Other social media platform	1753	7%
WeChat	734	3%
In my opinion, no social media platforms have misinformation and/or disinformation	1167	4%
Total 26249		

Total 26249

About nine out of ten girls selected an open social media platform, such as Facebook, Twitter, Instagram or YouTube, as a platform with most misinformation/disinformation.

Girls and young women believe that open social media platforms - those where content is shared on a public platform - have more misinformation than closed platforms, where content is shared between individual or closed groups of people on an app.²⁸⁶ More than twice as many girls and young women selected an open platform (89 per cent) than a closed platform (43 per cent) as one of the three social media platforms with most misinformation/disinformation. Youth who identify as LGBTIQ+ are more likely to say that open platforms have most misinformation (93 per cent) than those who do not (88 per cent).

Differences by age

Compared to younger participants (15 to 19), **older survey participants (20 to 24)** are statistically significantly more likely to believe that Facebook (68 per cent compared to 61 per cent) and WhatsApp (29 per cent compared to 23 per cent) are the platforms with most misinformation/disinformation.²⁸⁷

Differences by region and income classification

²⁸⁶ Closed platforms: WeChat, WhatsApp, Facebook Messenger and SnapChat; open platforms: Facebook, Instagram, TikTok, YouTube and Twitter.

²⁸⁷ While younger participants are slightly more likely to select Snapchat and TikTok.

Facebook is the platform that is considered to have most misinformation/disinformation in all regions, but there are regional differences for the second platform with most misinformation/disinformation:

- Asia and Pacific You Tube (37%)
- Europe TikTok (36%)
- North America Twitter (38%)
- Africa and the Middle East WhatsApp (49%)
- Latin America and the Caribbean WhatsApp (36%)

Girls and young women from high-income economies are statistically significantly more likely to select Instagram (32 per cent compared to 20 per cent), TikTok (36 per cent compared to 20 per cent), Snapchat (13 per cent compared to 5 per cent) and Twitter (31 per cent compared to 16 per cent) than girls and young women from other regions.

Differences by intersectional characteristics

Youth who identify as LGBTIQ+ or as having a disability are more likely to select Twitter, while girls and young women who identify as from a racial or ethnic or religious minority are more likely to select WhatsApp as a social media platform with most misinformation/disinformation.

Girls and young women who identify as a minority group are particularly likely to select Twitter (26 per cent compared to 21 per cent) and TikTok (30 per cent compared to 25 per cent) as one of the platforms with most misinformation.

- Girls who identify as LGBTIQ+ are more likely to select Twitter (33% compared to 21%) and TikTok (37% compared to 25%).
- Girls and young women who identify as having a disability²⁸⁸ are more likely to select Twitter (30% compared to 22%).
- Girls and young women who identify as belonging to a racial or ethnic minority group are more likely to select WhatsApp (32% compared to 26%).
- Girls and young women who identify as belonging to a religious minority are more likely to select WhatsApp (37% compared to 25%).

Insights from youth activists

In the qualitative interviews, girls and young women were asked if they had ever seen misinformation and/or disinformation online. Most of the examples cited involved **misrepresented events** or information: three examples cited involved **fake videos**, which included videos being altered to omit real events or videos misrepresented to be in a different time or place than the original. Gana in Egypt mentioned witnessing a disagreement with a student and professor and later seeing a video circulating to make it look like the professor was the one to blame in the argument; the student gained a lot of sympathy but what she had witnessed was the student harassing the professor.

The girls and young women frequently cited seeing **fake posts about COVID-19** and the COVID-19 vaccines. Tife in Nigeria remembered seeing a pastor with a large following share on WhatsApp that COVID-19 vaccines were a plan by the United States government to take over Nigeria. Misinformation around vaccines causing autism was also cited:

"Oh yeah. All the time. I mean, I have autism, so anytime anybody mentions vaccines, I have just the internal screaming, just like, "Oh my God, not this still." Abbie, 19, Ireland

Lisa in Brazil recalled seeing a post about **tampons causing cancer**. Another girl mentioned a murder taking place in her village and lots of online news outlets were falsely reporting and

²⁸⁸ When interpreting this finding it is important to keep in mind that only 1021 girls and young women identified as having a disability (4% of the survey participants).

speculating around the case before the facts of the case had been released.²⁸⁹ Online weight-loss scams were also discussed.290

When asked where they had seen these examples of misinformation and disinformation, the response was social media platforms. Like the quantitative survey, the most cited response was Facebook, 291 with ten girls and young women saying they had seen misinformation and/or disinformation on the platform. This was followed by Instagram (six mentions),²⁹² and Twitter (three mentions).²⁹³ Outside of social media platforms. WhatsApp was mentioned by two of the girls and young women.²⁹⁴ as were video sharing platforms such as TikTok and YouTube.295,296

"Almost on all platforms." Lola,18, Benin

The girls and young women interviewed were also asked if they had ever seen posts or adverts in their feed that contained misinformation or disinformation. Eight of the girls said they had seen these kind of posts or adverts but most couldn't remember in detail the content: a few girls gave examples such as negative political adverts containing misinformation, false advertisements and suggested videos containing misinformation.²⁹⁷ Seven of girls and young women felt unable to answer this question, there was a sense that they probably had but they couldn't remember or be sure they had.²⁹⁸ Three of the girls and young women said they hadn't seen these kinds of posts.²⁹⁹

The girls and young women were asked if they ever had to change their online behaviour because of misinformation and disinformation online. The majority of answers related to thoroughly checking the information is accurate before sharing,³⁰⁰ using a number of strategies such as checking the author and cross-checking other sources.

"Definitely, in fact the way that I used social media and digital platforms three years ago, isn't the way I use them now. Before I messed with lots of things. Just because I thought "Oh, this organisation, say, wouldn't lie – it must be true". So now, I guess, I go and I take much more time, I check, I click on the link and give it a look. So yeah, in fact, I have changed the way I use social media." Dora, 15, Peru

Others had stopped using certain platforms altogether,³⁰¹ or at least used them less frequently or were more conscious of using official webpages, like the WHO website, more.³⁰² Others unfollowed or blocked certain sources.³⁰³ For example if their friends had followed guestionable accounts or liked their posts, they would also unfollow their friends in order to totally block out negative posts.

²⁹¹ Gana, 24, Egypt; Abbie, 19, Ireland; Lilly, 23, Malawi; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales; Rachel, 18, United States; Anchal, 21, Bangladesh and Alyra 24 Burkina Faso. ²⁹² Cripaam, 17 Spain; Nabila, 18, Germany; Ana, 22, Dominican Republic; Dira, 18, Indonesia; Charlotte, 23,

²⁸⁹ Charlotte, 23, Wales

²⁹⁰ Lisa, 22, Malawi

Wales and Rachel, 18, United States.

²⁹³ Rachel, 18. United States; Cripaam, 17 Spain and Abbie, 19, Ireland.

²⁹⁴ Dora, 15, Peru and Tife, 22, Nigeria.

²⁹⁵ Tik Tok was mentioned by Rachel, 18, United States and YouTube was mentioned by Ámna, 20, Sudan and Anchal, 21, Bangladesh .

²⁹⁶ Other platforms mentioned were forums discussion websites such as Reddit and 4chan, local newspaper websites and google - these were mentioned once each.

²⁹⁷ Lisa, 15, Brazil; Gana, 24, Egypt; Dira, 18, Indonesia; Lola, 18, Benin; Nabila, 18, Germany, Anchal, 21, Bangladesh; Lisa, 22, Malawi and Ámna, 20, Sudan.

²⁹⁸ Mia, 20, Kenya; Lily, 19, Ireland; Alyra, 24, Burkina Faso, Charlotte, 23, Wales; Abbie, 19, Ireland; Saili, 17, Nepal and Rachel, 18, United States.

²⁹⁹ DF, 17, Indonesia; Nani, 19, Nepal and Lilly, 23, Malawi

³⁰⁰ Nabila, 18, Germany; DF, 17, Indonesia; Mia, 20, Kenya; Alyra, 24, Burkina Faso; Dora, 15, Peru; Rachel, 18, United States and Tife, 22, Nigeria.

³⁰¹ Lisa, 15, Brazil; Lola, 18, Benin; Dira, 18, Indonesia and Lilly, 23, Malawi

³⁰² Gana, 24, Egypt

³⁰³ Anchal, 21, Bangladesh; Alyra, 24, Burkina Faso; Tife, 22, Nigeria and Charlotte, 23, Wales.

"I just go to their account and unfollow them, because they might be spread any kind of disinformation to me and that can hamper my consumption or mental health. So, I just ignore them deliberately." Anchal, 21, Bangladesh

Worryingly some girls and young women said it had **stopped them wanting to engage**.³⁰⁴ They used to call out false information more, but it was making them tired and jaded, so they chose to ignore it now. It seemed to be a self-preservation strategy. One of the young women mentioned now only using a trusted source for information.³⁰⁵ Only one of the girls and young women said her behaviour hadn't changed and she still used it as before.

Negative effects of misinformation/disinformation on girls and young women

Misinformation and disinformation had a negative effect on 87% of the 26000 girls and women we surveyed.

<u>Misinformation makes girls feel sad</u>: about half of the girls and young women surveyed have felt sad, depressed, stressed, worried or anxious because of misinformation or disinformation online.

Misinformation and disinformation online had serious effects on girls and young women, with nine out of ten saying that misinformation and/or disinformation had a negative effect on them. The most common negative effect was feeling stressed, worried or anxious (35 per cent), followed by feeling sad or depressed (28 per cent). About half (46 per cent) of the interviewed girls and young women have felt sad, depressed, stressed, worried or anxious because of misinformation or disinformation online.

<u>Misinformation restricts girls' voices</u>: one out of four girls feel less confident to share their views and one out of five stopped engaging in politics or current affairs as a result of misinformation/disinformation online.

Misinformation and disinformation online restrict girls' and women's voices, with 26 per cent saying that it made them less confident to share their views, 18 per cent saying it stopped them engaging in politics and 13 per cent saying that it stopped them taking action on the issues that are important to them.

<u>Misinformation causes arguments and mistrust</u>: one in four girls and young women had an argument or questioned information that they had received at school or because of misinformation/disinformation.

Misinformation can lead to arguments and mistrust. 26 per cent of girls and young women surveyed have questioned information they had received at school and 26 per cent had an argument with friends or family because of misinformation or disinformation online.

<u>Misinformation makes girls feel physically unsafe</u>: 20% of girls and young women feel physically unsafe because of misinformation and disinformation online.

Misinformation and disinformation also negatively affect girls' and young women's health (13 per cent) and makes girls and young women feel physically unsafe (20 per cent).

The actual effects of misinformation and disinformation on girls and young women may be even more severe since the statistics only capture the experiences of those girls and young women who are aware of misinformation/disinformation negatively affecting them.

³⁰⁴ Abbie, 19, Ireland and Charlotte, 23, Wales.

³⁰⁵ Ámna, 20, Sudan

Table 10: Has misinformation and/or disinformation online ever caused you any of the following negative effects?

Has misinformation and/or disinformation online ever caused you any of the following negative effects? (select all that apply)	Frequency	Percent
It made me feel stressed, worried or anxious	8110	35%
It made me feel sad or depressed	6473	28%
It made me believe a myth or fake 'fact' about COVID-19	6580	28%
It made me question information that I received at school	6081	26%
It led to an argument or confrontation with friends or family	6072	26%
It made me less confident to share my views	6061	26%
It made me question whether to get the COVID-19 vaccine	5884	25%
It made me feel physically unsafe	4740	20%
It affected my trust in election results	4458	19%
It made me stop engaging in politics or current affairs	4205	18%
It made me do something that had a negative effect on my health	2959	13%
It stopped me taking effective action on the issues that are important to me	3110	13%
Misinformation and/or disinformation had no negative effect on me	3122	13%
It made me regret who or what I voted for at an election/referendum	2493	11%
Other negative effect	2376	10%

Girls and young women who believe Facebook has most misinformation report more negative consequences.

Girls and young women who selected Facebook³⁰⁶ as one of the top three platforms with most misinformation are more likely to say that misinformation has:

- made them feel stressed, worried, anxious, sad or depressed (49% compared to 38%)
- made them me feel physically unsafe (23% compared to 16%)
- led to an argument or confrontation with friends or family (29% compared to 20%)
- made them less confident to share their views (29% compared to 21%)
- made them regret who or what they voted for at an election/referendum (22% compared to 14%)
- made them question information that they had received at school (28% compared to 21%)
- made them believe a myth or fake 'fact' about COVID-19 (31% compared to 22%)
- made them question whether to get the COVID-19 vaccine (28% compared to 20%).

Experiencing negative effects makes girls and young women feel more concerned about misinformation and disinformation.

Girls and women who experienced negative effects due to misinformation/disinformation online are statistically significantly more likely to be very or extremely concerned about misinformation/disinformation online (27 per cent) than those who have not experienced negative consequences (45 per cent). This is the case for all negative effects; for example, girls and young women who feel stressed, worried, anxious, sad or depressed as a result of misinformation/disinformation online are more likely to be very or extremely concerned about

³⁰⁶ This does not necessarily mean that misinformation on Facebook is causing these negative effects.

misinformation (51 per cent), compared to those who have not experienced this negative effect (35 per cent).

Differences by region and income classification

40% of girls and young women surveyed from Africa and the Middle East have questioned whether to get the COVID-19 vaccine because of misinformation online; this is twice as many as for other regions.

Statistically significantly more girls and young women from Africa and the Middle East (40 per cent) than from other regions (21 per cent) said that misinformation made them question whether to get the COVID-19 vaccine. Compared to girls and young women from other regions, survey participants from Africa and the Middle East are also more likely to have felt sad or depressed (40 per cent compared to 24 per cent) and physically unsafe (31 per cent compared to 17 per cent) as a result of online misinformation or disinformation.

Girls and young women from low-income economies are more likely to feel sad, depressed, worried, anxious or physically unsafe because of misinformation online.

Girls and young women from **low-income economies** are more likely to say that misinformation has made them feel sad, depressed, worried or anxious (58 per cent compared to 44 per cent) or physically unsafe (34 per cent compared to 19 per cent), compared to those from other countries.

Girls and young women from high-income economies are statistically significantly less likely to be affected by misinformation/disinformation online (82 per cent compared to 90 per cent), compared to girls and young women from other countries. They are less likely to select all listed negative consequences with particularly strong differences for believing a myth about COVID-19 (20 per cent compared to 34 per cent) and questioning whether to get the COVID-19 vaccines (16 per cent compared to 31 per cent).

Differences by intersectional characteristics

Participants who identify as LGBTIQ+, an ethnic, racial, religious minority or as having a disability are more affected by misinformation online.

Half of the girls and young women who identify as belonging to a minority group have felt stressed, worried, anxious, sad or depressed as a result of misinformation/disinformation online.

Girls and young women who identify as **belonging to at least one minority group** are more affected by misinformation/disinformation online. They are more likely to say that misinformation had a negative effect on them (91 per cent) than girls who do not identify as from a minority group (85 per cent).³⁰⁷ Specifically, girls and young women who identify as belonging to a minority group are more likely to say that misinformation has:

- made them feel stressed, worried, anxious, sad or depressed (50% compared to 43%)
 - LGBTIQ+: 54% compared to 45%
 - \circ $\,$ racial or ethnic minority: 51% compared to 45% $\,$
 - religious minority: 51% compared to 45%
 - disability: 52% compared to 46%
 - made them feel physically unsafe (23% compared to 19%)
 - LGBTIQ+: 23% compared to 20%
 - racial or ethnic minority: 23% compared to 20%
 - led to an argument or confrontation with friends or family (29% compared to 25%)
 - LGBTIQ+: 33% compared to 25%
 - o racial or ethnic minority: 30% compared to 26%

³⁰⁷ LGBTIQ+: 90 per cent compared to 86 per cent; racial or ethnic minority: 91 per cent compared to 86 per cent; religious minority: 91 per cent compared to 86 per cent; disability: 90 per cent compared to 86 per cent.

- o religious minority: 32% compared to 25%
- made them less confident to share their views (29% compared to 25%)
 LGBTIQ+: 33% compared to 25%
- made them regret who or what they voted for (13% compared to 10%)
 - racial or ethnic minority: 24% compared to 11%
 - religious minority: 17% compared to 10%
- made them question information that they received at school (28% compared to 25%)
 - LGBTIQ+: 29% compared to 26%
 - o racial or ethnic minority: 30% compared to 26%
 - religious minority: 32% compared to 25%
- made me do something that had a negative effect on my health (15% compared to 11%)
 - LGBTIQ+: 15% compared to 12%
 - racial or ethnic minority: 17% compared to 12%
 - religious minority: 17% compared to 12%
 - disability: 18% compared to 12%

Insights from youth activists

"I think when you're going on social media, you need to be a psychologist or you are psychologically fit, and you have to get your mind straight, because there's a lot of negative comments, and a lot of bad things happening on the internet that can make you...not to want to use the internet." Lilly, 23, Malawi

In the qualitative interviews, the girls and young women were asked if they or anyone they knew had been personally affected by misinformation and disinformation online and if so, what effect had it had on them. Eight of the girls and young women said they or someone they knew had not been personally affected by misinformation and disinformation online.³⁰⁸ However six of these girls and young women still gave examples of misinformation and disinformation they had seen but said it hadn't had a personal effect on them.

The other girls and young women gave numerous examples of how misinformation had affected them or someone they knew; some personal stories were shared which demonstrate the severity of some of the misinformation and disinformation shared online. Dira in Indonesia described being harassed online to the point of needing to deactivate her Twitter account after refusing to spread something online she knew was untrue.

"But he kept sending it over and over and over and he threats me like, "You need to retweet it. You need to show it to people. You need to spread it and stuff." At the point, it just really disturbed me, so I decide to deactivate it and then he put some bad words and stuff, and I'm just a middle schooler back then. It is annoying and scary at the same time, because I don't know him." Dira, 18, Indonesia

Lisa in Malawi had an experience where a jilted male classmate posted on social media that her friend had died which had spread to the point where the girl's parents were being contacted to find out what was happening. After a number of hours it was confirmed as untrue. She described the mental effect this had on her friend and how it affected her own trust:

"Actually, it made me not associate with people that made me separate myself from people even more. I was scared." Lisa, 22, Malawi

Another young woman described losing her partner to suicide: before the inquiry had been released, inaccurate information had been shared on social media with the media taking certain pieces of the story and leaving others out. She felt that much of what was shared was inappropriate. When she reached out to complain to the media outlet, the complaint was not taken seriously and the response she got was that it was a public interest story.

³⁰⁸ Rachel, 18, United States; Alyra, 24, Burkina Faso; Dora, 15, Peru; Ámna 20, Sudan; DF, 17, Indonesia, Lily, 19; Ireland, Cripaam, 17, Spain and Nani, 19, Nepal.
"Obviously that really personally affected me and will always affect me....And I think actually something that I've noticed a lot is if you speak to anybody who's been bereaved by suicide for example, but maybe other causes too, that if you ask them something that really upset them they will tell you in the media reporting of that death or the media reporting of the circumstances around it. Because they are so misleading and inaccurate. And even though they say they maybe get information from credible sources I think it's the construction of things generally, like I said. Because it's like, "We need to get people's attention." Charlotte, 23, Wales.

Two girls had experience of **blackmail**. Gana in Egypt had friends who had their social media accounts hacked with wrong information posted on their accounts. Her friends were blackmailed with the hackers threatening to post content that would affect their reputation. In the case of one of her female friends the hacker posted personal photos from her cell phone.

A number of the girls and young women shared accounts of family members or friends being affected by false rumours around the COVID-19 vaccine, by myths around COVID-19 or by online scams.³⁰⁹ Gana in Egypt revealed her friend got infected after reading something false around mask-wearing. Four girls also remembered they themselves sharing misinformation accidently. ³¹⁰ One of them said she was glad this had happened as sharing fake news had now made her realise the kind of research she needs to do before sharing information and another felt guilty for contributing to the spread of wrong information.

From the different examples that the girls and young women shared, mental health related effects were mentioned most, with the girls and young women citing it had caused them stress, anxiety or worry.³¹¹ Some had experienced emotional reactions such as guilt, anger and upset,³¹² while others mentioning it affecting their trust.³¹³ Although Charlotte in Wales had mentioned the incident with the media as having a permanent effect on her and making her anger, one positive side was it had made her a better ally to anyone going through bereavement and she was able to help them navigate through similar situations based on her experience.

The girls and young women in the qualitative interviews were asked if misinformation or disinformation had caused any barriers to them becoming politically and socially aware and active on the topics they care about. Twelve of the girls and young women felt misinformation and disinformation had caused at least some barriers,³¹⁴ although a few noted this still had not stopped them becoming active on the topics they care about. Two of the girls and young women noted they were afraid to disagree with people online because people often react aggressively. One of them shared that she was bullied online both by people she knew and didn't know for having different opinions in relation to a topic. Another two of the girls and young women disclosed that they avoid being active on politics: one young woman said she didn't like to be active on political rights because of the lack of reliable information, while the other said she didn't like to participate on political or climate issues because, if she got too much attention for it, she felt it would put her in danger. Some mentioned that it becomes tiring having to debate people online when you disagree with them, others said it caused them to be more indecisive in their decisions.

³⁰⁹ Lisa, 15, Brazil; Anchal, 21, Bangladesh; DF, 17, Indonesia; Dira, 18, Indonesia, Lilly, 23, Malawi; Gana, 24, Egypt and Abbie, 19, Ireland, although Abbie mentioned it in the context of someone she knew believing a myth around COVID-19 rather than a family member or friend.

 ³¹⁰ Nabila, 18 Germany; Cripaam, 17, Spain; Mia, 20, Kenya and Lola, 18 Benin.
³¹¹ Lisa, 15, Brazil; Tife, 22, Nigeria; Saili, 17, Indonesia; Lilly, 23, Malawi and Abbie, 19, Ireland.

³¹² Charlotte, 23, UK, Lola, 18, Benin and Gana, 24 Egypt.

³¹³ Lisa, 22, Malawi and Dira, 18, Indonesia,

³¹⁴ Dora, 15, Peru; Saili, 17, Nepal; Lily, 19, Ireland; Lisa, 15, Brazil; Gana, 24, Egypt; Abbie, 19, Ireland; Lisa, 22, Malawi; Tife, 22, Malawi; Charlotte, 23, Wales

Seven of girls and young women felt it had not caused any barriers,³¹⁵ saying that it is always possible to check other sources to clarify. Another girl mentioned not being too hard on yourself - understanding that we are all only human we can make mistakes and learn.

Identifying misinformation/disinformation online

About half of the surveyed girls and young women (54 per cent) feel able to spot misinformation or disinformation online. But 34 per cent feel unsure and 12 per cent feel unable to spot misinformation or disinformation online.





Total 26242

Differences by age

Younger girls are statistically significantly more likely to feel unsure or to not know how to spot misinformation/disinformation online (50 per cent) compared to 20 to 24-year-olds (44 per cent). This might be to do with the fact that older participants have more experience or knowledge of some of the warning signs.

Differences by region and income classification

There are no significant regional differences in the ability to spot misinformation/disinformation online (see Figure 16):

Figure 16: Do you think you can spot misinformation and/ or disinformation online - by region

³¹⁵ Lilly, 23, Malawi; Anchal, 21, Bangladesh; Ámna, 20, Sudan; Lola, 18, Benin; Nabila, 18, Germany; Alyra, 24, Burkina Faso and Rachel, 18, United States.



Insights from youth activists

In the qualitative interviews, girls and young women were asked if they thought they could identify misinformation or disinformation online. Ten of the girls and young women provided answers that suggested they **can sometimes identify misinformation or disinformation**.³¹⁶ Anchal in Bangladesh discussed strategies she used to help herself such as cross-referencing information or even using a fact checking tool. The uncertainty in most of the girls and young women answers seemed to stem from **false information often being well articulated** and therefore seeming more convincing, some described being able to identify poorly written articles but found identifying misinformation or disinformation confusing or difficult when it was more sophisticated.

"I think it can be kind of confusing sometimes, but I think it's one of the skills that I've deliberately taught myself to try to figure it out. Like if this wasn't something that I'd tried to learn how to do, then I feel like I would get duped to very easily." Abbie, 19, Ireland

"I can say it's not easy. You have to read so many articles and then you have from the articles that's when you get to understand the information much more better. And then there are also people who share the information so that they can mislead others. And then there are other people who share the information so that you can have a better view on something.. I think it's not easy. It takes a lot of reading and passion. When I get some information that I'm not sure of, I tend to ask others on what they think. If they think if it's right or if it's wrong." Mia, 20, Kenya

Rachel from the United States mentioned there being another level of difficulty added due to the trust she has in certain sources of information, stating:

"It's hard because I associate misinformation with the other political view, especially in the United States...but that's definitely not true. So honestly I think I definitely am blind to it, and I'm more likely to be blind to it if it's posted by somebody I would trust or a source or somebody that I would align with." Rachel, 18, United States

³¹⁶ Lisa, 15, Brazil; Dira, 18, Indonesia; Abbie, 19, Ireland; Lilly, 23, Malawi; Ámna, 20, Sudan; Saili, 17, Nepal; Lily, 19, Ireland; Mia, 20, Kenya; Lisa, 22, Malawi and Anchal, 21, Bangladesh.

Seven of the girls felt they were able to and seemed confident in this ability.³¹⁷ Again, due to strategies such as comparing suspected misinformation or disinformation with other sources and verification processes such as being conscious of what they considered warning signs, such as clickbait headlines or exaggeration of facts.

Two of the girls and young women³¹⁸ described not being able to identify misinformation or disinformation due to both the volume of information there is online and it being very difficult to unpack the truth – underlining that it can be a subjective concept.

Strategies for spotting misinformation online

Nearly all girls and young women (97%) use at least one strategy to assess whether online information is truthful: about half cross-check online information with other sources or check if the source is backed up by evidence, while one in five use a fact-checking tool.

Almost all girls and young women who took the survey (97 per cent) use some kind of assessment strategy to check whether the information they access online is truthful. Only 3 per cent assume that any online information is truthful. The most common strategy to assess online information is cross-checking information with other sources (52 per cent), followed by checking whether an online source provided evidence (49 per cent) and assessing whether the information is from a reliable and trustworthy author and/or institution (43 per cent). About one in five girls and young women use a fact-checking tool.

How do you decide if the information you access online is truthful? (select all that apply)	Frequency	Percent
I cross-check the information with other sources	13544	52%
I check if they have provided evidence	12971	49%
It was from a reliable and trustworthy author and/or institution	11171	43%
I look at the profile of who posted the content to see if they are credible	9869	38%
I determine if the source is one-sided or biased	9232	35%
I look for signs of low-quality information such as grammatical errors	8393	32%
I check if the image(s) look sensationalist or are click-bait images	7283	28%
I use an online fact-checking tool	4615	18%
It was shared by someone I know	4451	17%
It had a lot of likes or reshares	4213	16%
It was shared by a popular celebrity or social media influencer	3782	14%
Other	1750	7%
I assume any information I access online is truthful	882	3%

Table 11: How do you decide if the information you access online is truthful?

Total 26249

On average, girls and young women use three of the listed strategies to assess whether online information is truthful; 60 per cent use at least three strategies and 30 per cent use at least five strategies to assess whether information online is truthful.

³¹⁷ DF, 17 Indonesia; Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Dora, 15, Peru; Ana, 22, Dominican Republic; Gana, 24, Egypt and Nani, 19, Nepal.

³¹⁸ Lola, 18, Benin and Charlotte, 23, Wales.





Differences by region and income classification

There are some regional differences in the strategies girls and young women use (see Figure 18), for example:

- Girls and young women in Europe are <u>the least</u> likely and girls and young women in Africa and the Middle East <u>the most</u> likely to use an online fact checking tool.³¹⁹
- Girls and young women in Africa and the Middle East are the most likely to rely on content being shared by a popular figure or someone they know and on the number of likes or reshares.

Figure 18: How do you decide if the information you access online is truthful - by region?

³¹⁹ As described on p. 6 we define fact-checking tools as sites that let people verify information they see in news stories, videos and other sources. Numerous different fact-checking tools can be found online, some are verified and others are unverified.



Insights from youth activists

Like the quantitative survey the most commonly discussed steps for checking if the information they accessed was truthful online, was **cross-referencing with other sources**. Checks were conducted both online and offline using different websites, including Google Scholar, and national radio or television broadcasts. This was discussed by fourteen of the girls and young women.³²⁰ The second most common practice was researching the source of information, for example checking the author or organization.³²¹ Another method referred to checking if the information was linked to evidence,³²² for example, comparing it against official data. A small number of the girls and young women also mentioned discussing the information with peers or family members,³²³ looking for signs of low-quality information, e.g. click-bait headlines or bad grammar,³²⁴ and two girls mentioned using a fact checking tool.³²⁵

³²⁰ Lola, 18, Benin; DF, 17, Indonesia; Nabila, 18, Germany; Mia, 20, Kenya; Anchal, 21, Bangladesh; Alyra, 24, Burkina Faso; Dora, 15, Peru; Lisa, 15, Brazil; Gana, 24, Egypt; Abbie, 19, Ireland; Lisa, 22, Malawi; Ámna, 20, Sudan; Charlotte, 23, Wales and Rachel, 18, United States.

³²¹ Lola, 18, Benin; DF, 17, Indonesia; Anchal, 21, Bangladesh; Alyra, 24, Burkina Faso; Dora, 15, Peru; Lisa, 15, Brazil; Abbie, 19, Ireland; Lisa, 22, Malawi and Ámna, 20, Sudan.

³²² Charlotte, 23, Wales; DF, 17, Indonesia; Dora, 15, Peru and Gana, 24, Egypt.

³²³ Nabila, 18, Germany and Mia, 20, Kenya.

³²⁴ Gana, 24, Egypt and Ámna, 20, Sudan.

³²⁵ Anchal, 21, Bangladesh and DF, 17, Indonesia.

"I mainly resort to two approaches, I look for the writing style of the news or information, if they are exaggerating or overstating certain opinion or trying to direct people in a certain way, then I doubt the info and I start double checking the info thorough Google and only from official websites, I try to look for official data supporting their claim." Gana, 24, Egypt

Education on misinformation and disinformation

Seven out of ten girls and young women surveyed have never been taught about spotting misinformation/disinformation at school or by family members.

About 70 per cent of girls and young women have never been taught how to identify misinformation and/or disinformation at school or by their parents; 78 per cent have never been taught by social media platforms about spotting misinformation and 85 per cent have not been taught by government institutions.

Table 12: Have you ever been taught how to identify misinformation and/or disinformation online by any of the following?

Respondent has <u>never</u> been taught how to identify misinformation and/or disinformation online by the following	Frequency	Percent
School or other educational institution	17553	67%
Parents or other family member(s)	18369	70%
Friends or peers	18931	72%
Social media platforms	20494	78%
Social media users	20808	79%
Government institutions	22221	85%
Youth club network or group	23095	88%
Charities or community organisations (e.g. Non-governmental organisations)	23715	90%
Religious or community leaders	24060	92%
Other	24839	95%

Total 26249

Girls and young women who have been taught about misinformation/disinformation online are more likely to be able to spot it, to have seen it and to feel concerned about it.

Girls and young women who have been taught about misinformation and disinformation are statistically significantly more likely to:

- feel able to spot misinformation/disinformation online (58%), compared to those who have never been taught about this (42%)
- have ever seen misinformation/disinformation online (92%) compared to those who have never been taught about this (79%)
- **be concerned about misinformation/disinformation online** (92%) compared to those who have never been taught about this (86%).

Girls and young women who have been taught about misinformation/disinformation online are more likely to use strategies to assess whether online information is truthful: they are almost twice as likely to use an online fact checking tool.

Girls and young women who have been taught about misinformation and disinformation online also use statistically significantly more strategies to assess whether information online is trustful (four compared to three). They are more likely to use at least two of the listed strategies to assess whether online information is truthful (77 per cent), compared to those who have never been taught (68 per cent).

Compared to girls and young women who have never been taught about

misinformation/disinformation online, those who have been taught are statistically significantly more likely to:

- use an online fact-checking tool: 20% compared to 12%
- check if they have provided evidence: 51% compared to 46%
- check if it was from a reliable and trustworthy author and/or institution: 44% compared to 37%
- look at the profile of who posted the content to see if they are credible: 39% compared to 34%
- look for signs of low-quality information such as grammatical errors: 33% compared to 28%
- check if the image(s) look sensationalist or are click-bait images: 30% compared to 21%

Differences by region and income classification

Girls and young women from low-income economies are least likely to be taught about misinformation.

Girls and young women from high-income economies are statistically significantly more likely to have been taught about misinformation at school (37 per cent compared to 31 per cent), while girls and young women from low-income economies are less likely to have been taught about misinformation by:

- school or other educational institution (24% compared to 34%)
- parents or family members (18% compared to 32%)
- friends or peers (23% compared to 29%)
- social media platforms (15% compared to 23%)
- social media users (12% compared to 22%)
- government institutions (11% compared to 16%).

Differences by intersectional characteristics

Girls and young women who identify as belonging to a **religious minority** are twice as likely to have been taught about misinformation online by religious or community leaders (16 per cent) than girls and young women who are not from a religious minority (7 per cent).

Insights from youth activists

In the qualitative interviews, girls and young women were asked whether they had been taught how to assess the accuracy of online information by anyone, and if not whether they thought this was a problem. The majority of girls and young women stated they were not taught how to do this, many identified it as problematic. They discussed this both as a concern for themselves and for online users in general. In response to the question, a small number of girls and young women mentioned that they had received training however their answers centred specifically on online safety rather than assessing the accuracy of information or digital media literacy specifically. The training received primarily seemed to be through attending courses, such as online safety courses or attending online safety conferences or brief training sessions offered at school or in extra-curricular clubs.

The majority of girls and young women said they had **never been taught how to assess the accuracy of online information by anyone**, ³²⁶ saying they largely **relied on themselves** to work out if the information was accurate. A few of the girls and young women identified this as problematic.³²⁷ Dira in Indonesia said she sometimes attended webinars to teach herself these skills and Lisa in Brazil said she had seen some helpful TV campaigns. Only Nabila in Germany had been

 ³²⁶ Lola, 18, Benin; Nabila, 18, Germany; Mia, 20, Kenya; Anchal, 21; Bangladesh; Lisa, 15, Brazil; Gana, 24, Egypt; Dira, 18, Indonesia; Lisa, 22, Malawi; Charlotte, 24, Wales and Rachel 18, United States.
³²⁷ Lisa, 22, Malawi; Lilly, 23, Malawi; Charlotte, 24, Wales and Dira, 18, Indonesia.

taught at school, specifically about issues that stem from social media use. Many of the girls and young women turned to family members to help them work out the accuracy of information such as mothers,³²⁸ brothers,³²⁹ and sisters.³³⁰ However, turning to family members appeared to be an ad hoc choice and for the most part they assessed the information themselves. A handful of participants mentioned discussing concerns with peers³³¹ and teachers.³³²

"The book also called Safe Online. The book really helped me, how to protect my privacy online, how to not give out confidential info online, how to remain anonymous, especially when I'm talking about something touchy that can cause me my safety....It was given to me by my brother." Tife, 22, Nigeria

"I definitely rely on my sister a lot. So she's a defense attorney and she lives super close to me in Los Angeles. She constantly has to be the devil's advocate in her work. Recently I've seen her do that a lot in our conversations, but it's very interesting because she gives me a whole new perspective to these like activist issues that I'm posting on social media. She's definitely somebody that I would rely on to help me feed through all the information that I'm consuming online and come to like concrete opinions that are based off of reliable sources." Rachel, 18, United States

A number of girls provided answers that suggest they had some teaching, however their answers related mainly to online safety or cyberbullying rather than comprehensive digital or media literacy lessons, the former was primarily gained through attending courses or short trainings by youth networks or charities school or extracurricular activities.³³³

The girls and young women were also asked during the qualitative interviews whether they think digital media literacy should be taught in schools or other education institutions. All of the participants **believed digital media literacy should be taught in schools.** Most of the girls and young women said it should be taught at secondary level, for example, Lilly in Malawi mentioned it would be useful to be taught as part of the life skills class in secondary school. Mia from Kenya suggested starting earlier:

"Yes, I think it should be taught. Because currently we are in a world where everything is being done in the internet. We are doing everything digitally. So I think it should be taught in the schools from the pre-nurseries, the primary schools to secondary schools to universities. So that when we grow up, we have a better view on how to use our digital platforms." Mia, 20, Kenya

Outside of schools and education institutions, the girls were asked who else should be responsible for educating young people on the issue. The most commonly discussed answers were charities or youth networks (which included community associations, extracurricular clubs, youth and school clubs and NGOs).³³⁴ Following that it was parents,³³⁵ although Lilly in Malawi and Dora in Peru acknowledged that some parents did not always have the digital literacy skills needed to help their children with the subject. Other power holders held accountable were governments,³³⁶ social media companies,³³⁷ community or religious leaders.³³⁸

³²⁸ Lily, 19, Ireland and Abbie, 19, Ireland

³²⁹ Gana, 24, Egypt and Tife, 22, Nigeria.

³³⁰ Rachel, 18, United States

³³¹ Lisa, 22, Malawi; Nabila, 18, Germany and Mia, 20, Kenya.

³³² Lily, 19, Ireland and Dora, 15, Peru.

³³³ Saili,17, Nepal; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales; Abbie, 19, Ireland; Cripaam, 17, Spain; Dora, 15, Peru and Alyra, 24, Burkina Faso.

³³⁴ Nabila, 18, Germany; Lily, 19, Ireland; Alyra, 24, Burkina Faso; Lisa, 15 Brazil; Gana, 24, Egypt and Ámna, 20, Sudan

³³⁵ Dira, 18, Indonesia; Lilly, 23, Malawi, Tife, 22, Nigeria; Lily, 19, Ireland; Mia, 20, Kenya; Cripaam, 17, Spain and Dora, 15, Peru.

³³⁶ DF, 17, Indonesia; Lisa, 15, Brazil; Lisa, 22, Malawi and Nani, 19 Nepal

³³⁷ Lola, 18, Benin, Lily, 19, Ireland and Rachel, 18, United States.

³³⁸ Nabila, 18 Germany, Mia, 20, Kenya and Tife, 22, Nigeria.

"But I definitely do think they [social media companies] need to do a better job on their behalf of stopping the spread of misinformation and disinformation and be more proactive in taking on posts that are being reported and making sure that stuff comes from a source or some kind of fact checking system." Rachel, 18, United States

The participants were also asked if they were offered digital media literacy lessons at school what they would most like to learn. Overall, there was a range of answers but one of the most cited areas was general ways to navigate online spaces, such as social media and general digital media literacy.³³⁹ More specifically, the girls and young women were interested in ways to identify misinformation and disinformation, including media manipulation and online safety.³⁴⁰ Other areas mentioned were digital skills (coding, website development),³⁴¹ data privacy,³⁴² online well-being³⁴³ and digital rights.³⁴⁴

"I think we definitely need too, because right now, especially since the pandemic, everyone's used digital spaces. We do everything online. I mean, maybe in the future we will get more engaged with online spaces, platform. I think it is important for us to know this and it will be more helpful if we get this in our educations, especially for those children who are under 10 years old, who is still young but already use digital spaces." Dira, 18, Indonesia

Who should be responsible for countering misinformation/ disinformation online?

Girls and young women call on social media companies, governments and news and media companies to counter misinformation and disinformation online.

Girls and young women feel that social media companies (20 per cent), governments (18 per cent) and news and media companies (16 per cent) should primarily be responsible for identifying and countering misinformation and/or disinformation online. Only 4 per cent selected educational institution and parents/family members as the key actors.

³³⁹ Alyra, 24,Burkina Faso; Rachel, 18, United States, Ámna, 20, Sudan; Tife, 22, Nigeria and Lilly 23, Malawi.
³⁴⁰ Alyra, 24,Burkina Faso; Abbie, 19, Ireland; Charlotte, 23, Wales and Gana, 24, Egypt mentioned issues related to misinformation and disinformation, while Tife, 22, Nigeria; Gana, 24, Egypt; Lola, 18 Benin; DF, 17, Indonesia and Lily, 19, Ireland referred to online safety.

- ³⁴¹ Anchal, 21, Bangladesh and DF, 17, Indonesia
- ³⁴² Lisa, 15, Brazil and Dira, 18, Indonesia.

³⁴³ Lilly, 23, Malawi

³⁴⁴ Dira, 18, Indonesia.

Figure 19: Who should be responsible for identifying and countering misinformation and/or disinformation online?



Total 26,219

Differences by region

Across all regions, most girls and young women select social media companies, governments and news and media companies as the main actors who should be responsible for tackling misinformation online. In Asia and the Pacific and Africa and the Middle East, girls and young women select governments first, while in Latin America, Europe and North America, girls and young women select social media companies as the key actor.





Who should counter misinformation/disinformation by region

Insights from youth activists

Over half of the girls and young women interviewed suggested governments were responsible for helping to tackle the problem of misinformation and disinformation and ensuring action.³⁴⁵ Ideas for government accountability included:

- government bodies taking more responsibility for media outlets and social media channels posting misinformation and disinformation and taking it down³⁴⁶
- government sanctions for those who post misinformation and disinformation³⁴⁷

³⁴⁵ DF, 17, Indonesia; Lola, 15, Benin; Alyra, 24, Burkina Faso; Cripaam, 17, Spain; Dora, 15, Peru; Gana, 24, Egypt; Abbie, 19, Ireland; Lisa, 22, Malawi; Tife, 22, Nigeria; Ámna, 20, Sudan; Charlotte, 23, Wales; Lisa, 15, Brazil and Lilly 23, Malawi.

³⁴⁶ Lily, 23, Malawi and Charlotte, 23, Wales.

³⁴⁷ Dora, 15, Peru

- state broadcasters advertising awareness campaigns on misinformation and disinformation³⁴⁸
- reforms in education sectors to include digital media literacy.

"It's kind of tricky because it depends on what misinformation we're talking about. Like massive conspiracy theories, I don't think getting the government involved is going to help, because they don't trust the government. So yeah. But I think in preventing the issue, but kind of at its root, I think it should be working together between the government, schools, the guards [the police], reliable news media, all working together." Abbie, 19, Ireland

The girls and young women had lots of ideas for ways to stop misinformation and disinformation online. The majority of solutions were categorized in the fields of education or by regulation. The solutions around education included teaching online safety, digital literacy for parents and to teach people from a young age and teaching about the impacts of misinformation and disinformation. ³⁴⁹

"You need to start small and teach digital media literacy and make sure people understand this information." Abbie, 19, Ireland

Some of the ideas the girls and young women had for regulation were:³⁵⁰

- protection laws for digital spaces
- stronger punishment for those that post misinformation and disinformation
- law enforcement working to prevent misinformation and disinformation
- more regulation of media outlets and social media platforms by governments

However, it should be noted that government involvement in regulating online platforms tends to be a contentious issue as there is a balance to be had between regulation of false information and not using it to curtail free speech or target groups or individuals who express opposition to a government.

The next most discussed options for taking action were **media companies and social media companies.**³⁵¹ The girls and young women spoke about **social media companies needing stronger mechanisms to tackle the issue** such as:

- all social media companies having warnings on posts that contain misinformation and disinformation³⁵²
- users having to do short training before opening a social media account³⁵³
- improving their reporting mechanisms³⁵⁴
- fact checking systems in place³⁵⁵
- detecting and taking down misinformation and disinformation and fake accounts.³⁵⁶

Six of the girls and young woman remarked that we had also had a collective responsibility as users of these platforms, pointing to the need to follow reputable sources or to check information and also reporting misinformation and disinformation when we see it.³⁵⁷

³⁵¹ Abbie, 19, Ireland, Charlotte, 23, Wales; Tife, 22, Nigeria; Nabila, 18, Germany, Cripaam, 17, Spain and Lola, 18, Benin mentioned the responsibility of media outlets and Tife 22, Nigeria; Lola, 18, Benin, Lily, 19, Ireland and Anchal, 21, Bangladesh mentioned social media companies having responsibility

³⁵² Lily, 19, Ireland

³⁴⁸ Lisa, 15, Brazil

³⁴⁹ Abbie, 19, Ireland, Gana, 24, Egypt; Anchal, 21, Bangladesh; DF, 17, Indonesia; Dora, 15, Peru and Alyra, 24, Burkina Faso.

³⁵⁰ Dira, 18, Indonesia; Lisa, 22, Malawi; Ámna, 20, Sudan; Charlotte, 23, Wales and Alyra, 24, Burkina Faso.

³⁵³ Anchal, 21, Bangladesh

³⁵⁴ Alyra, 24, Burkina Faso and Anchal, 21, Bangladesh.

³⁵⁵ Charlotte, 23, Wales, Dira, 18, Indonesia; Tife, 22, Nigeria and Ámna, 20, Sudan.

³⁵⁶ Lola, 18, Benin; Alya, 24, Burkina Faso; Anchal, 21, Bangladesh and Tife, 22 Nigeria.

³⁵⁷ Charlotte, 23, Wales; Dira, 18 Indonesia; Mia, 20, Kenya; Dora, 15, Peru; Lily, 19, Ireland and Nani, 19, Nepal.

"I think that, beyond what we could receive at school, it also depends on us ourselves – the issue of reflecting whenever we receive information. The issue that everyone can reflect for themselves, that certain information isn't trustworthy. But also that we can organise in groups, in collectives, to be able to debunk it, to say it like that. So yeah I think it's the responsibility of everyone, but it's also a matter of doing it together, to identify information that isn't true and to address it." Dora, 15, Peru

"I think actually every one of us plays an important role to make these digital spaces a lot safer, a lot more good for us. But those who came from institutions that have a power, that have the privilege to make laws, to tell a bigger, wider people about what's happening and then what to do, I think it would definitely help with these issues. But I think every one of us have the same role to tackle these situations, these bad situations." Dira, 18, Indonesia

Other power holders the girls and young women discussed were: NGOs and community organisations,³⁵⁸ influencers,³⁵⁹ law enforcement,³⁶⁰ and parents.³⁶¹

7. CONCLUDING INSIGHTS

The findings demonstrate that girls and young women are spending huge amounts of time online, with 55 per cent of girls and young women spending more than seven hours a day online and 16 per cent spending more than twelve hours a day online.

Of the girls and young women surveyed, 52 per cent learn about the topics that mattered to them through social media influencers such as bloggers and vloggers, while the 22 youth activists discussed using social media platforms to learn. Overwhelmingly Instagram was the most mentioned online space platform for learning about the topics that matter to them. Learning was cited by the young activists as the main reason for seeking out information online about these topics. This demonstrates, first, how much girls and young women interviewed rely on online platforms as an informal learning tool, and second, how young women and girls are engaging less and less with traditional sources of information, finding alternative online spaces.

The influence of online platforms must not be underestimated: **93 per cent of the girls and young women surveyed have been influenced by information online.** This reliance on online platforms for information has only been accelerated during the pandemic, with 48 per cent of the surveyed girls and young women stating that they have changed how they behaved during the pandemic and 27 per cent saying that online information has influenced their decision about whether to get the COVID-19 vaccine. Notably, 40 per cent of girls and young women from Africa and the Middle East have questioned whether to get the COVID-19 vaccine because of misinformation online.

The findings demonstrate the vast range of potential benefits and opportunities that online platforms present for learning about topics of interest. In addition, online spaces present the potential to connect with likeminded individuals, which girls and young women from minorities particularly relied on, opening up a global reach for youth groups and networks. Youth activists are leveraging online platforms to facilitate self-directed informal learning practices, exploratory dialogue, and communicative exchanges. This is illustrated by the youth activists who said it had created more opportunities than barriers in their journey to becoming an activist. However, they also noted that they had mixed levels of confidence in the information they relied on.

Both the interviews and the survey point to the mistrust girls and young women have in online platforms: there was no single online source that the majority of girls and young women surveyed actually trusted. In fact, of those surveyed, 91 per cent are concerned about

³⁵⁸ Gana, 24, Egypt and Alyra, 24, Burkina Faso.

³⁵⁹ Lilly, 23, Malawi and Lola, 28, Benin.

³⁶⁰ Abbie, 19, Ireland and Ámna, 20, Sudan.

³⁶¹ Lisa, 22, Malawi and DF, 17, Indonesia.

misinformation and/or disinformation. Online platforms and particularly social media platforms have a long way to go towards becoming safe and trusted spaces for information.

Social media influencers were the second most cited source of information for the surveyed girls and young women and social media platforms were the most popular places for the youth activists to find information on their topics of interest. However, both sets of respondents rated social media platforms as being the space where most misinformation and disinformation is found – with **72 per cent of girls and young women surveyed having seen misinformation and/or disinformation** on these platforms. This correlates with much of the literature on the subject and is rather a damning indictment of social media platforms' performance in combatting false information. It is clear that social media platforms need to be more rigorous in helping to tackle the issue: notably Facebook which was mentioned by all the study respondents as being particularly prone to hosting misinformation and/or disinformation.

One of the startling findings from the study was that girls and young women have had to change their behaviours online in order to deal with misinformation and disinformation. Yet again, girls and young women have had to develop their own strategies to cross-check and validate information, with **only a handful of countries having comprehensive digital media literacy programmes in place.** Even when specifically asked who they sought help from, most of the young activists confirmed it was up to them alone to tackle the phenomena.

The impact of misinformation and disinformation is no longer something that can be ignored, its effects are being felt by girls and women around the world, with 87 per cent of the 26,247 girls and young women surveyed saying it has had a negative effect on them. In addition, **about half of them (46 per cent) said that they have either felt sad, depressed, stressed, worried or anxious because of misinformation or disinformation online.** Furthermore, the youth activists provided telling real life examples of how invasive and encroaching the effects can be. While the issues of online information might seem insignificant in comparison to, for example, online harassment, the voices and experiences of girls and young women must be taken into account when balancing measures to combat misinformation with the right to freedom of expression, and most certainly to deal with disinformation more stringently.

Moreover, while the research demonstrates online platform are useful for engaging girls in social, political and civic issues online and engaging in online public forums, misinformation and disinformation are increasingly becoming a barrier to this. One out of four girls feel less confident to share their views and one out of five stopped engaging in politics or current affairs as a result of misinformation and/or disinformation online. This stands in direct opposition to girls and young women being able to confidently and knowledgeably engage in political, civic and social debates, informed decision-making and being safe and active in the world.

8. RECOMMENDATIONS

As the research respondents have emphasised, everybody is responsible for tackling misinformation and disinformation online: it is essential for all of us to **always assess information before sharing it**, **report suspected misinformation and disinformation and raise awareness about the issue.** But some have more power than others.

The recommendations that follow, addressed to key power-holders, are based on suggestions from girls and young women taking part in the research.

Governments

Governments must:

A. Promote digital literacy

• **Invest** in ICT education and digital literacy by supporting community-led and peer-driven digital skills and empowerment initiatives for all children, particularly girls and young women in

all their diversity, and their families: focused on problem solving, group mentorship, information and data literacy, content creation, and leadership skills, in addition to technical skills.

- **Introduce** or build digital literacy, including critical thinking, in school curricula from primary school level. Girls and young women must be able to confidently and knowledgeably navigate online spaces and learning these skills needs to be part of an overall education system that promotes gender equality.
- Work with civil society to develop and deliver digital literacy and awareness raising initiatives, so that communities, families and civil society are better informed about both the opportunities and risks of being online. They must facilitate broader discussions aimed at eliminating gender inequality and the gender digital divide: acknowledging the harmful norms that restrict girls' digital inclusion, and the online violence and abuse that misinformation and disinformation contribute too.
- **Meaningfully engage** girls and CSOs in policy and legislative discussions to ensure that the regulation of online platforms, strategies to encourage girls' connectivity and tackle digital violence and the roll-out of digital literacy initiatives are fit for purpose reflecting girls' diverse needs and lived experiences. Initiatives should also include steps to mitigate the stress and psychological impact of experiencing hostility whilst navigating online spaces.

B. Protect and monitor rights

- **Ensure** government legislation, regulations and policies recognise children's digital rights, taking active measures to incorporate the recommendation of the UN Committee on the Rights of the Child.³⁶² These emphasise the importance of promoting digital citizenship for children and adolescents: in particular with reference to accessing information, promoting civic participation, protection and privacy, in accordance with their evolving capacities, and in a way that ensures a gender and diversity approach.
- **Recognise, investigate and address** the implications of misinformation and disinformation on girls, connecting this with efforts to address online gender-based violence through programming and policy interventions. Governments should update legislative frameworks and enact policies relating to digital violence, harassment and hate speech and their prevention, reflecting how disinformation and misinformation contributes to misogyny, racial abuse and other harmful content online.
- **Ensure** discussions around government regulation of social media companies and other internet platforms centres on reforms to practices and product designs that ultimately make online experiences safer, particularly for girls and marginalised individuals. Regulatory frameworks must include independent oversight bodies, that meet calls for greater transparency and accountability.
- **Ensure** government policies on internet access are inclusive and prioritise more affordable, meaningful connectivity for everyone, especially girls and young women. Governments should adopt meaningful connectivity as a new target for the internet, focusing on four components: regular internet use, an appropriate device, enough data and a fast connection.

Online Platforms

Online platforms must:

A. Promote digital literacy

• Work with girls and young women and civil society to build on and create solutions to increase all children's digital literacy. Interventions should be grounded in the experiences and needs of girls and young women in all of their diversity: they should include tools and initiatives for fact checking, nudges to change users' behaviour and verifying content, as well as awareness raising.

³⁶² CRC General comment No. 25 (2021) on children's rights in relation to the digital environment, CRC General comment No. 20 (2016) on the implementation of the rights of the child during adolescence

• **Initiate** innovative public-awareness raising campaigns about disinformation and misinformation, including those that are age-appropriate and targeted to a younger audience.

B. Take responsibility

- **Recognise** that online platforms have a responsibility and duty of care to ensure content published and promoted as a result of their own procedures, algorithms, and decision-making, automated or human, does not perpetuate misinformation and disinformation that could jeopardise consumers' physical and mental wellbeing.
- **Investigate and address** the implications of misinformation and disinformation for girls specifically, connecting this with efforts to address and reduce online gender-based violence through their systems and processes.
- **Recognise** that where gender intersects with race, ethnicity, sexual identity or disability, girls and young women can be particularly at risk and their rights specifically, to freedom of expression, assembly, and psychological and physical safety undermined.
- Amend existing policy statements and community guidelines to explicitly acknowledge the gendered and intersectional dimensions and impacts of misinformation and disinformation and commit to implementing gender-sensitive solutions and penalising perpetrators.
- **Build** on measures initiated during the COVID-19 pandemic when online platforms worked together to implement technical solutions to tackle misinformation and disinformation: including connecting users to credible, authoritative information, and moderating and reducing the spread of misleading content. It is vital to work with girls and young women and civil society organisations to create new technical solutions that recognise the gendered dimension of misinformation and disinformation and address this across a broader spectrum of issues that affect girls' and young women's' lives. Too much reliance on automation should be avoided as it is less effective at identifying unacceptable content, or understanding context, than a trained human moderator.
- Be transparent and accountable with regards to the delivery and impact of initiatives to address misinformation and disinformation. In particular while still protecting the data privacy of platform users online platforms should facilitate the publication of data which is disaggregated by age and gender to provide insights into the effects of misinformation and disinformation on girls and young women. Data should be made available to external stakeholders, including academia and civil society, and analysed regularly to gather evidence of the true extent of misinformation, and disinformation. Their input will help to identify shortcomings, positive examples of impact and opportunities to strengthen procedures with children's and young people's interests particularly in mind.

Media outlets must:

- **Collaborate** with other organisations to share expertise and disseminate good practices around fact checking alongside other verification methods. Share sector insights and expertise with governments and network providers to inform digital media literacy programmes that focus on developing critical thinking and on practical digital navigation and safety skills.
- **Commit** to not spreading misinformation and disinformation on their channels and networks and when it does occur, adequately addressing it as a correction; bearing in mind the danger of amplifying or conferring legitimacy on information that is simply untrue.

Network Providers must:

• Work with governments to take measures to increase meaningful connectivity: make mobile internet access more inclusive with a particular focus on freely accessible educational content through zero-rating relevant websites as well as increasing data allowances and lowering costs.

Civil Society and non-governmental organisations must

- **Provide** financial and technical support to young feminist organisations and groups working on girls' digital rights, specifically those campaigning against misinformation and disinformation, providing solidarity with activists and strengthening and amplifying intergenerational movements.
- Facilitate collaboration and coordination between the different stakeholders: specifically Global South / North collaboration including girls and young women, girl-led organisations, civil society, government representatives, academia and the tech sector to amplify impact for change.

Intergovernmental and supranational organisations must:

- Meaningfully engage girls and young women in discussions on regulation, standards and policies, ensuring that their experiences are reflected. It is crucial that the EU Digital Services Act, and related proposals such as the AI Regulation and European Democracy Action Plan, currently being debated, is properly accountable to girls and young women, ensuring the systemic risks they face are prevented and mitigated, consistently and transparently.
- **Investigate** the issue of misinformation and disinformation and the impact it has on individuals' human rights. This includes ongoing research on the gendered and age impacts and dimensions of disinformation and misinformation and strongly encouraging greater transparency and accountability within and throughout the tech sector: providing public information on tech reform, the use of algorithms, data and privacy and combating harmful content. Use these insights to inform public awareness campaigns to combat the spread of harmful content, building on the UN's existing *Verified* campaign which tackles COVID-19 misinformation and disinformation.

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ABOUT PLAN INTERNATIONAL

Plan International is an independent development and humanitarian organisation that advances children's rights and equality for girls. We strive for a just world, working together with children, young people, supporters and partners. Using our reach, experience and knowledge, Plan International drives changes in practice and policy at local, national and global levels. We are independent of governments, religions and political parties. For over 80 years we have been building powerful partnerships for children and we are active in more than 75 countries.

Girls Get Equal: Plan International has been campaigning for girls' rights for over a decade. The Girls Get Equal campaign, created with youth activists around the world, aims to ensure girls and young women have equal power over their own lives and can shape the world around them. In order to achieve gender equality in an increasingly digital world, online spaces must be made safe, accessible and affordable for everyone. Girls and young women, in all their diversity, must be free to be themselves: to campaign, take collective action, and make decisions about the issues that affect their lives, wherever they are.

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