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# Generation Z and cyberviolence: between digital platforms use and risk awareness

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#### **ABSTRACT**

The article focuses on the results of a national empirical research on Generation Z's perceptions and experiences of cyberviolence. This term refers to aggressive and intentional actions, carried out, through electronic tools by a single person or a group, which deliberately aim to hurt or damage another who cannot defend himself. The main aim of this study was to gather national data on cyberviolence in order to explore better how young people (aged 18-25) understand and experience this phenomenon and what maybe the most suitable actions to limit it. The data analysis explored three main issues: (1) The main platforms used by Generation Z on which cyberviolence can occur; (2) The level of knowledge and awareness that Generation Z has about the different forms of cyberviolence and their dangerousness; (3) The features of social media perceived as most dangerous by the respondents. The article also proposes a reflection on the actual level of awareness of young people about this issue and the need to consider digital literacy programmes that aim to teach young people how to analyse the media critically.

#### **KEYWORDS**

Cyberviolence; Generation Z; digital platforms; digital risks; digital literacy; youth

#### 1. Introduction

The article focuses on some findings from a national research project on Generation Z's perceptions and experiences of cyberviolence. The interest of the research is to analyse the knowledge, behaviour and opinions of young people between the ages of 18 and 25with regard to cyberviolence issues and experiences in social platforms. Specifically, the online survey (which collected and analysed a total of 2365 cases) aimed to explore how Generation Z know about and experience this phenomenon, and to investigate this generation's views on the best and most appropriate ways to address the problem. As noted in literature, 'Generation Z' refers to the generation following the Millennials, those born between 1997 and 2010. An important hallmark of this social group is the fact that it has used the Internet and digital devices in a widespread fashion since childhood. Generation Z's strong familiarity with digital technologies and social media have significantly impacted their socialisation processes and identity construction. However, the use and familiarity of this group of young people with social media also brings

with it a number of risks, linked to online violence phenomena that have been on the rise in recent years. These phenomena have different characteristics and modalities and impact differently on young people, men and women and different social groups.

Cyberviolence is defined here as 'the use of computer systems to cause, facilitate, or threaten violence against individuals that results, or is likely to result, in physical, sexual, psychological, or economic harm or suffering and may include exploitation of the individual's circumstances, characteristics, or vulnerabilities' (Council of Europe, 2018, p. 5). This definition not only encompasses gender-based violence, but also more recent manifestations of online violence. In the most recent literature, cyber-violence refers to aggressive and intentional actions, carried out, through electronic tools (sms, mms, images, photos or video clips, phone calls, emails, chat rooms, instant messaging, websites, offensive and harassing), by a single person or a group, which deliberately aim to hurt or damage another who cannot defend himself, often because initially unaware and unable to emotionally and psychologically manage the problem. Cyber-stalking, revenge porn, hate speech and cyberbullying are just some forms of online violence (cyber-violence) (Machado et al., 2022).

Beginning with the characteristics of Generation Z and its relationship with digital platforms, the article aims to explore this generation's level of knowledge and awareness about different forms of cyber violence, how dangerous it is, and the nature of the media/ digital consumption context in which the phenomenon currently occurs. The article also proposes a reflection on the actual level of awareness of young people about this issue and the need to consider digital literacy programmes that aim to teach young people how to analyse the media critically.

#### 2. Literature review

#### 2.1. Generation Z in the Italian context

The constant use of digital platforms is one of the hallmarks of recent generations and, in particular, Generation Z. Generation Z' refers to the generation following the Millennials, that is, those who were born between 1997 and 2010. This group of young people has used the Internet and digital platforms since childhood. Members of Generation Z are considered to be highly accustomed to communication technologies and social media, which significantly impact their socialisation processes (Madden, 2019; Scholz & Vyugina, 2019; Scholz & Vyugina, 2019; Seemiller & Grace, 2018). Therefore, members of Generation Z have been referred to as 'digital natives' (Prensky, 2001), a now-out dated label that has been superseded by scientific findings (Bennett & Maton, 2010) introducing the idea of a community of young people using social platform in their everyday life for a lot of different purposes. In particular, Generation Z does not conceive of a life outside the infosphere because, to put it more emphatically, the infosphere is gradually absorbing all other reality. Generation Z was born online as explained by Floridi (2014).

It is crucial to highlight that the term 'Generation Z' is not intended in a deterministic sense. It is, in our opinion, a useful label to circumscribe a generation to meaningfully differentiate it from the 'adult' generations, which are typically 'less accustomed' to digital technologies. It is perhaps superfluous to point out that the literature on youth

and digital platforms is very rich and embraces different aspects, further integrating reflection on Generation Z. One perspective that has not been considered here, but could be explored in the future, especially from an educational point of view and related to learning theories, concerns online communities also understood as communities of practice. In this regard, it might be interesting to study the forms of collaborative knowledge produced by young people using Web 2.0 tools (Gunawardena et al., 2009; Lave & Wenger, 1991).

Generation Z in the Italian context is considered contradictory and is represented in public arenas and common sense in different and opposite ways. The overall picture proposed by Benasso and Cuzzocrea (2019) shows that Generation Z is not wholly different from the Millennials, as they show some similarities bit also some new features in relation with online reality: they have experienced difficult circumstances and will continue to experience them into the future, but this generation is less worried about its future than it could be. This demonstrates the impact of the relatively protective environment in which young people of this age have been raised, an environment that is very much embedded in Italian culture and tradition (particularly regarding the role of the family in Italian society). This generation seems to be living in a 'bubble'.

Beyond definitional issues, this is a generation that, in a similar way to the one that immediately preceded it (the Millennials), has a very close and, at the same time, controversial relationship with digital media, especially social media (Introini & Pasqualini, 2018). As has been amply demonstrated through research conducted in this field, the media plays an important role in the construction of youth identities and in shaping generations (Aroldi & Colombo, 2020). Digital media platforms are a place where youth socialise, and build and creatively reconstruct their identities. Turner (2015) highlighted that social media has become an integral part of the daily lives of members of Generation Z, with one result being extensive smartphone usage. Communication technologies exert a considerable impact on the construction of teens' values, imaginaries, behaviours and expectations, and how they interact with their peers and relate to each other in social settings (boyd, 2014). The development of online relationships has become the norm for this generation: they use social media to strengthen relationships with friends, make new ones, and interact with people they would never have met in real life. Above all, young people learn (continuously and in a natural way) many skills linked to informal knowledge that can flow into new forms of subjectification connected to the digital experience (Scolari, 2018; Tirocchi & Serpieri, 2020). In this sense, digital platforms are used by this generation as spaces of expanded sociality, functioning to nurture paths of identity distinction and generational growth, and acting as a reflective laboratory for testing one's subjectivity continuously, both at an individual level and in a relational sense.

## 2.2. Generation Z and platform society

Generation Z was among the first generations able to use the Internet from an early age. Carried along with the online revolution of the 1990s, this generation was exposed to an amount of technology unthinkable for their predecessors (Niaz, 2019; Reinikainen et al., 2020). As technological tools became more compact and affordable, the popularity of smartphones, in particular in the US, grew exponentially. In fact, most of these digital natives have had some kind of social media presence for more than half their lives. This social-savvy generation represents a changing tide in social media usage. Sixty-six percent of Gen Z consumers state that social media is essential to their lives, but their reasoning is unique. The most common reason Gen Z uses social media is to pass the time, making them the only generation to rank that above connecting with family and friends. In 2015, 77% of 12- to 17-year-olds owned a mobile phone. It is not hard to imagine how this technology affected their lives (Dimock, 2019). Thus, Generation Z, as well as the social groups that immediately preceded it, are characterised by an especially strong relationship with digital platforms, which contributes to producing so-called participatory cultures (Jenkins, 2006), in which young people progressively assume an active role in the production and consumption of content, so as to be defined as a prosumer (Toffler, 1981). To say that Generation Z is particularly inclined to use digital media is not to say that this generation knows how to use them critically and wisely, as we will observe later in this article.

To examine the relationship between this generation and digital media in depth, it is helpful to follow the evolution of the digital media ecosystem in relation to social changes, from the advent of social media to the rise of 'platform society' (van Dijck et al., 2018), which represents the most recent phase of this transformation. The concept of the platform society highlights the centrality of digital platforms in people's lives and the ability of technologies to structure daily activities (van Dijck et al., 2018). For at least twenty years, due to the advent of Web 2.0<sup>2</sup> and its participatory potential, social media has been an important reference point in the lives of young people. Through it, they have been offered the possibility of 'staging themselves' and managing their social relationships (boyd & Ellison, 2007). Due to their use of social media (for example, Facebook and Instagram), adolescents acquire many skills related to managing identity and social relations through exchanging resources and support, especially within their peer groups (Scolari, 2018). With the introduction of the concept of networked individualism (Wellman, 2002), in the framework of the connective society, Rainie and Wellman highlighted the ability of individuals, on the one hand, and of digital platforms, on the other, to simultaneously foster the establishment of online and offline ties and networks, to create a new social operating system<sup>4</sup> that expands social relationships beyond the traditional neighbourhood. As the networked individualism approach states, today each individual can simultaneously become part of numerous networks, online and offline precisely, within which he or she can assume different roles (peripheral or central depending on the structure of the networks and situations).

'Platform society' describes the use of digital environments today increasingly influences many sectors of society and, therefore, daily life, including journalism, health, education and public transport. Currently, the Western world, at least, is primarily run by the 'Big Five', a small number of large technology companies comprising Facebook<sup>5</sup>, Apple, Microsoft, Alphabet (Google) and Amazon. In this regard, it is also interesting to underline how the affordances<sup>6</sup> of platforms shape the relationship that young people establish with the platforms themselves. Today, the relationship between youth and digital technologies is evolving in an increasingly complex way. Platforms are multiplying and diversifying, and this has atwofold consequence. On the one hand, it creates new opportunities for growth and exchange with peers, but on the other hand, it exposes young people to numerous risks.



# 2.3. Generation Z and the risk society

Members of Generation Z were mostly born in the early twenty-first century, after the fall of the Berlin Wall, the fall of Eastern European regimes and the 9/11 attacks in New York. For these reasons, Luttrell and McGrath (2021) spoke of Generation Z as a 'superhero generation', about the superpowers attributed to cartoon superheroes because these events created global uncertainty and they have been able to navigate it. Precisely concerning this aspect, Generation Z seems to fall, like previous generational labels, into the trap of determinism and, more specifically, of technological determinism. Like digital natives or the Net Generation, the young people of this generation would seem, according to the authors, to be more inclined towards activism. Social justice is a central interest, as is climate change (note the activities of the Swedish activist Greta Thunberg) and other sensitive issues, such as human rights and those of the LGBTQ+ community. All these aspects, as well as the sense of freedom, curiosity, exploration of new and meaningful experiences, and other hallmarks of this generation, seem to be inextricably linked, first of all to the use of digital technologies: 'They recreate, learn and work in a digital world, which will ultimately continue to influence their home, educational, and work environments' (Luttrell & McGrath, 2021, p. 36). As we have already pointed out, a digital world involves the use of a variety of sophisticated communication devices or gadgets such as iPads or smartphones. Moreover, Generation Z, in addition to being born into a society of risk and uncertainty (Bauman, 1999; Beck, 1992) has experienced the fragility of the pandemic period, which, at least from 2020, has made society even more fragile, with the exposure to health risks but also to the dangers of misinformation.

# 2.4. From digital risks to cyberviolence

The issue of the risks associated with using digital technologies has become central to our societies because, as we have already pointed out, digital environments are developing rapidly and leading to a significant transformation in social relations. Moreover, digital environments are 'open' spaces that can be difficult to control and regulate in traditional ways. The risks of the digital world to the younger generation have been widely debated, especially concerning the evolution of the media system, which has created many opportunities but also increasingly insidious risks (Sannella, 2017). Sonia Livingstone, in particular, has studied this phenomenon for a long time within the framework of several international projects, starting with EU Kids Online. EU Kids Online classified online risk in 2009 (Staksrud et al., 2009; Staksrud & Livingstone, 2009), funded by the European Commission's (EC) Safer Internet Programme.

Starting 'from a child-centred and evidence-based approach, this classification model identified two dimensions of risk: the positioning of the child in relation to the digital environment (as a recipient of mass-produced content, a participant in adult initiated activity, and an actor in peer-to-peer exchanges), and the nature of the risk (aggressive, sexual, values and commercial)' (Livingstone & Stoilova, 2021, p. 4).

EU Kids Online's original 3Cs classification of online risks for children proposed these three main dimensions of risk: content, contact and conduct.8 The 3Cs classification was already a point of reference since 2010, much cited in numerous institutional and noninstitutional settings. To track its use, Livingstone et al. did a keyword search and then a search of reports and documents from different organisations. They found that the 3Cs of online risk informed the work of a number of key actors, including UNICEF, the European Commission (EC), the Organisation for Economic Co-operation and Development (OECD), the Broadband Commission for Sustainable Development, the International Union International Telecommunication Union (ITU), the ICT Coalition and others. The classification has recently been updated and integrated (Livingstone & Stoilova, 2021). In the new report, Livingstone and her group provide a new CO:RE<sup>9</sup> 4Cs classification, adding the contract dimension which means that 'a child is party to or exploited by potentially harmful contract' (Livingstone & Stoilova, 2021, p. 12).

Here, the concept of cyberviolence is proposed as being broad and multidimensional; it goes beyond a simple definition of the risks of digital technologies for young people. Cyberviolence can be directed at any individual or group, although gendered cyberviolence is often referred to in the literature to mean, in particular, violence perpetrated against women. Cyberviolence is the use of computer systems to cause, facilitate or threaten violence against individuals. These cyber systems cause or may cause, physical, sexual, psychological or economic harm or suffering. And they may include the exploitation of people's circumstances, characteristics or vulnerabilities (Backe et al., 2018; Peterson & Densley, 2017). On the other hand, it is a reality that any crime can have a 'cyber' element that can change the nature and scope of the crime (Lumsden & Harmer, 2019). Research by Rebollo-Catalan and Mayor-Buzon (2020) on the role of bystanders in cyberviolence provides interesting background for contextualising the problem among adolescents, citing numerous studies. For example, Martín-Montilla et al. (2016) found that the most common cyberviolence behaviours, at least as far as adolescents are concerned, include: exchanging passwords for social networks; posting sensitive images or data that could harm a partner or ex-partner; usurping email passwords; threatening to reveal data, videos, or photographs; and monitoring a partner's friends and posts on social networks.

Other studies (Council of Europe, 2018) have referred to violence targeting both women and children, providing a legal framework for the issue. Precisely with reference to the latter study, the working group responsible for the mapping of forms of cyberviolence defined the phenomenon in these terms:

[C]yberviolence is the use of computer systems to cause, facilitate, or threaten violence against individuals that results, or is likely to result, in physical, sexual, psychological, or economic harm or suffering and may include exploitation of the individual's circumstances, characteristics, or vulnerabilities (Council of Europe, 2018, p. 5).

In the typology proposed by the working group of the European Council we find the following forms of cyberviolence, which in part correspond to those mentioned in the research questionnaire discussed in this paper:

- Cyberharassment (which includes defamation and other damage to reputation; cyberbullying; threats of violence, including sexual violence; cybercrime; coercion; insults or threats; incitement to violence; revenge porn; incitement to suicide or self-harm, etc.);
- Cybercrime (illegal access, illegal interception, data interference, system interference, computer-related forgery, computer-related fraud, child pornography);
- ICT-related violations of privacy (computer intrusions; taking, sharing, manipulation of data or images, including intimate data; sextortion; stalking; doxing; identity theft; impersonation, etc.);

- ICT-related hate crime (against groups based on race, ethnicity, religion, sex, sexual orientation, disability, etc.);
- *ICT-related direct threats of or physical violence* (murder; kidnapping; sexual violence; rape;torture;extortion;blackmail;swatting;incitement;violence;transmissions themselves cause injuries; attacks on critical infrastructure, cars or medical devices etc.);
- Online sexual exploitation and sexual abuse of children (sexual abuse, child prostitution, child pornography, corruption of children, solicitation of children for sexual purposes, sexual abuse via livestreaming, etc.).

In the case of the research presented here, the items chosen to indicate cyberviolence were fewer and more focused on activities or problems that involve Generation Z (e.g. Cyberbullying, hate speech).

## 3. Methods

The analysis presented here is based on a wider research project, 'Cyberviolence and social aspects of online violence'. The main aim of this study was to gather national data on cyberviolence in order to explore better how young people understand and experience this phenomenon and what maybe the most suitable actions to limit it.

The research questions were as follows:

- RQ1) What are the main platforms used by Generation Z on which cyberviolence can occur?
- RQ2) What is the level of knowledge and awareness that Generation Z has about the different forms of cyberviolence and their dangerousness?
- RQ3) What features of social media are perceived as most dangerous by the respondents?

From a methodological point of view, considering the main issue and the target population, we decided to use a web-based questionnaire as the main data collection technique for the study. The use of the online questionnaire was motivated by two aspects: the content of the research, which assumes internet users, and the type of sample young people with access to technology. The pandemic's emergence was an additional element of convenience for an online survey. To develop the sample, the non-probability method known as 'snowball sampling' was used, starting from University students, association of youth people, student associations and social platform groups. The dissemination plan involved direct collaboration between the universities and organisations involved in the research project. The web survey was also distributed by the participants themselves, who could share the link with peers and personal contacts. The sample surveyed was limited to young people born between 1995 and 2002 who were residents of Italy. The survey was conducted between February 2021 and May 2021. A total of 2365 valid questionnaires were collected.

Table 1 summarises some of the characteristics of the sample. A majority of respondents were women (a nearly 80/20 ratio). The ages 21, 22 and 23 are heavily represented. In terms of educational attainment, most had completed high school (80.6%) and very few had higher education. The sample was well distributed throughout the nation, with the exception of the islands, which are less explored (3.3%).

Age	N	%	Area of residence	N	%	Schooling	N	%
27	155	6.6	North-West Italy	429	18.1	Secondary school	76	3.2
26	150	6.3	North-East Italy	336	14.2	High school	1907	80.7
25	220	9.3	Central Italy	603	25.5	Bachelor's degree	342	14.5
24	250	10.6	South Italy	919	38.9	Master's degree	30	1.3
23	460	19.5	Islands	78	3.3	Master	7	0.3
22	578	24.4		2365	100.0		2362	100.0
21	398	16.8						
20	154	6.5						
	2365	100.0						

**Table 1.** Main characteristics of respondents (% values) N = 2365.

The researchers developed the questionnaire to focus specifically on the cyber-violence issue and its social aspects. The questions were divided into seven thematic areas: socio-personal profile, cyberviolence, use of social networks and risks, victims and social groups, experiences, help, and interventions. In order to ensure that the questions' formulation was understood by respondents as intended by the researchers, and also to assess the quality of the tool, a pre-test was carried out on subjects with similar characteristics to those of the selected unit of analysis. This phase provided important methodological indications regarding improving the definitions of the most relevant concepts explored in the research. The final version of the web survey was uploaded online using Google Forms. It took an average of 15 min to be completed. Descriptive statistics were applied and the data were analysed using the Statistical Package for the Social Sciences (SPSS) for Windows, version 20.0.0 (IBM SPSS Statistics 20, UnitedStates). Based on the data collected, this article analyses some specific issues related to Generation Z and cyberviolence.

## 4. Findings

## 4.1. Digital platforms usage

The questionnaire section titled 'Use of social networks and risks' focused on the different ways respondents said they used social networks. Two main questions were explored using the data collected: What are the most frequently used platforms? What are they used for?

The first set of questions given to the participants, in particular, aimed at investigating the frequency of use of social media. To answer the question How often do you use the following social networks? interviewees could choose between the following options: every day, 2-3 times a week, once a week, once a month, once a year, never/I don't use it. Participants were provided with the following list of social networks to choose from: WhatsApp, Instagram, Ask, LinkedIn, Twitter, Snapchat, Viber, ThisCrush, Skype, YouTube, Facebook, TikTok, Telegram, Microsoft Teams and Zoom. Analysis of recent studies on the relationship between youth and digital platforms (Pew Research Center, 2021; Scolari, 2018) assisted us in deciding which platforms to include in the list. We included instant messaging services, social networking sites and platforms that youth have used for education and communication during the pandemic in the past two years (such as Microsoft Teams and Zoom).

From the data analysis, it emerged that the platforms most used by the respondent group were WhatsApp and Instagram, for which the response 'every day' was clearly prevalent, at 98.9% and 92.1% respectively (Table 2). Conversely, some social networks were found not to be used by the majority of the interviewees; the response 'never/I don't use it' was chosen for: Ask(95.1%), LinkedIn (85.0%), Snapchat (82.6%), Twitter (72.5%), TikTok (54.4%), Viber (96.9%), Skype (64.9%) and This Crush (96.0%). The findings are in line with the reference literature. In fact, if we look at the data published by the We Are Social/Hootsuite Observatory (2022) we can see that our findings are almost in line with theirs. According to the We Are Social/Hootsuite Observatory research, of about 43 million social media users in Italy, the top three platforms used monthly were WhatsApp (90.8%), Facebook (78.6%) and Instagram (71.4%), while the top two platforms participants said they preferred were WhatsApp (39.7%) and Instagram (21.7%). In addition, there were 78.22 million people using mobile phones in Italy.

Data regarding frequency of use revealed further important information when observed in relation to the gender dimension. Certain platforms are more genderoriented/gender-sensitive, therefore, the percentages show a significant variation depending on whether the behaviour of boys or girls is being considered. An example is YouTube, for which the response 'every day' compared to the reference value (39.6%) almost doubled in the case of male respondents (71.7%), highlighting a frequency of daily use that was markedly male oriented. For the Telegram platform, the answer 'every day' showed a relevant variation between the reference value, 14.5%, and the percentage recorded for young males, 29.6%. In reverse reasoning, for the Tikor platform, the 'every day' mode went from a 25.9% reference value to 11.1% for boys and 29.4% for girls, revealing it to be more frequently used by the latter Table 3.

The second set of questions aimed to explore how respondents used platforms and thus to understand the main purposes behind their usage. To the question What purposes are they used for? interviewees could choose from one of the following graded response modes: very much, a lot, quite a lot, a little, not at all. Of the proposed items, 'chatting' proved to be one most favoured by respondents (very much = 57.5%, a lot = 24.4%), followed by 'talking' (very much = 41.6%, a lot = 28.7%) and 'finding information' (very much = 31.8%, a lot = 34.7%) (Table 4). Values discussed showed that these platforms play a relevant communication and socialisation role for this group of young people

<b>Table 2.</b> How often do	you use the following	social networks? (% v	$\alpha$ ralues) N = 2365.
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Social platform	Everyday	2–3 times a week	Once a week	Once a month	Once a year	Never/ I don't use it	Total
WhatsApp	98.9	0.6	0.2	0.1	0.0	0.2	100.0
Instagram	92.1	2.7	0.9	0.7	0.1	3.5	100.0
Facebook	46.6	17.7	7.7	7.0	2.2	18.8	100.0
YouTube	39.6	36.0	15.5	6.2	0.7	2.0	100.0
MicrosoftTeams	32.5	17.0	4.1	4.5	2.0	39.9	100.0
TikTok	25.9	8.9	6.3	3.2	1.3	54.4	100.0
Telegram	14.5	15.2	11.4	9.6	3	46.3	100.0
Zoom	13.6	12.6	10.0	12.2	6.5	45.1	100.0
Twitter	8.1	7.6	4.8	4.2	2.8	72.5	100.0
Snapchat	1.8	1.9	3.2	4.8	5.7	82.6	100.0
LinkedIn	1.5	2.2	4.1	4.5	2.7	85.0	100.0
Skype	1.0	3.0	6.7	11.8	12.6	64.9	100.0
Viber	0.3	0.3	1.3	0.9	0.3	96.9	100.0
ThisCrush	0.3	0.4	1.3	1.0	1.0	96.0	100.0
Ask	0.2	0.1	1.3	1.4	1.9	95.1	100.0

Table 3. How often do you use the following social networks? Response mode (Everyday + Never /I don't use it) by Gender (% values) N = 2365.

			Respon	se mode		
	·	Everyday		Never/I don't use it		
Social platform	Total	Male	Female	Total	Male	Female
WhatsApp	98.9	97.6	99.2	0.2	0.7	0.1
Instagram	92.1	85.1	93.7	3.5	7.3	2.5
Facebook	46.6	47.9	46.3	18.8	20.9	18.3
YouTube	39.6	71.7	32.0	2.0	0.6	2.4
MicrosoftTeams	32.5	30.7	32.9	39.9	42.1	39.5
TikTok	25.9	11.1	29.4	54.4	70.8	50.6
Telegram	14.5	29.6	11.0	46.3	25.3	51.2
Zoom	13.6	13.8	13.5	45.1	38.7	46.6
Twitter	8.1	10.2	7.6	72.5	62.1	74.9
Snapchat	1.8	2.0	1.7	82.6	86.2	81.7
LinkedIn	1.5	2.2	1.4	85.0	78.4	86.5
Skype	1.0	0.9	0.9	64.9	59.6	65.1
Viber	0.3	0.0	0.4	96.9	96.4	96.9
ThisCrush	0.3	0.0	0.3	96.0	95.5	96.2
Ask	0.2	0.0	0.3	95.1	94.9	95.1

from Generation Z. As has already been discussed, the development of online relationships has become the norm for this generation: they use social media to strengthen relationships with friends and peers, but also to interact with people they would never have met in real life. Indeed, other proposed purposes for the use of these platforms, such as publishing posts, watching what others do, following groups/associations, following famous people's pages, meeting new people and buying products, revealed an equal distribution between the different responses modes.

To the contrary, showing off/being seen and not to be alone did not seem to be relevant reasons for using platforms according to the majority of respondents (not at all = 50.1% and 43.6% respectively). Also, for this question set, data in relation to the gender variable were observed in order to analyse other interesting variations. Table 4 shows how the values for the response mode 'very much' and 'a lot' were significantly higher for girls than for boys. This trend confirms the greater relational propensity of girls to use social networks. Considering the specific items, for buying products compared to the reference value of the response mode 'not at all' = 23.4%, the results for the boys' answers were almost double (M = 36.1%) those of the girls (F = 20.5%). In reverse reasoning, for the

Table 4. What purposes are they used for? Only response mode very much/a lot/not at all by Gender (% values) N = 2365.

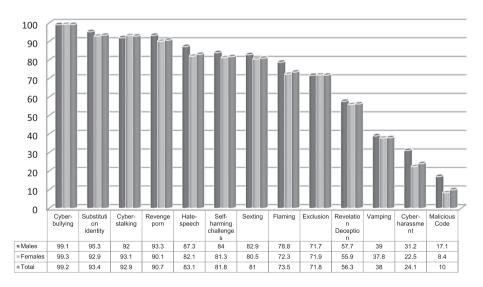
		Very much	1		A lot			Not at all	
Purposes	М	F	Tot.	М	F	Tot.	М	F	Tot.
Talking	35.9	42.9	41.6	26.9	29.1	28.7	3.3	2.7	2.8
Chatting	48.3	59.6	57.5	26.5	23.9	24.4	1.8	1.1	1.3
Publishing posts	10.0	9.9	9.9	9.4	16.4	15.1	13.8	7.0	8.3
Finding info	28.3	32.6	31.8	33.9	34.9	34.7	3.1	1.5	1.8
Watching what others do	10.9	15.0	14.2	17.6	25.4	23.9	10.9	5.0	6.1
Showing off	2.0	1.2	1.4	3.1	3.3	3.3	52.6	49.5	50.1
Meeting new people	6.2	3.7	4.1	9.8	8.4	8.7	23.8	28.2	27.4
Buying products	6.2	7.0	6.9	10.9	16.4	15.4	36.1	20.5	23.4
Following groups	15.1	15.4	15.4	27.4	25.5	25.9	8.2	9.8	9.5
Following famous people	17.8	21.5	20.8	25.2	30.9	29.9	9.8	5.3	6.2
Not to be alone	2.7	3.6	3.4	8.9	9.0	9.0	47.2	42.7	43.6

item *chatting*, observed against the reference value of the response mode 'very much' = 57.5%, the girls' results were higher (F = 59.6%) than those of the boys(M = 48.3%).

# 4.2. Analysis of cyberviolence as an experience related to social media knowledge, use and dangerousness

The frequent use of social media by the young people of Generation Z not only allows them to socialise and have fun, relate to their peers and learn about the world, but also exposes them to negative phenomena such as cyberviolence in its various forms. In our group of young respondents, the percentage of those who stated that they had already heard of cyber violence was very high. The percentage, 96.8%, was identical for boys and girls. This is probably related to the fact that this generation is accustomed to using the Internet and also knows about the risks from personal experience, training courses and media coverage of the topic, including social media coverage.

From Chart 1 we can see that knowledge of cyberviolence was widespread among our young respondents, particularly regarding cyberbullying, identity theft, cyberstalking and revenge porn. The figure was similar for males and females. Some specific forms of cyberviolence, such as vamping, cyber-harassment and malicious code, were less well known. The knowledge of the various phenomena is clearly linked to this generation being 'digital natives', and also to the fact that since secondary school they have had a level of access to training courses/days relating to these phenomena. Frequent exposure to social platforms, especially WhatsApp and Instagram –on a daily basis, for most of them –also creates a strong perception of the danger of the various forms of cyberviolence. For this age group, the most feared form is revenge porn (Chart 2). At this point in their lives, romantic and sexual relationships are common and often characterised by experimentation and consolidation. When asked about this, boys and girls considered revenge porn, cyberbullying and self-harming challenges to be the worst forms of cyberviolence.



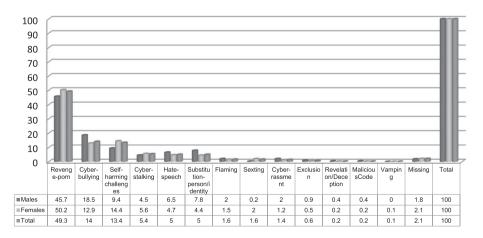
**Chart 1.** Percentage of young people who know about online violence by gender (% values) (only affirmative answers) N = 2365.

We can make some interesting observations by considering the dangers and risk aspects of these forms of online violence. First of all, revenge porn, self-harm challenges, cyberbullying and cyberstalking were considered the most dangerous forms of cyberviolence by young people. Generally, girls tended to perceive these phenomena as more dangerous than their male peers, with some differences Table 5.

# 4.3. Between freedom and risk: what is more dangerous on the platforms?

The attitudes of young people towards the digital platforms they frequent every day brought out their concerns about the possible risks, perhaps unexpectedly. In fact, it seems curious that a feature of social media and digital platforms, such as freedom of speech, which should mean openness and increased possibilities for expression, is easily associated by young people with the possibility of cyberviolence or hate speech. As many as 62.1% of the interviewees believed that freedom of speech could result in one of these two phenomena, while only 15.5% believed that freedom of speech could be connected with cyberviolence or hate speech. One of the reasons for this attitude could indeed be that the topics of online violence and hate are constantly at the centre of public debate and media attention, so much so that they are perceived as being almost 'normal' in the digital context. Both cyberviolence, which we defined earlier, and hate speech one wery close to the experience of the young people interviewed. 'Too much' freedom seems to be perceived as something dangerous that can lead to situations of deviance Table 6.

Let's analyse the responses of the interviewees with reference to the most dangerous features of social networks (Chart 3). We find ourselves faced with a surprising awareness of both males and females about the risks. Again, we do not know if this is determined by the constant media focus on the subject or if it is instead related to the progressive acquisition of an ability to look critically at the platforms. Certainly, strong attention seems to be paid to certain aspects. 74.9% of the respondents thought that the impossibility of blocking content on the net was extremely dangerous. Similarly, when asked how dangerous they considered the violation of privacy to be, 62% responded that they considered it so. Once again, in examining the characteristics that appeared more dangerous to the participants,



**Chart 2.** Type of cyberviolence considered the worst by gender (% values) N = 2365.

Table 5. Perception of dangerousness (only response mode very much) by gender (percentage values) N = 2365.

	Males	Females	Delta
Revenge porn	73.7	80.9	7.2
Self-harmingchallenges	66.1	79.3	13.2
Cyberbullying	44.5	64.6	20.1
Cyberstalking	40.1	62.8	22.7
Hatespeech (onlinehate)	30.7	48.3	17.6
Cyber-harassment	17.4	33.7	16.3
Flaming (denigration)	22.7	41.0	18.3
Substitution of person/identity theft	51.0	51.4	0.4
Revelation and deception	19.6	32.0	12.4
Exclusion	21.4	35.9	14.5
Maliciouscode	14.5	24.4	9.9
Sexting	20.3	40.1	19.8
Vamping (nocturnal social use)	11.8	20.8	9.0

Table 6. What makes social media extremely dangerous? Only response mode extremely dangerous (% values) N = 2365.

	Extremely dangerous
Impossibility of blocking content	74.9
Privacy violation	62.0
Identity theft	60.9
Contents' virality	57.3
Receiving insults and teasing	46.9
Fake profile	45.6
Anonymity	44.1
Ineffective alerts	42.6
Lack of competence in use	37.6
Lack of knowledge of privacy rules	36.6
Other	16.6

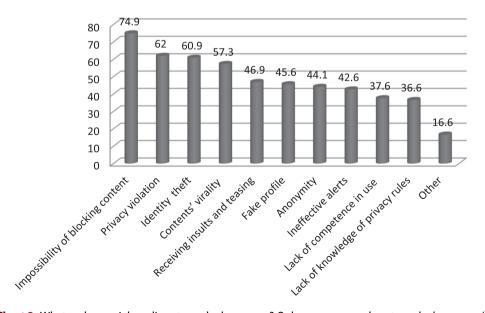


Chart 3. What makes social media extremely dangerous? Only response mode extremely dangerous (% values) N = 2365.

both the boys and the girls seemed to fear identity theft (60.9%) or being insulted or teased (46.3%), while they appeared much less aware of the dimension related to knowledge and skills. In fact, only 37.6% seemed to be aware of how to approach media to use critically and consciously. The percentage of those who did not consider this particularly dangerous was slightly higher in the Mezzogiorno area (southern Italy): 40%, compared to percentages ranging from 29.5% to 35.7% in the rest of the country. With regard to the gender variable, girls seemed to be a little more sensitive to this aspect than boys (34.5% vs 28.7%). Even the fact that a lack of knowledge about privacy rules is not considered hazardous points to a lack of civic awareness of media use. Thus, two conflicting attitudes emerged: on the one hand, young people seemed to underestimate the importance of being able to critically analyse media, but on the other hand, they were very keen to safeguard their privacy and personal data. The issue of adolescents' privacy management on social media and how they individually control information is a hot and current topic on which, even recently, research has been conducted (De Wolf, 2020).

# 5. Limitations, future research and conclusions: towards complex digital skills

This paper described the characteristics of Generation Z, highlighting the salient aspects of that generation and the link with the uncertain and risky reality they live in, which the most recent sociological literature has well underlined. Generation Z moves between ease of access to the digital world and the existential fragility linked to the risks associated with identity construction. It is also a generation that, precisely because of its propensity to use digital technologies, has often experienced online violence (cyberbullying is one of the most obvious examples). This seems to grow with the development of digital technologies, alongside traditional forms of violence (Hellsten et al., 2021; Patton et al., 2014). The article also provided a definition of cyberviolence, taken from literature. Developing this definition has also involved several problems, as the concept of cyberviolence has often been intertwined with that of gender-based violence. In the case of this research, however, the concept embraces different forms of violence that take place in digital environments, ranging from cyberbullying to revenge porn to very different forms of violence, such as hate speech. The survey results revealed some interesting findings regarding the three research questions; they provide further food for thought. To this end, we briefly analyse the answers to the three questions.

RQ1) What are the main platforms used by Generation Z on which cyberviolence can occur? The data relating to Generation Z's media consumption style confirm a frequent use of digital platforms, which are now an integral part of the hybrid flow, online/ offline life of young people. The percentages showed a high level of use of WhatsApp and Instagram. Facebook (although it has been abandoned by younger people in favour of other social media) continues to be a popular platform, while YouTube is also well patronised by teens.

RQ2) What is the level of knowledge and awareness that Generation Z has about the different forms of cyberviolence and their dangerousness? Regarding the knowledge of the different forms of cyberviolence, the respondents (both males and females) showed a high level of knowledge about the different forms of cyberviolence. Girls, in particular, revealed a higher degree of concern about the different manifestations of cyberviolence.

RQ3) What features of social media are perceived as most dangerous by the respondents? Respondents showed a certain fear about the 'open' nature of digital platforms. In fact, they believed that the freedom of expression granted by social networks can easily lead to cyberviolence and hate speech. Moreover, young people considered some aspects of social media particularly dangerous, especially those related to the protection of personal data.

If we try to analyse the findings drawn from consideration of the three research questions 'within a broader framework, we can make some critical observations. Research results concerning perceptions about cyberviolence by Generation Z show, at least on the surface, a good level of consciousness in young people about the phenomenon and also an awareness of the problematic and dangerous aspects of digital platforms. However, we might think that knowledge of cyberviolence or the perception of social media's 'problematic' characteristics may simply result from the constant media coverage about these issues. In other words, the media confers an awareness about certain issues without necessarily translating into young people developing deep knowledge about the more knowing how to find a solution to them. It is sufficient to reflect on how these topics are sometimes treated in the information arena, and to understand that the media almost always leverages sensationalism and that it itself may be primarily responsible for incidences of violence. Suppose we try to put ourselves in the shoes of parents and teachers, who are involved in dealing with these phenomena every day. In that case, we might think that cyberviolence is only superficially 'known' to young people. Also, because it is 'digital' violence, it risks being perceived by young people as something distant, invisible and not especially real - something that is found only in videogames or TV series.

Furthermore, a limitation of this study is its exclusively quantitative methodology. In future research, the quantitative structure of the research could certainly be integrated with qualitative aspects, by asking the sample involved in the research, perhaps through in-depth interviews, to explain the characteristics of the phenomenon investigated and their personal perceptions about it. In this regard, future research could pay even more attention to gender issues by investigating, with ad hoc questions, the different ways of thematising cyberviolence by males, females or non-binary subjects in order to compare their attitudes. In light of these results, we believe it is necessary to reflect on the role of education and, more specifically, of media and digital education, whose strategic importance is often not recognised, especially in the Italian context. The report edited by the VAWG Helpdesk (Faith & Fraser, 2018) shows that there is limited data on cyberviolence, specifically on what works to prevent it. It is therefore difficult to determine how effective, for example, increased involvement in social networks, participation in awareness campaigns such as #metoo, the creation of apps or other devices, or the provision of online information and support can be. On the other hand, Nagle's work (2018) proposes enhancing teachers' critical awareness in using social media (specifically Twitter) to prevent a phenomenon such as cyberviolence.

Thus, to limit the phenomenon of cyberviolence, but especially to educate about the critical and conscious use of media content, it might be appropriate to promote digital literacy and, in particular, social media literacy (Tirocchi, 2013). The latter applies particularly to the younger generation, but even before that, adults play the important role of educators. Promoting digital literacy means reflecting critically on important aspects of the media and opportunities to recognise and interpret the different types of content that the complex media ecosystem offers and to know how to evaluate and insert them into

appropriate interpretative frameworks. Knowing the media's risks and opportunities also means acquiring stronger digital citizenship each day, which involves continuously adapting to contemporary changes. Young people belonging to Generation Z have encountered the phenomenon of cyberviolence during their adolescence. Schools and the media have promoted, at various times, interesting and important initiatives for prevention, but evidently, the messages they conveyed were not powerful enough to build a collective and critical awareness of these phenomena. The challenge for Generation Z is therefore to acquire so-called digital skills, now essential for managing media content, but especially for dealing with the complexity of the world we live in today. This strategy is shown to be necessary precisely to counter young people's own affirmations that they do not consider a lack of competence regarding the media to be dangerous. The skills themselves are increasingly complex and multifaceted. They refer to the paradigm of transmediality (Scolari, 2018), but they are certainly inextricably intertwined with ethical and relational aspects. It is, therefore, necessary to work on the capabilities and skills of young people and their awareness so as to limit the impact of the negative aspects of digital technologies and make digital platforms become, for all intents and purposes, positive places of growth and good relations.

#### **Notes**

- 1. They are also called: Gen Z, iGen, Post-Millennial, Centennial, Zoomer Plural. This term, according to the Pew Research Center (Dimock, 2019), can be defined as those young people born between 1997 and 2012, with an extension of meaning still open to later years, given the fluidity of these categories. Istat (2016) in Italy, on the other hand, suggests a broader vision of the term, which is closer to the Italian context, in which all those born between 1995 and 2015 are included.
- 2. Web 2.0 is described by Tim O'Reilly (2009) who mentions the main characteristics that differentiate it from Web 1.0. These features have been summarised by o'Reilly with reference to three dimensions: 1) the web model, considered as a platform 2) the role of the user, who is able to control and manage content, becoming more and more author through the use of social networks, blogs, wiki 3) skills related, among others, to services, the architecture of participation, scalability, remixability of data sources, the concept of collective intelligence.
- 3. Some research highlights the ability of social media to build identities and develop numerous skills, related not only to the production of content, but also to the individual and social management of emotions, identity and relationships (Scolari, 2018).
- 4. Rainie and Wellman (2012) examine the 'triple revolution' that has contributed to a very profound social transformation: 1) the rise of social networking; 2) the capacity of the Internet to empower individuals; 3) the always-on connectivity of mobile devices.
- 5. In 2021 born Meta Platforms, Inc., an American multinational technology conglomerate that owns Facebook, Instagram, and WhatsApp, among other products and services.
- 6. By applying the definition of Davis and Chouinard (2016), affordances are about how the platforms shapes the ways they can be used or not used.
- 7. 'EU Kids Online' is a thematic network funded by the EC Safer Internet plus Programme (http://ec.europa.eu/information society/activities/sip/index en.htm) from 2006 to 2009. It has examined research findings from 21 member states into how children and young people use the internet and new online technologies. The aim was to identify comparable findings across Europe and evaluate the social, cultural and regulatory influences affecting online opportunities and risks, along with children's and parents' responses, in order to inform policy (adapted from: www.eukidsonline.net).

8. Content risks refers to a child exposed to unwelcome and inappropriate content. This label includes sexual, pornographic and violent images; some forms of advertising; racist, discriminatory or hate speech material; and websites advocating unhealthy or dangerous behaviours, such as self harm, suicide and anorexia.

Contact risks refers to a child that participates in risky communication, such as with an adult seeking inappropriate contact or soliciting a child for sexual purposes, or with individuals attempting to radicalise a child or persuade him or her to take part in unhealthy or dangerous behaviours.

Conduct risks: refers to a child behaves in a way that contributes to risky content or contact. This label comprises children writing or creating hateful materials about other children, inciting racism or posting or distributing sexual images, including material they have produced themselves. (UNICEF, 2017; as cited in Livingstone & Stoilova, 2021).

- 9. The CO:RE project is a Coordination and Support Action within the Horizon 2020 framework, which aims to build an international knowledge base on the impact of technological transformations on children and youth (Livingstone & Stoilova, 2021).
- 10. Hate speech is defined by the Cambridge Dictionary as 'public speech that expresses hate or encourages violence towards a person or group based on something such as race, religion, sex, or sexual orientation'.

#### Disclosure statement

Authors conceived of the idea, collected the literature, the references, and the data, and wrote the paper together. In particular, Simona Tirocchi and Isabella Crespi are responsible of the paragraphs 2; Marta Scocco is responsible of the paragraphs 3. The introduction, part 4 and conclusions were written together.

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