

How Can Cyberhate Victimization and Perpetration Be Understood? Towards a Psychological Approach

Modern societies live in the digital age, with access to and use of information and communication technologies (ICT) ubiquitously integrated into their quotidian experiences. Early in 2023, there were 5.44 billion mobile phone or smartphone users worldwide, 5.16 billion Internet users, and 4.76 billion social media users, which is equivalent to 68%, 64.4%, and 59.4% of the world's total population, respectively (Kemp, 2023).

The adolescent generation has often stood out in these statistics (Gen Z, born 1997–2009; Dimock, 2019). In the United States of America, the most recent survey of the Pew Research Center on the Internet and Technology documented that nearly all adolescents had access to smartphones (95%), desktop or laptop computers (90%), and gaming consoles (80%). YouTube (95%), TikTok (67%), Instagram (62%), and Snapchat (59%) dominated their social media landscape, with 97% of them accessing the Internet daily and 46% almost constantly (Vogels et al., 2022; *N* = 1316, 13-17 years old). The cross-cultural report conducted by the EU Kids Online Network identified similar digital patterns among 25,101 adolescents aged 9 to 16 years old from nineteen European countries (Smahel et al., 2020). Specifically, in Portugal, most households with adolescents up to 15 years of age had Internet access at home (99.2%), and 97% surfed via mobile broadband (Instituto Nacional de Estatística [Statistical National Institute], 2022; *N* = 6594 households, with at least one person aged 16 to 74 years old). Fully 87% of adolescents logged on via smartphones, 41% via desktop or laptop computers, and 25% via tablets (Ponte & Batista, 2019; *N* = 1974, 9-16 years old). Their top online activities included consulting or sharing content on TikTok (43.1%), exchanging messages on WhatsApp (38.8%), consulting or sharing content on Instagram (37.1%), watching series (37%), playing online games (36.4%), and watching

videos on YouTube (32.7%), accounting for two or more hours on a typical weekday (Gaspar et al., 2022; $N = 5809$, 11-15 years old).

Adults' generations have also embraced these digital tools and habits (Millennials, born 1981–1996; Gen Xers, born 1965–1980; Baby Boomers, born 1946–1964; Silent Generation, born 1945 and earlier; Dimock, 2019; Vogels, 2019). In the United States of America, a Pew Research Center survey on the Internet and Technology revealed that smartphone ownership (85%) and home broadband subscriptions (77%) were increasingly common (Perrin, 2021; $N = 1502$, 18-65 years old or older). More than eight-in-ten adults were online at least daily (85%), and about three-in-ten were online almost constantly (31%; Perrin & Atske, 2021; $N = 1502$, 18-65 years old or older). A majority used YouTube (81%) and Facebook (69%), with Instagram, Snapchat, and TikTok being more popular among those under 30 years old (Auxier & Anderson, 2021; $N = 1502$, 18-65 years old or older). The annual statistics on ICT access and use by individuals and households throughout the member states of the European Union revealed consistent trends (Eurostat, 2022). Specifically, in Portugal, 88.2% of households had an Internet connection at home, and 84.6% had a broadband connection. The most common Internet activities among adults were exchanging instant messages (91.8%, e.g., WhatsApp, Messenger), sending or receiving emails (87.9%), searching for information about goods or services (86.1%), reading online news (81.8%), making calls (81.5%, e.g., video calls), participating in social network sites (79%), listening to music (69.5%), and banking services (68.0%; Instituto Nacional de Estatística [Statistical National Institute], 2022; $N = 6594$ households, with at least one person aged 16 to 74 years old).

This level of network immersion allows people to easily exchange their opinions, ideas, and information, but it has also led to information disorder and its associated perils. Overall, the conceptual framework of information disorder considers three elements: a) the

agent, which is the person, group, or organization that creates, (re)produces, and distributes the message, as well as their motivations, intention to mislead and/or harm, and audience; b) the message, which is information, and its formats, characteristics, and duration; and c) the interpreter, which is the reader, and how they interpret the message (Wardle & Derakhshan, 2017; Wardle, 2018). Three stages can also lead to information disorder: a) creation, when the message is produced; b) (re)production, when the message is turned into a media product; and c) distribution, when the media product is made available to the public (Wardle & Derakhshan, 2017; Wardle, 2018). Based on the falseness and harm dimensions, information disorder can be distinguished into three types: a) misinformation, which is information that is false but not intended to cause harm (e.g., false connection¹, misleading content²); b) disinformation, which is information that is false and intended to cause harm (e.g., false context³, imposter content⁴, manipulated content⁵, and fabricated content⁶); and c) malinformation, which is truthful information that is intended to cause harm (e.g., some forms of leaks, harassment, and cyberhate; see the full theoretical model in Wardle & Derakhshan, 2017; Wardle, 2018).

This conceptual chapter aims to contribute to a comprehensive and integrated analysis of cyberhate among adolescents and adults. It is structured into three main sections. The first operationalizes the key conceptual characteristics, disentangles the theoretical similarities and differences between cyberhate and other forms of violence, and presents the known prevalence of victimization and perpetration among adolescents and adults. The second

¹ Headlines, images, and captions that do not correspond to the article's content. Clickbait headlines can be the most common examples (Wardle & Derakhshan, 2017; Wardle, 2018).

² Information that is used to paint a false picture of a person or an issue. This can happen when a story is retold, a quote or statistic is cut up, or an image is cropped to support a broader point of view and get rid of essential arguments (Wardle & Derakhshan, 2017; Wardle, 2018).

³ True information that is distributed with false contextual information (Wardle & Derakhshan, 2017; Wardle, 2018).

⁴ Impersonation of true sources, such as well-known figures, journalists, or logos (Wardle & Derakhshan, 2017; Wardle, 2018).

⁵ True information that is manipulated to cause deception (Wardle & Derakhshan, 2017; Wardle, 2018).

⁶ False information intended to deceive and cause harm (Wardle & Derakhshan, 2017; Wardle, 2018).

identifies the main sociodemographic correlates and discriminates the risk and protective factors with theoretical frameworks and the unique effects of ICT. The chapter concludes with recommendations for prevention and intervention strategies that demand a multi-stakeholder approach.

Cyberhate: (In)definition and Prevalence of Victimization and Perpetration

Cyberhate (otherwise known as “online hate”, “online hate speech”, or “online extremism”; Bauman et al., 2021; Bernatzky et al., 2022; Costello & Hawdon, 2018) lies in a complex nexus of misused, unmediated, and unregulated freedom of speech (Bauman et al., 2021; Castaño-Pulgarín et al., 2021; Chetty & Alathur, 2018). The debate about its universal conceptualization is still ongoing (Bauman et al., 2021; Windisch et al., 2022). Meanwhile, cyberhate has been defined as all forms of ICT-mediated expression that incite, justify, or propagate hatred or violence against individuals or groups based on their gender, race, ethnicity, religion, sexual orientation, or other collective characteristics (Anti-Defamation League, 2016; Bauman et al., 2021; Bernatzky et al., 2022; Blaya & Audrin, 2019; Bliuc et al., 2018; Castaño-Pulgarín et al., 2021; Chetty & Alathur, 2018; Council of Europe, 2016; Costello et al., 2019; Wachs et al., 2021a; Wachs et al., 2021b). Considering the complexity of this phenomenon, each of its conceptual components will be examined in further depth in the following paragraphs.

Firstly, the authors of cyberhate may be individuals or members of organized hate movements. The Internet has facilitated an easier and more affordable process for any ordinary individual to create, (re)produce, and disseminate hateful content, as well as engage in communication with hate groups without the need for a formal affiliation (Blaya & Audrin, 2019; Blaya et al., 2020; Bernatzky et al., 2022; Costello & Hawdon, 2018; Southern Poverty Law Center, 2020, 2021). At the same time, organized hate groups swiftly recognized the Internet as a valuable tool for their activities. It provided them with the means to operate

anonymously, disseminate and popularize their hateful and radicalized ideologies, indoctrinate and recruit new sympathizers, reinforce transnational identities, acquire funding, and coordinate acts of hate-based violence (Bauman et al., Wachs, 2021; Blaya & Audrin, 2019; Costello & Hawdon, 2018; Hawdon et al., 2014). Although some of them have been banned and have resurfaced on encrypted platforms (Southern Poverty Law Center, 2020, 2021), the most recent report from the Southern Poverty Law Center listed 733 active hate groups in the United States of America, including General Hate ($n = 65$), White Nationalist ($n = 98$), Anti-LGBTQ ($n = 65$), Antisemitism ($n = 61$), Neo-Nazi ($n = 54$), Anti-Muslim ($n = 50$), Neo-Völkisch ($n = 32$), Ku Klux Kan ($n = 18$), Anti-Immigrant ($n = 18$), Racist Skinhead ($n = 17$), Neo-Confederate ($n = 16$), and Christian Identity ($n = 9$; Southern Poverty Law Center, 2021).

Secondly, the intended targets of cyberhate reflect historical, social, and cultural movements, along with their status within different societies. Cyberhate is most commonly manifested as the expression of prejudices, stereotypes, and/or extrapolations based on the characteristics of minority, oppressed, and marginalized individuals or groups (Bauman et al., 2021). These characteristics can be alleged or identified, assigned or selected, and include, but are not limited to: gender (e.g., sexism, misogyny, transphobia), race or ethnic background (e.g., racism, regionalism, nativism, xenophobia), religion (e.g., anti-Christianity, anti-Islamism, anti-Muslim, anti-Hinduism), sexual orientation (e.g., homophobia), immigrant status, and political affiliation (Bauman et al., 2021; Bedrosova et al., 2022; Blaya & Audrin, 2019; Blaya et al., 2020; Bliuc et al., 2018; Castaño-Pulgarín et al., 2021; Chetty & Alathur, 2018; Fortuna & Nunes, 2018; Hawdon et al., 2014).

Thirdly, cyberhate can manifest itself in both subtle expressions (e.g., humor, irony, sarcasm, and generalizations), and overt incitements to hatred (e.g., hostile, resentful, or angry tone); various forms of hate can be observed, including text, memes, stickers, images, videos,

and/or graphic representations, all of which can appear in both the main content and comment sections of online platforms; it can be encountered on video sharing sites (e.g., YouTube), social networking sites (e.g., Instagram, Facebook, Twitter, Tumblr), personal blogs, public forums, newspaper message boards, interactive online games, and even on the deep or dark web (e.g., 4chan, 8chan, EndChan; Bauman et al., 2021; Blaya & Audrin, 2019; Costello & Hawdon, 2018; Fortuna & Nunes, 2018; Hawdon et al., 2014; Reichelmann et al., 2021; Rieger et al., 2021). The selection of these online channels appears to vary. For instance, Bliuc and colleagues (2018) conducted a comprehensive systematic review spanning ten years of research on cyber-racism. They revealed that individual cyber-racism is communicated through diverse channels, including forums, chat rooms, social networking sites, blogs, and YouTube videos. In contrast, group-based cyber-racism appears to be predominantly confined to websites associated with specific groups. Furthermore, political fringe communities such as Reddit, 4chan, and 8chan have repeatedly been linked to right-wing extremist terrorists (Rieger et al., 2021).

Subsequently, although cyberhate may consist of a single act without explicitly highlighting its repetitive nature, Windisch and colleagues (2022) argued that comprehending it necessitates the recognition of a continuum of processes encompassing both victimization and perpetration, thereby establishing connections across varying degrees of severity. Building upon an adapted version of Allport's scale of prejudice (1954), the manifestation of cyberhate may begin with anti-locution (or cyberhate, which involves expressing prejudice against friends or strangers) and subsequently progress through avoidance (the act of avoiding individuals or members of certain social groups), discrimination (the act of distinguishing and excluding them based on prejudice), physical attacks (the act of physically assaulting them), and finally culminate in eradication (the act of eradicating them; Windisch et al., 2022). With that in mind, there are some examples of how online extremist narratives spilled over into

hate-fueled real-life acts of violence, such as the mass shootings that took place at the Walmart store in El Paso (Texas, United States of America), at the synagogue in Poway (California, United States of America), and at the mosques in Christchurch (New Zealand, Australia; Castaño-Pulgarín et al., 2021; Rieger et al., 2021; Windisch et al., 2022).

Additional related insights are put forth by Chetty and Alathur (2018). As per their propositions, cyberhate can unfold in distinct stages following trigger incidents: a) influence stage (immediately after the incident, there will be a heavy flow on social networking sites); b) intervention stage (after a few days, it will decrease); c) response stage (after a few more days, it will subside to nil); and d) rebirth stage (after a considerable time, there is a possibility of it resurfacing; Chetty & Alathur, 2018).

Still, the harmfulness experienced by individuals as victims of or witnesses to cyberhate depends on the specific persons and circumstances involved (Chetty & Alathur, 2018). For example, in a study involving 2,592 individuals aged 18-25 years old from the United States of America, the United Kingdom, Finland, Poland, France, and Spain, it was observed that 70.7% of respondents had been exposed to hateful or degrading writings or speech online that attacked individuals or groups of people in the preceding three months (Reichelmann et al., 2021). Subsequently, after such exposition, a significant majority of respondents reported experiencing emotions of anger (65%), sadness (64.8%), and shame (51.0%), with a substantial proportion also indicating feelings of guilt (22.6%) and pride (17%; Reichelmann et al., 2021). Through an exploration of the impact of LGBTQ+ cyberhate on 175 individuals aged 13-25 years old, predominantly from the United Kingdom, one study documented adverse effects on their well-being and social interactions. These effects included experiences of sadness and depression, shame and self-blame, feelings of inferiority and invalid identities, fear and a sense of lack of safety, as well as instances of isolation and withdrawal from online and offline spaces (Keighley, 2022). However,

cyberhate carries the potential to cause serious repercussions not only for individuals but also for communities. In addition to subjecting the targets of cyberhate to humiliation, degradation, stigmatization, and dehumanization, these acts also present a threat to human rights, fundamental freedoms, democratic outcomes, and social cohesion (Bauman et al., 2021; Bliuc et al., 2018; Blaya & Audrin, 2019; Blaya et al., 2020; Chetty & Alathur, 2018).

Examining the similarities and differences between cyberhate and other forms of violence can offer valuable insights into the intricacies of this phenomenon. Among these concepts are cyber-aggression, cyber-harassment, cyber dating abuse, and cyberbullying. Additionally, there are broader constructs such as extremism, hate crimes, terrorism, and cyber-terrorism that also warrant consideration.

Cyber-aggression (also known as cyberviolence) is an umbrella term that encompasses a wide range of ICT-mediated interpersonal aggressive behaviors, including subsets such as cyberhate, cyber-harassment, cyber dating abuse, and cyberbullying (Bedrosova et al., 2022; Vale et al., 2018).

Cyber-harassment has been conceptualized as any kind of repeated, intentional, and unwanted ICT-mediated interpersonal aggression that entails dominance, coercion, and emotional harm. This includes behaviours labeled as cyber sexual harassment (e.g., pressuring someone to send erotic or pornographic messages or to share nude images, as well as engaging in phone sex), cyber obsessional relational intrusion⁷ (e.g., sending exaggerated messages of affection), cyberstalking (e.g., initially meeting online and then improperly approaching, intimidating, or pursuing the victim physically), and cyberbullying (e.g., sending insulting, humiliating, or threatening messages; Pereira & Matos, 2015; Pereira & Matos, 2016; Pereira et al., 2016; Vale et al., 2022).

⁷ Both cyber obsessional relational intrusion and cyberstalking reflect a continuum process of unwanted harassment. However, while the former entails achieving a heightened level of intimacy, typically in a romantic context, the latter involves persist harassment leading to feelings of threat or fear (Spitzberg & Cupach, 2014; Spitzberg & Hoobler, 2002).

Cyber dating abuse refers to a pattern of repeated, intentional, and unwanted abusive behaviours that a current and/or former partner exerts over the other through ICT: threats (e.g., intimidating to emotionally and/or physically harm the current and/or former partner, their families, or their friends); humiliation (e.g., starting a social networking page for posting negative information about the current and/or former partner); monitoring or control (e.g., making the current and/or former partner disclose digital conversation(s) they've had with another person(s); and sexual coercion (e.g., sharing a nude photo or video of the current and/or former partner without their permission; Brown & Hegarty, 2021; Brown et al., 2021; Vale et al., 2020; Vale et al., 2021).

Researchers have also highlighted the urgent need to distinguish between cyberbullying and cyberhate. Despite both using similar online channels, sharing the intention to inflict harm upon specific individuals or groups, and occasionally overlapping in their manifestations, they are not identical in all theoretical components (Blaya et al., 2020; Bedrosova et al., 2022). Cyberbullying is characterized as recurring behavior that takes place over an extended period with a focus on targeting individuals rather than communities (i.e., individual focus; typically involves peers within the same school environment or extracurricular activities). It involves an asymmetric power imbalance between the victim and the perpetrator (e.g., which may stem from physical strength, psychological confidence, or technological expertise). The motivation behind cyberbullying can be diverse, including internal and external factors (e.g., seeking entertainment, dealing with boredom, feelings of jealousy, seeking revenge, desiring acceptance; Aboujaoude et al., 2015; Blaya et al., 2020; Hinduja & Patchin, 2011; Smith et al., 2008; Smith, 2012; Vale et al., 2020; Varjas et al., 2010). On the other hand, cyberhate does not have to be repetitive and long-lasting, tends to target communities rather than individuals (collective focus; (un)known individuals, selected based on identified or assumed group characteristics), is driven by the perpetrator's prejudices

and stereotypical ideas, and aims to stigmatize and dehumanize the identity and the community to which the victim belongs (Bedrosova et al., 2022; Blaya et al., 2020). An examination of the structural relationship between these two types of violence revealed that cyberbullying and cyberhate share some common factors, such as higher age, time spent online, exposure to harmful online content, and emotional symptoms. However, they are also different from each other and, to some degree, related by different correlates. Specifically, individual-based discrimination (e.g., height, weight, appearance, behaviour, opinions, or beliefs) was associated with cyberbullying but did not predict cyberhate involvement, while group-based/community-based discrimination (e.g., family background, skin colour, religion) predicted cyberhate and, to a lesser extent, cyberbullying (Bedrosova et al., 2022; N = 3,855, aged 11–17 years old, from the Czech Republic, Poland, and Slovakia).

Briefly, extremism refers to racial, religious, political, social, and/or other ideologies that deviate from accepted societal norms and are often linked to hate organizations and extremist movements (Chetty & Alathur, 2018; Fortuna & Nunes, 2018). Hate crimes are crimes against a person, group, or property with an added element of bias. These offenses may include threats, arson, vandalism, assault, and homicide (Chetty & Alathur, 2018). According to the Federal Bureau of Investigation's Uniform Crime Reporting Program's annual report, there were 8,763 bias-motivated offenses and 7,314 reported hate crimes in the United States of America (FBI, 2021). Under the Portuguese legal framework, cyberhate is criminally punishable⁸, but it is only considered a hate crime when it takes this form of

⁸ Lei n.º 94/2017, de 23 de agosto [Law no. 94/2017, of 23 August]: “Discrimination and incitement to hatred and violence. 1 - Whoever: a) Founds or constitutes an organization or develops organized propaganda activities that incite discrimination, hate, or violence against a person or group of persons because of their race, color, ethnic, or national origin, ancestry, religion, sex, sexual orientation, gender identity, or physical or mental disability, or encourages it; or b) Participates in or provides assistance to the organization or activities referred to in the previous paragraph, including their financing, is punishable by one to eight years in prison. 2 - Whoever, publicly, by any means intended for dissemination, namely through apologia, denials, or gross trivialization of crimes of genocide, war, or against peace and humanity: a) Provoke acts of violence against a person or group of persons because of their race, color, ethnic or national origin, ancestry, religion, sex, sexual orientation, gender identity, or physical or mental disability; b) Defaming or insulting a person or group of people because of their race, color, ethnic or national origin, ancestry, religion, sex, sexual orientation, gender identity, or physical or

conduct, being a criminal offense with an aggravating circumstance (Lei n.º 94/2017, de 23 de agosto [Law no. 94/2017, of 23 August]). Still, terrorism can be characterized as the intimidation or coercion of the civilian population through life-threatening acts or the commitment of real-life acts of violence that have the potential to cause mass destruction, homicide, abduction, or other serious crimes (Chetty & Alathur, 2018). When those acts of terrorism are facilitated through ICT, they become known as cyber-terrorism. Similar to extremist movements, cyberhate and the process of radicalization can be prevalent elements in (cyber)terrorist activities (Chetty & Alathur, 2018).

Regardless of the operational definition of cyberhate, different roles can be played, such as those of bystanders (i.e., those who see or hear cyberhate), victims (i.e., those who are and/or feel targeted by cyberhate), and/or perpetrators (i.e., those who create, (re)produce, and disseminate cyberhate; Bedrosova et al., 2022; Hawdon et al., 2014; Machakova et al., 2020; Reichelmann et al., 2021; Wachs & Wright, 2018; Wachs et al., 2019). Exposure to cyberhate seems inevitable, with existing research suggesting that being a bystander is the most prevalent form of experiencing cyberhate (Bedrosova et al., 2022; Blaya & Audrin, 2019; Hawdon et al., 2015; Machakova et al., 2020; Wachs & Wright, 2018; Wachs et al., 2019). While not all instances of exposure to cyberhate result in becoming a victim or perpetrator, the evidence suggests that these rates are also alarming. The following are some research-survey studies from different American, Asian, and European countries that illustrate these issues.

Studies with samples of adolescents found that of 9,459 adolescents aged 11-17 years old from the Czech Republic, Finland, Flanders, France, Italy, Lithuania, Norway, Poland,

mental disability; c) Threatening a person or a group of persons because of race, color, ethnic or national origin, ancestry, religion, sex, sexual orientation, gender identity, or physical or mental disability; or d) Inciting violence or hatred against any person or group of persons because of their race, color, ethnic or national origin, ancestry, religion, sex, sexual orientation, gender identity, or physical or mental disability, is punishable by imprisonment from 6 months to 5 years”.

Romania, and Slovakia, the percentage who had received hateful and degrading messages or comments online against them or their community in the last 12 months varied from 3% (Italy) to 13% (Poland). In all countries, less than 2% of adolescents reported experiencing victimization on a daily or weekly basis (Machakova et al., 2020); and, of 6,829 adolescents aged 12-18 years old from the United States of America, South Korea, Thailand, India, Cyprus, Greece, Germany, and Spain, 14.2% reported posting hateful or degrading writing or speech online, which inappropriately attacked individuals or certain groups based on their sex, race, sexual orientation, and religious affiliation, at least once within the last 12 months. Prevalence rates of cyberhate perpetrators varied from 4.2% among South Korean adolescents to 32.2% among Thai adolescents (Wachs et al., 2019).

Studies with samples of adults found that of 10,093 adults aged 18-65 years old or older from the United States of America, 20% reported being harassed online due to their political views, 14% due to their gender, 12% due to their race or ethnicity background, 8% due to their religion, and 7% due to their sexual orientation (Vogels, 2021); and of 4,878 adults aged 18-26 years old from the United States of America, the United Kingdom, Finland, Poland, France, and Spain, the percentage who reported experiencing at least one attack online based on their characteristics (e.g., gender, ethnicity, religion, political views) in the preceding three months varied from 43.33% (Finland) to 72.95% (United States of America), and the percentage of adults who reported producing hateful or degrading writings or speech online that attacked specific individuals or groups varied from 8.78% (Poland) to 19.29% (United States of America; Celuch et al., 2022).

Portugal is still in an embryonic stage regarding the conduct of this kind of studies focused on cyberhate victimization and perpetration. However, the latest annual reports have documented alarming figures. Out of 27,887 crimes and other reported situations, 210 were related to discrimination and incitement to hate and violence. Moreover, 190 out of 810

reports of illegal content available on the Internet were related to cyberhate (Associação Portuguesa de Apoio à Vítima [Portuguese Association for Victim Support], 2022a, 2022b). Additionally, 60 of the 418 reported situations of alleged discrimination occurred on social networking websites or the Internet. Most of these incidents did not target specific individuals but rather communities or social groups, such as Brazilian nationality, Roma ethnicity, and Black skin color (Comissão para a Igualdade contra a Discriminação Racial [Portuguese Commission for Equality Against Racial Discrimination], 2021).

The variability in the estimation of prevalence rates of cyberhate is often attributed to conceptual and methodological differences among various studies. These differences can include the definition of cyberhate (using a broad definition or focusing on specific behaviours targeting some minorities, oppressed, and marginalized individuals or groups), measures of cyberhate (employing specific items developed for this purpose or adapting items from other scales), time frames of experiences (e.g., the last three months, the last year, lifetime), response options (e.g., categorical, continuous), perspectives considered (victimization and/or perpetration), as well as the characteristics of the samples (e.g., gender identity, age, race, and ethnic background; Bauman et al., 2021). Additionally, cultural and legal differences can also contribute to this variability in the prevalence of cyberhate. For example, in the United States of America, the First Amendment ensures the protection of freedom of speech, which can influence tolerance for certain forms of expression. On the other hand, member states of the European Union have been taking specific measures to regulate and combat cyberhate (e.g., the EU Hate Speech Code of Conduct; Project Hate No More: training and awareness raising to combat crime and hate speech; and, the Lisbon Declaration: Digital Democracy with a Purpose, an initiative recently developed by the Portuguese Presidency of the Council of the European Union).

Cyberhate: Sociodemographic Correlates and Theoretical Frameworks

The literature on the sociodemographic characterization of those involved in cyberhate shows unclear or inconsistent findings. Some studies suggest that gender may not be a significant predictor of involvement in cyberhate (e.g., Görzig et al., 2023; Wachs et al., 2020; Wachs et al., 2021). On the other hand, other studies indicated that females were more often victims, while males tended to be perpetrators of cyberhate (e.g., Blaya & Audrin, 2019; Costello & Hawdon, 2018; Wachs & Wright, 2018; Wachs et al., 2019). These findings align with the insights of Celuch and colleagues (2022), where females were less likely to report accepting cyberhate in half of their samples in Finland, Poland, and the United States of America. These results also resonate with the dominant male-oriented and patriarchal social structure, where males have a greater tendency to engage in other cyber criminal behaviors (Pereira et al., 2016; Vale et al., 2018). Regarding age, some studies have found that increasing age is associated with higher odds of being a victim or perpetrator of cyberhate (e.g., Wachs et al., 2019). Particularly in the context of adolescents, this may be attributed to older adolescents exhibiting specific developmental needs, curiosities, and desires, which can lead to more frequent engagement in cyber-practices and risks, where there is also a decrease in parental mediation (Pereira et al., 2016; Vale et al., 2018; Vale et al., 2022).

Additionally, beyond sociodemographic correlates, scholars in the fields of psychology and criminology have emphasized the need for comprehensive theoretical frameworks to identify the individual, relational, and contextual factors influencing the likelihood of cyberhate victimization and perpetration.

According to Bauman and colleagues (2021), Erikson's Theory of Stages of Psychosocial Development (1963) is essential in explaining why children and adolescents are at a heightened risk of cyberhate involvement. This theory proposes that the development of a person's personality may be broken down into eight sequential stages that begin in childhood

and continue into late adulthood. In each of these stages, there is a psychosocial crisis that must be resolved by the successful completion of a developmental task. These tasks have an impact on how individuals relate to their inner and outer worlds. During the fourth psychosocial stage (industry vs. inferiority, 5-12 years old), children develop skills in (extra)curricular activities, and their classmates' recognition of their accomplishments is critical to their self-esteem and self-concept (Bauman et al., 2021; Erikson, 1963). However, those who do not acquire this sense of competence develop a sense of inferiority. When this occurs, children may doubt their abilities, feel like they don't fit in with their peers, and be vulnerable to hate content and hate-groups recruiting strategies. Through this interaction, they begin to attribute their feelings of inferiority to certain social groups and diminish them, and when they are appreciated for engaging in cyberhate, they get a sense of competence that they have never felt before (Bauman et al., 2021).

In the fifth psychosocial stage (identity vs. role confusion, 12-18 years old), adolescents are developing their sense of self in diverse domains (e.g., gender, ethnicity, religion, and sexuality; Bauman et al., 2021; Erikson, 1963). If access to and use of ICT can help them meet this developmental task by allowing them to identify and differentiate, develop critical thinking, self-explore intellectual, entertainment, and sexual interests, and refine socio-emotional skills (Gaspar et al., 2022; Ponte & Batista, 2019; Smahel et al., 2020; Vale et al., 2018; Vogels et al., 2022), they might also interfere with these processes. Adolescents who are struggling to establish their different identities and feel isolated can be vulnerable to individuals or organized hate movements. These groups offer them acceptance when it may be lacking elsewhere (Bauman et al., 2021) and disseminate content that can be aesthetically appealing and tailored to their cultural trends. Proof of that can be found in the percentage of cyberhate exposure in online multiplayer games. According to the latest report from the Anti-Defamation League in the United States of America, 26% of adolescents

reported exposure to white supremacist ideologies on social media networks, and 16% encountered these ideologies in online multiplayer games (e.g., Dota 2, PUBG: Battlegrounds, Valorant, World of Warcraft, Grand Theft Auto, Overwatch, or Call of Duty; Anti-Defamation League, 2022).

Other insights are derived from major victimology and criminology paradigms. For example, Cohen and Felson's Lifestyle-Routine Activities Theory (1979) considers structural opportunities as a causal mechanism for crimes. Victimization occurs because of the intersection, in time and space, between the exposure or proximity to motivated perpetrators, attractive targets, and the absence of capable guardianship (Cohen & Felson, 1979; Eck & Clarke, 2003; Hindelang et al., 1978; Miethe & Meier, 1990; Reyns et al., 2011). Although some questions remain unexplored about their usefulness in ICT-mediated interpersonal aggressive behaviors (e.g., Yar, 2005), this theory has been gaining empirical support in understanding factors that lead individuals to fall victim to cyberhate (e.g., Wachs et al., 2021a; Wachs et al., 2021b).

Individuals who act on their pre-existing criminal tendencies are considered motivated perpetrators. While exposure alludes to how accessible an individual is to a perpetrator, proximity alludes to the likelihood of coming into contact with a perpetrator (Cohen & Felson, 1979; Hindelang et al., 1978; Miethe & Meier, 1990). Studies that tested this theory with samples of adolescents found that excessive Internet use and witnessing cyberhate seemed to increase the visibility of and the likelihood of contact with motivated perpetrators, thereby increasing the likelihood of cyberhate victimization (Wachs et al., 2021a; Wachs et al., 2021b).

Once an individual is exposed or in proximity, the target's attractiveness represents how the individual's characteristics and individual lifestyle choices and activities make them appear like a potentially rewarding opportunity to motivated perpetrators (Cohen & Felson,

1979; Hindelang et al., 1978; Miethe & Meier, 1990). Similarly, specific cyber risky routines, such as disclosing personal information, contacting unknown people online, and experiencing data misuse, seem to increase the target's suitability, thereby increasing the likelihood of cyberhate victimization (Wachs et al., 2021a; Wachs et al., 2021b).

Considering such exposure and attractiveness, this theory focuses on how capable guardianship can prevent the occurrence of victimization (Cohen & Felson, 1979; Hindelang et al., 1978; Miethe & Meier, 1990). Findings support the hypothesis that adolescents' experience of problematic sharenting facets (e.g., "I received negative or hurtful comments from someone because of something my parent or caregiver published online") was positively related to the risk of being a victim of cyberhate (Wachs et al., 2021b). Furthermore, while the adolescents' perception of being subjected to the restrictive strategies of parental mediation on the Internet also increased such vulnerability (i.e., implementing rules without dialogue, restricting the use of the Internet or access to specific websites; e.g., "My parents check my Facebook, WhatsApp, or other profiles on other networks"), the instructive strategies of parental mediation demonstrated the opposite effect (i.e., parental guidance, collaboration, and support; e.g., "My parents show me how to use the Internet and warn me about its risks"; Wachs et al., 2021a). Other studies have also supported the usefulness of these instructive strategies, revealing a positive association between them and the use of problem-focused coping strategies in response to cyberhate. Therefore, these adolescents' capability to cope included strategies such as distal advice (e.g., "go to the police"), close support (e.g., "spending time with my friends to take my mind off it"), assertiveness (e.g., "tell the person to stop it"), and technical coping (e.g., "block that person so that he or she cannot contact me anymore"; Wachs et al., 2020; Wright et al., 2021). The adolescents' perception of family support was found to strengthen the positive relationship between instructive strategies of parental mediation and problem-focused coping strategies towards cyberhate (Wright et al.,

2021). Other studies explored the role of friends in relation to cyberhate. For example, Bedrosova and colleagues (2022) found a certain tendency for perceived friend support to be negatively associated with cyberhate in two countries (Czech Republic and Poland). Furthermore, a supportive peer environment emerged as a protective factor against cyberhate victimization due to perceived discrimination and lower life satisfaction (Görzig et al., 2023).

Lifestyle-Routine Activities Theory is often used to explain victimization. However, the acknowledged overlap of roles between victims and perpetrators (Jennings, Piquero, & Reingle, 2012; Lauritsen, Sampson, & Laub, 1991; Posick, 2013) has led researchers to think that exposure to online hate materials and participation in group attacks would have a positive relationship (Hawdon et al., 2019). The theory's applicability received no support. High social networking site usage did not demonstrate a significant relationship, time spent online per day exhibited a negative relationship, and living alone also failed to show a significant association with joining an online attack on a targeted group when witnessing such an attack occurring (Hawdon et al., 2019).

Gottfredson and Hirschi's General Theory of Crime (1990) offers an insightful explanation for cyberhate perpetration. The theory revolves around the concept of "self-control", which refers to an individual's ability to regulate their own emotions, thoughts, and behaviours. This trait or characteristic is believed to be established in early childhood through parental or caregiver supervision and the transmission of social values and norms. Individuals who experience a lack of parental mediation and inadequate socialization are more likely to possess lower levels of self-control. Consequently, they may exhibit certain characteristics, including impulsivity, insensitivity, risk-taking, and nonverbal behaviours. These characteristics can predispose them towards delinquency, criminal acts, and other problem behaviours, whenever opportunities materialize in the direction of such deviation, especially when they perceive immediate or near-term gratification for engaging in them (Gottfredson &

Hirschi, 1990). Findings suggest that low levels of self-control played an important role in the decision to joining an online attack on a targeted group when witnessing such an attack occurring (Hawdon et al., 2019), as well as in the decision to engage in cyberhate production (Bernatzky et al., 2022). However, the explanatory effect of low self-control on cyberhate production lost significance after controlling for the core variables of the Social Structure-Social Learning Theory (Bernatzky et al., 2022).

Akers' Social Structure-Social Learning Theory (2009), an extension of Social Learning Theory, focuses on how macro-level structural factors can influence social learning processes at the micro-level, leading to deviant and criminal behaviours. Akers (2009) identified four interrelated elements of social structure through which social learning processes might occur: a) differential location, which involves the individuals' sociodemographic characteristics and the influence of social stratification patterns on social learning processes (e.g., gender, age, race, ethnicity, economic status); b) differential social location, which considers group relationships, social ties, and institutional affiliations that may influence individuals' inclinations towards or away from engaging in cyberhate (e.g., family, peers, work groups); c) differential association, which focuses on exposure, interaction, and proximity to individuals who legitimize norm-violating activities and/or commit deviant or criminal behaviours; and d) differential reinforcement, which alludes to (non)social rewards received for engaging in the deviant or criminal behaviours.

The study conducted by Bernatzky and colleagues (2022) examined the elements of the social structure that might account for individuals producing online material that others might interpret as hateful or degrading. The authors observed that factors such as being white, male, less educated, and economically disengaged did not significantly predict cyberhate production (although right-wing individuals and extremist movements have been playing a very active role online; differential location; Bernatzky et al., 2022; Costelo et al., 2019;

Hawdon et al., 2014; Southern Poverty Law Center, 2020, 2021). Moreover, they noted that proximity to friends or religious groups did not show a significant relationship. However, being close to one's family was found to be associated with a reduced likelihood, while being close to online communities was associated with an increased likelihood of producing cyberhate (differential social location). Furthermore, they found that joining an online attack on a targeted group when witnessing such an attack occurring and agreeing with deviant definitions of behavior were both correlated with producing cyberhate (differential association). Nonetheless, expressing agreement with cyberhate witnessed was positively associated with producing such content, while copying one's friends did not demonstrate a significant relationship (differential reinforcement; Bernatzky et al., 2022).

Other studies have provided substantial support for the aforementioned aspects of the theory: differential social location, association, and reinforcement. These studies have shown that spending more time on websites that are populated by hate, belonging to an online community and a deviant youth group, holding favorable attitudes toward violence and racism, witnessing cyberhate, and having less trust in institutions are associated with a greater likelihood of engaging in cyberhate perpetration (Blaya & Audrin, 2019; Celuch et al., 2022; Costello & Hawdon, 2018; Hawdon et al., 2019; Wachs & Wright, 2018; Wachs et al., 2019). These findings align with the Internet hate-crime typology developed by Jacks and Hadler (2015). The authors argue that Internet users may initially start as browsers (i.e., accidentally or intentionally watching online hate, without interacting with other users or the online community); however, due to repeated exposure and acceptance within the group, their prejudices and bigotries may strengthen, leading them to take on roles as commentators (i.e., watching online hate content, (re)posting hateful or other comments, and interacting with the online community), activists (i.e., uploading overtly hateful material and, perhaps, interacting with hate organizations offline), and even leaders (i.e., advocating for one's own extreme

views, building websites, purchasing extremist material, planning and organizing hate-related activities both online and offline, and potentially engaging in illegal activities).

Agnew's General Strain Theory (1992) can be promising in explaining the overlapping roles of victims and perpetrators (i.e., double involvement). According to this theory, experiences of strain (e.g., failure to reach valued goals, loss of positive stimuli, and exposure to negative stimuli) can lead to negative emotions (e.g., sadness, anger, and frustration). In the absence of effective coping skills, these emotions may lead individuals to engage in deviant, criminal, or other problem behaviors (Agnew, 1992). Strain has been shown to have a relationship with cyberhate. For example, research has shown that individuals who were exposed to cyberhate and experienced victimization were more likely to join in on hateful behavior online or to be perpetrators of cyberhate (Blaya & Audrin, 2019; Costello & Hawdon, 2018; Hawdon et al., 2019; Wachs & Wright, 2018).

Sociological theoretical frameworks, such as Tajfel and Turner's Social Identity Theory (1979), offer valuable insights. According to this theory, an individual's social identity is formed through group membership. In this process, individuals perceive those who are similar to them as part of their in-groups ('us'), while those perceived as different become out-groups ('them'). Cyberhate amplifies groups identities, leading to favorable judgments of in-groups and derogation of out-groups (Costello et al., 2019). Empirical evidence supports these propositions, as studies have shown that females and individuals who identify as political moderates or liberals were substantially more likely than males and political conservatives to rate cyberhate as more disturbing (Costello et al., 2019). Notably, right-wing groups tend to target females, non-conservatives, racial and ethnic minorities, Jews, Muslims, immigrants, and other marginalized groups (Costello et al., 2019; Hawdon et al., 2014; Southern Poverty Law Center, 2020, 2021). These findings suggest that individuals who are

already vulnerable or at risk appear to be particularly affected by cyberhate (Costello et al., 2019).

To deepen our understanding of cyberhate, it is essential to consider the unique mechanisms of ICT that can exacerbate polarization and limit users' exposure to alternative information, viewpoints, and positions. These mechanisms include algorithms that customize and direct individuals' Internet experiences based on data collected about their profiles, interests, and behaviors, creating a "filter bubble effect" (Pariser, 2011). In addition, exposure to environments that validate and strengthen certain ideologies and behaviours can lead to an "echo chamber effect" (Cinelli, 2021). Consequently, initial exposure to cyberhate can create hate-filter bubbles and contribute to echo chambers. Moreover, the presence of (real or perceived) anonymity, asynchronous communication, de-individuation, a lack of social cues, and an apparent lack of repercussions and impunity can further encourage such behavior, known as the "online disinhibition effect" or "toxic online disinhibition effect" (Suller, 2004; Wachs & Wright, 2018). Studies have confirmed a link between the belief that one is less inhibited while engaging in certain cyber-practices and the posting of hateful or degrading speech online that targets individuals or groups based on their gender, race, sexual orientation, or religious affiliation, with the toxic effect of online disinhibition moderating the relationship between being bystanders and becoming perpetrators of cyberhate (Wachs & Wright, 2018).

Cyberhate: Recommendations for Prevention and Intervention

Cyberhate is a pressing societal problem that requires attention due to its alarming prevalence rates (victims, perpetrators, and bystanders), multicausal origins (individual, relational, and contextual variables), and potential detrimental consequences. With that in mind, addressing cyberhate demands comprehensive prevention and intervention efforts that involve a concerted, long-term commitment from society. Adolescents, as a group with distinct developmental characteristics and needs, are especially vulnerable to a variety of

risks. To protect them, it is crucial to foster a warm, available, and responsive home environment that facilitates trusting relationships. Parents play a vital role in educating their adolescents about mutual respect, socio-cultural diversity, and boundaries of expression, making them aware of the responsibilities that come with exercising their human rights and fundamental freedoms. In addition, parents should adopt instructive mediation strategies on the Internet (e.g., stimulating open dialogue, staying around, and teaching adolescents about netiquette and safety rules). Educational institutions also have significant responsibilities. This includes prioritizing the creation of an inclusive socio-cultural climate and the implementation of anti-cyberhate policies. Equally important is the restructuring of the pedagogical curriculum to promote single-sessions about critical thinking abilities (e.g., educating students on distinguishing between accuracy, misinformation, disinformation, and malinformation), emotional regulation and conflict management (e.g., enabling students to handle sadness, anger, and frustration in constructive ways), empathy (e.g., encouraging students to adopt the perspective of victims and become proactive upstanders), and comprehensive digital literacy and citizenship education (e.g., teaching students about the nature, dynamics, myths, and consequences of cyberhate). Additionally, they should leverage their support services to provide appropriate support to victims, perpetrators, and bystanders of cyberhate incidents. Collaborative efforts and specialized training are crucial for professionals from various fields, including teachers, health professionals, psychologists, criminologists, police officers, prosecutors, and judges, to enhance their sensitivity and practices. To reduce the risk of secondary victimization, key recommendations include learning about the specificities of cyberhate, using simple and inclusive language, being attentive to victims' needs, considering multiple social identity characteristics (e.g.,

intersectionality⁹), and adopting non-critical and respectful approaches. Researchers must urgently produce an integrative mapping of cyberhate, encompassing its prevalence, characterization, and impact through a combination of quantitative and qualitative studies. This holistic and mixed-methodological approach is essential for promoting best practices in the field, including risk assessment and the development of prevention and intervention measures for adolescents and adults (primary prevention), vulnerable groups (secondary prevention), and victims and/or perpetrators (tertiary intervention). Linguistics and computer engineers should continue to develop efforts to identify, classify, and quantify cyberhate using different techniques (e.g., lexicons, semantic analysis, syntactic, and n-grams). Technological industries and web developers must redesign platforms with long-term solutions to anticipate, classify, report, and mitigate cyberhate in a timely and effective manner. Social organizations should persist in addressing cyberhate in their initiatives, while media campaigns sensitize the general public with appropriate information and language, including victim's rights, legal proceedings, and available services. Lawmakers should seek to update and enforce laws discouraging these behaviours, holding individuals criminally responsible, and promoting the social reintegration of perpetrators to prevent revictimization experiences. Global institutional efforts are of paramount importance (e.g., United States of America: Federal Bureau of Investigation's Uniform Crime Reporting, Southern Poverty Law Center, Anti-Defamation League; Member states of the European Union: European Union Agency for Fundamental Rights, European Office for Democratic Institutions and Human Rights, European Commission against Racism and Intolerance; Portugal: Associação Portuguesa de Apoio à Vítima [Portuguese Association for Victim Support], Comissão para a Cidadania e Igualdade de Género [Portuguese Commission for Citizenship and Gender Equality], ILGA Portugal -

⁹ The convergence of social categorizations (e.g., gender, race, ethnicity, sexual orientation, or other characteristics) results in interconnected and interdependent experiences of oppression, discrimination, or disadvantage.

Observatório da Discriminação contra Pessoas LGBTI+ [ILGA Portugal - Observatory for Discrimination against LGBTI+ People] and Comissão para a Igualdade contra a Discriminação Racial [Portuguese Commission for Equality Against Racial Discrimination]). In conclusion, to efficiently combat this urgent societal issue, all communities must consider cyberhate a fundamental priority and place it at the forefront of their scholarly, practical, scientific, media, political, and public agendas.

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