

BUILDING RESILIENCE TO EXTREMISM IN GAMING:

IDENTIFYING AND ADDRESSING TOXICITY IN GAMING CULTURE

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EXECUTIVE SUMMARY

Video gaming has evolved into a global phenomenon, shaping culture, entertainment, and social interaction. As millions of individuals immerse themselves in digital worlds, it becomes paramount to understand the complex interplay of factors within gaming culture. By examining the toxic undercurrents within some gaming cultures and their potential implications for radicalisation, this paper aims to equip EU Member States with insights and strategies to foster resilient and inclusive gaming communities.

The paper is divided into three lines of analysis. First, to examine where and how toxic cultures exist in gaming. Second, to explore the links between toxicity and socialisation, radicalisation, and extremism. Finally, to assess what the challenges, efforts, and opportunities for building resilience to toxicity in gaming spaces and cultures are. In order to provide an encompassing overview of these topics, the paper considers the role of the gaming industry, governments and intergovernmental entities, individuals and communities, and civil society organisations in both the manifestation of toxicity in gaming spaces and culture as well as in the existing efforts and future opportunities to prevent and combat associated risks and threats.

In conclusion, this paper highlights the need to work towards resilient, diverse, and inclusive gaming spaces, to help counter the pervasive issue of toxicity within gaming cultures and potential links to radicalisation and extremism. To address these challenges, policymakers and stakeholders must take a multifaceted approach. Recommendations include promoting diversity in the gaming industry, implementing robust content moderation mechanisms, and fostering inclusive communities. Empowering gamers with the skills to resist toxic influences and extremist narratives is also vital. By adopting these strategies, EU Member States can enhance the resilience of gaming communities and promote safer, more inclusive gaming spaces.

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LIST OF ACRONYMS

AI Artificial Intelligence

CT Counter-Terrorism

DSA Digital Services Act

EGRN Extremism and Gaming Research Network

EU European Union

EU MS European Union Member States

EUIF European Union Internet Forum

FPA Fair Play Alliance

GIFCT Global Internet Forum to Counter Terrorism

HORIZON Horizon Europe Framework Programme

ML Machine Learning

P/CVE Preventing and Countering Violent Extremism

SIDE Social Identity Model of Deindividuation Effects

TAT Tech Against Terrorism

VRWE Violent Right-Wing Extremist/ism

INTRODUCTION & METHODOLOGY

The landscape of online gaming has evolved dramatically over the years, evolving from mere entertainment to a complex digital environment where millions of individuals from diverse backgrounds meet and build communities. This convergence, however, has not only led to positive interactions and experiences but has also given rise to multifaceted challenges. While gaming is often celebrated for its potential to foster community, creativity, and positive social interactions, it also harbours dark corners where hate speech, toxicity, discrimination, and extremist ideologies can find refuge. The intersection of gaming culture with these issues is a relatively under-researched domain, demanding careful analysis and understanding.

This paper explores the intricate relationship between gaming culture, toxicity, and the potential for radicalisation and extremism within online gaming spaces. The paper aims to advance knowledge and provide European Union Member States (EU MS) with a comprehensive introduction to toxic gaming cultures. This encompasses conceptualisations of toxicity in gaming communities, discussions of the risks associated with toxicity creating pathways to radicalisation and recruitment into violent extremism, and opportunities for positive interventions. By examining the various dimensions of toxicity in gaming, the paper serves as a valuable resource for policymakers, offering a roadmap for effective policy development and programming in the gaming space. Additionally, it highlights positive interaction opportunities within gaming platforms, drawing from best practices and recommendations from adjacent preventing and countering violent extremism (P/CVE) spaces.

METHODOLOGY

To undertake this exploration, our research draws from a diverse range of sources, ensuring a comprehensive and nuanced understanding of the subject matter:

- **Literature Review**: Our foundation rests on a rigorous literature review, encompassing academic articles, open-source literature, and existing research reports.
- Extremism and Gaming Research Network (EGRN): The paper leverages the work produced by the EGRN, a consortium of experts and researchers, including the authors, specialising in the intersection of extremism and gaming. The EGRN's contributions provide valuable perspectives and findings that enrich this study.

Objective and Research Questions

The primary objective of this paper is to equip EU MS with a comprehensive understanding of gaming culture's intricate dynamics, its potential connections to radicalisation and (violent) extremism, and the emergence of resilience within gaming communities. Drawing on recent research and existing literature reviews, the paper outlines relevant concepts of toxicity (e.g., racism, bigotry, misogyny, etc.) in gaming culture, how it can form links to (violent) extremist narratives and ideology, the emerging trends and risks, and offers policy and broader recommendations for actions to enhance the resilience of gamers to toxicity, radicalisation, and (violent) extremism in online gaming spaces. To achieve this, it addresses the following research questions:

• In what ways does toxicity manifest in gaming culture and spaces that can contribute to the process of radicalisation?

• What knowledge can we carry from the P/CVE space to address these dynamics and build resilience in the gamer communities?

Some of the sub-questions the paper seeks to answer include:

- How does toxicity manifest and why is it accepted within some gamer cultures/communities?
- What role does socialisation in gaming play in potential pathways to radicalisation?
- How do toxic narratives of gaming cultures link to other forms of radical or extremist ideologies or narratives?

SECTION 1: TOXIC CULTURES IN GAMING

This section delves into the multifaceted nature of toxicity within gaming culture. Toxicity in gaming takes various forms and often thrives at different levels: the institutional, the community, and the individual. To unravel why gaming spaces sometimes breed cultural toxicity, we examine these dimensions individually, shedding light on their unique contributions to the issue.

INSTITUTIONAL LEVEL

Within the gaming industry, a pervasive issue persists – sexism. While gaming demographics are becoming increasingly diverse, with individuals of all backgrounds participating, the industry itself has been slow to reflect this diversity. Instead, it remains predominantly male-dominated, with embedded sexist undertones that extend into gaming spaces. 2

One significant contributor to this institutional-level problem are the historical and ongoing gender role expectations deeply rooted in many societies. From an early age, boys are often steered toward technology and gaming, including studying sciences and technology, while girls are subtly dissuaded. This imbalance in early exposure and education, combined with societal norms that label certain interests and professions as either 'masculine' or 'feminine', translates into a stark gender disparity within the gaming industry itself.³ This perpetuates a cycle where the industry remains predominantly male-dominated, creating an environment that is not only unwelcoming to women but also conducive to the perpetuation of sexism and other forms of toxicity.⁴

Sexism, racism, and other forms of discrimination within the gaming industry are not confined to the boardrooms or development studios; they are ingrained in the very fabric of the games themselves. The lack of diversity within the industry manifests in the mechanics, design, and narratives of games, perpetuating a culture that normalises toxicity.⁵ For example, many games offer a narrow selection of character 'skins', which often conform to specific gender, race, religion, or other characteristics. It is not uncommon to find that players are predominantly offered the option to play as a white male character, typically with a high degree of physical fitness and specific religious or ethnic markers. This lack of diversity in character representation reinforces the notion that certain identities are more valuable or deserving of representation than others, contributing to a hostile environment for those who do not conform to these stereotypes.⁶ Moreover, many games perpetuate 'us vs. them' narratives, often pitting white characters against brown, Muslim, or other marginalised groups. These narratives can not only promote negative stereotypes but also fuel divisive thinking, contributing to the polarisation seen in some gaming communities.⁷

¹ Rosenblat and Barrett, "Gaming The System".

² "Sexism in the Gaming Industry: Are Things Beginning to Change? - Society of Women Engineers - Magazine"; Lorenz and Browning, "Dozens of Women in Gaming Speak Out About Sexism and Harassment".

 $^{^{\}rm 3}$ Rennick et al., "Gender Bias in Video Game Dialogue".

⁴ Paul, The Toxic Meritocracy of Video Games.

⁵ Cross et al., "Gendered Violence and Sexualized Representations in Video Games"; Weststar, Kwan, and Kumar, *Developer Satisfaction Survey 2019 - Summary Report*.

⁶ Cohen-Peckham, "Confronting Racial Bias in Video Games".

⁷ Cicchirillo and Appiah, "The Impact of Racial Representations in Video Game Contexts".

When women are included as playable characters, they are frequently portrayed in highly sexualised ways. This reduces female characters to mere objects of desire, reinforcing harmful gender stereotypes and contributing to the objectification of women both in games and in the broader culture. Exposure to sexualised portrayals of women, even in fictional contexts, can normalise objectification and sexual harassment. Gamers, particularly impressionable younger players, may gradually come to view this as an acceptable way to perceive and treat women. Aside from reinforcing harmful attitudes and behaviours towards women in society at large, these sexualised portrayals of female characters can also create an uncomfortable and unwelcoming environment for female gamers. When women see themselves represented in such a manner, it can deter them from fully participating in gaming communities.

Beyond issues of gender and race, games often institutionally overlook basic considerations of diversity. The default perspective in many games is that of an able-bodied white male, particularly in Western contexts, as well as there being a default expectation of able-bodied gamers. This not only marginalises individuals with disabilities but also reinforces the idea that the able-bodied perspective is the norm, while others are 'different' or 'other'. Additionally, this absence of diversity limits creativity and the potential for innovative storytelling and gameplay experiences. It narrows the scope of narratives that can be explored and restricts the opportunity for gamers to step into the shoes of characters from various backgrounds and perspectives, which is one of the unique strengths of interactive media like video games.

Furthermore, the toxic undercurrents within the gaming industry extend to how gaming influencers, streamers, and revenue generators are treated.¹³ The lack of institutional reckoning regarding the treatment of these figures perpetuates a culture of toxicity within gaming spaces. A prime example of this is the infamous 'Gamergate' incident. This event exposed how a female gaming journalist who advocated for more progressive attitudes within gaming, including more inclusivity and diversity in gaming spaces, was systematically attacked, which later extended to women in the gaming space more widely.¹⁴ Gamergate highlighted the ugly underbelly of the gaming community, where attempts to promote positive change were met with harassment, doxxing, ¹⁵ and threats.

The lack of institutional response to these incidents sends a troubling message to the gaming community. It suggests that such behaviour is tolerated or, at best, ignored, fostering a sense of impunity among those who engage in toxic actions and behaviours. ¹⁶ This, in turn, emboldens individuals who seek to maintain the status quo of gaming as an exclusive and often hostile space.

COMMUNITY LEVEL

Moving beyond the institutional level, community-level factors play a significant role in either deterring or nurturing toxicity within gaming spaces. The dynamics of these communities play a crucial role in shaping the experiences of the gamers within them. Some gaming communities may be more prone to toxicity due to factors

 $^{\rm 11}$ Wong, "The Lack of Diversity in Video Games: A Forum Post".

 $^{^{\}rm 8}$ Gestos, Smith-Merry, and Campbell, "Representation of Women in Video Games".

⁹ Breuer et al., "Sexist Games=sexist Gamers?"

¹⁰ Ibid.

¹² Weststar, Kwan, and Kumar, *Developer Satisfaction Survey 2019 - Summary Report*.

¹³ MacDonald, "Is the Video Games Industry Finally Reckoning with Sexism?"

¹⁴ Nagle, Kill All Normies.

¹⁵ i.e., the search for and publishing of private or identifying information about (a particular individual) on the internet, typically with malicious intent.

¹⁶ Breuer et al., "Sexist Games=sexist Gamers?"

like competitiveness, exclusivity, or a lack of adequate self-moderation.¹⁷ The absence of robust moderation mechanisms can allow toxic behaviour to continue unchecked, potentially creating an environment where harassment, hate speech, and discrimination become the norm rather than the exception.¹⁸ This is further complicated by the fact that these toxic behaviours often manifest under the guise of humour, memes, and other more subtle forms of expression, making it more difficult to recognise, identify, and moderate such content without running the risk of limiting freedom of speech.¹⁹

One crucial aspect of community-level toxicity is the nature of the specific gaming communities themselves. Communities built around particular games can vary widely in their levels of toxicity, often at least partially due to the inherent dynamics and characteristics of those games.²⁰ For instance, military simulation games often replicate real-world military scenarios and operations. While these games can offer players a unique opportunity to experience the challenges of military operations, they can also create environments that may inadvertently reinforce certain attitudes and behaviours, such as in-group/out-group dynamics that mirror those seen in military units — potentially fostering hypermasculine, misogynistic, and racist behaviour as part of in-group identity formation.²¹ Psychologists have even noted that online relationships formed through shared gaming experiences can rival the intensity of offline bonds, akin to those developed in military units.²²

While some aspects of gaming communities are unique to the online space, wider community dynamics within gaming often mirror offline peer dynamics, where behaviours like showing off, gaining status, and fostering a 'bros club' mentality prevail.²³ The case of Jack Teixeira, a 21-year-old Massachusetts Air National Guardsman who allegedly leaked classified military documents to his online gaming community, illustrates the significant influence of gaming communities on individuals.²⁴ Teixeira's actions were not solely driven by his youth or vulnerability but rather by a deep affinity for the gamer community with which he shared a strong connection. This case underscores the centrality of socialisation in online gaming, where bonds and peer-group dynamics are powerful forces.²⁵

Understanding these socialisation and peer-group dynamics is crucial in addressing issues like misogyny, racism, xenophobia, and violent extremism within gaming communities, highlighting the need for measures that encourage positive behaviours, inclusivity, and respectful interactions among gamers to counteract the potential for toxic peer dynamics.²⁶ Certain gaming communities have already taken the initiative to create spaces that prioritise diversity and inclusivity or have implemented rigorous self-moderation standards. These communities have demonstrated remarkable success in resisting toxicity and fostering healthier interactions among their members.

¹⁷ Kowert, "Dark Participation in Games".

¹⁸ Rosenblat and Barrett, "Gaming The System".

¹⁹ Reyman and Sparby, "Digital Ethics"; Wells et al., "Right-Wing Extremism in Mainstream Games".

²⁰ Lamphere-Englund and White, "The Pentagon Leak"; Peckford, "Right Wing Extremism in a Video Game Community? A Qualitative Content Analysis Exploring the Discourse of the Reddit GamerGate Community r/KotakulnAction".

²¹ Forthcoming policy brief RUSI (FRET in security forces)

²² Lamphere-Englund and White, "The Pentagon Leak".

²³ Kowert, Martel, and Swann, "Not Just a Game".

²⁴ Lamphere-Englund and White, "The Pentagon Leak".

²⁵ Ibid.

²⁶ Lamphere-Englund and White, *The Online Gaming Ecosystem*.

INDIVIDUAL LEVEL

At the individual level, toxicity within gaming culture can become deeply ingrained when personal identity becomes strongly fused with one's gamer identity. When these identities intertwine, individuals can become highly susceptible to the toxicity that might be prevalent in the gaming spaces they inhabit and the communities they engage with.²⁷ The fusion of personal and gamer identities can be a double-edged sword. On one hand, it can provide a profound sense of belonging, purpose, and community for individuals, addressing fundamental human needs for acceptance, status, and connection. On the other hand, this fusion can make individuals highly vulnerable to the toxic elements within gaming environments.

Resilience, the ability to withstand and counteract toxic influences, is significantly diminished when gamers find themselves regularly exposed to high levels of toxicity, including misogyny, racism, and more, such as is commonly found in in-game chats and other social interactions.²⁸ What is particularly alarming is the normalisation of this type of language and behaviour. The narratives and themes of certain games often encourage the 'othering' mentality, where individuals are pitted against each other based on differences in gender, race, or other characteristics.²⁹ Much like offline dynamics, individual needs for acceptance, status, and community play a pivotal role in determining how resilient individuals are to extremism and toxicity within gaming spaces. These fundamental human needs can lead individuals to prioritise group cohesion and conformity over questioning or challenging toxic norms.³⁰

²⁷ Kowert, Martel, and Swann, "Not Just a Game"; Kowert, "Extremist Action in Digital Gaming Spaces: The Role of Identity Fusion".

²⁸ Schlegel and Amarasingam, Examining the Intersection Between Gaming and Violent Extremism.

²⁹ Kowert, Martel, and Swann, "Not Just a Game".

³⁰ Kowert, Martel, and Swann, "You Are What You Play".

SECTION 2: LINKS TO SOCIALISATION, RADICALISATION, AND EXTREMISM

This section aims to illustrate how the toxic cultures ingrained within gaming spaces, including misogyny, racism, and other forms of harmful behaviour, can intersect with violent extremism, resulting in a convergence of hate-driven beliefs and actions. It also covers the dynamic process of socialisation and the role it plays in shaping individuals' beliefs and attitudes within gaming communities, discussing the psychological mechanisms that potentially make gaming communities a fertile ground for radicalisation and recruitment into violent extremism.

HOW TOXIC CULTURES CAN LINK TO VIOLENT EXTREMISM

Before covering the process of socialisation, this sub-section explores the complex relationship between specific toxic cultures prevalent within gaming environments, such as racism and misogyny, and their potential to cultivate pathways to violent extremism.

Toxic narratives and cultures that pervade gaming spaces, such as racism, misogyny, homophobia, or toxic masculinity, often share common threads with some of the foundational components of various violent extremist ideologies. Within gaming communities, these toxic narratives can therefore inadvertently serve as a gateway, potentially laying the foundation for susceptibility to violent extremism. Additionally, extremists can target toxic gaming communities for possible recruitment.

Misogyny and Violent Extremism

The links between misogyny, toxic gender narratives, and violent extremism are complex and multifaceted. Research indicates that gendered narratives, both overt and subtle, play a role in facilitating radicalisation and the formation of extremist identities across various ideological contexts and countries.³¹ Extremists across the ideological spectrum often leverage gendered messaging to radicalise and frame the participation of both women and men differently within online spaces. Gender norms and ideologies thus become intrinsic in providing individuals with a sense of belonging and purpose.³²

Research suggests a significant relationship between misogyny, hostile/sexist beliefs, and violent extremism.³³ The explicit ideologies of terrorist groups and the documented histories of misogyny in many perpetrators of violence highlight this link.³⁴ Studies further suggest that individuals with hostile attitudes towards women and gender equality are more prone to violent extremist views, intolerance towards other groups, and support for violent activities.³⁵

³¹ Pearson, Winterbotham, and E. Brown, *Countering Violent Extremism*.

³² Phelan et al., Introductory Guide to Understanding Misogyny and the Far-Right; Pearson, "Why Men Fight and Women Don't".

³³ Díaz and Valji, "Symbiosis of Misogyny and Violent Extremism".

³⁴ Ibid.; McCulloch et al., "Lone Wolf Terrorism Through a Gendered Lens".

³⁵ Bjarnegård, Melander, and True, *The Sexism and Violence Nexus*.

Within violent right-wing extremist (VRWE) groups, 'traditional' gender norms and hypermasculine ideals often dominate, shaping the roles of both women and men. These groups emphasise patriarchal cultures and endorse heterosexuality, motherhood, and traditional masculinity.³⁶ However, VRWE movements also recontextualise gender to express opposition to perceived enemies in a gendered manner.³⁷ For instance, certain VRWE actors present Muslims and Islam as misogynistic and gender-unequal, framing them as threats to Western societies.³⁸

This manipulation of gender narratives is not unique to VRWE movements and can be observed in various extremist ideologies worldwide. For example, some Islamist extremist groups exploit gender dynamics, often promoting traditional gender roles and conservative interpretations of Islam. They may use these narratives to justify gender-segregated spaces, women's limited participation in public life, and restrictions on women's freedoms. At the same time, they frame their struggle as a defence of these traditional gender roles against perceived Western influences, using gender-related arguments to recruit individuals who identify with conservative interpretations of Islam. Beyond Islamist extremism, various religious extremist movements, including those within Christianity, Judaism, Hinduism, and other faiths, may use gendered narratives to justify their actions in order to uphold traditional gender roles or oppose societal changes related to gender and sexuality.³⁹

Racism and Violent Extremism

In addition to the intersection of misogyny and extremist ideologies, it is important to recognise the profound influence of racism within some gaming communities and its potential connection to violent extremism. While racism and violent extremism are distinct issues, they can intersect and amplify one another, creating a pathway that leads individuals from prejudiced beliefs to more extreme and potentially violent actions.

Racist ideologies can intersect with broader extremist narratives, such as white supremacy, ethnonationalism, or other expressions of VRWE. These ideologies share common themes of exclusivity, superiority, and the belief in a perceived threat to one's identity or culture.⁴⁰ The alignment between racist and extremist beliefs provides a foundation for individuals to transition from discriminatory attitudes to more extreme actions, as they regard themselves as defenders of their racial or cultural group from perceived threats.⁴¹

Extremist groups manipulate and reframe racist narratives to serve their agenda. They may depict acts of violence as acts of self-defence or as necessary measures to preserve their group's perceived superiority. Such narrative framing allows individuals to rationalise and justify their engagement in extremist activities, blurring the lines between racist beliefs and violent actions.⁴²

Other Toxic Behaviours and Extremism

Beyond misogyny and racism, other forms of toxicity such as homophobia, anti-Semitism, and ableism can also play a role in contributing to radicalisation and extremist recruitment. Holding such toxic beliefs can result in social isolation, as individuals who express hate speech, homophobia, or ableism may face a backlash from the

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³⁶ Latif et al., "Do White Supremacist Women Adopt Movement Archetypes of Mother, Whore, and Fighter?"

³⁷ Fangen and Lichtenberg, "Gender and Family Rhetoric on the German Far Right"; Pilkington, "'EDL Angels Stand beside Their Men ... Not behind Them'".

³⁸ Fangen and Lichtenberg, "Gender and Family Rhetoric on the German Far Right".

³⁹ "Masculinities, Misogyny and Violent Extremism | United Nations Development Programme".

⁴⁰ Gray, "Deviant Bodies, Stigmatized Identities, and Racist Acts".

⁴¹ Miller-Idriss, *Hate in the Homeland*; McCauley and Moskalenko, *Friction*.

⁴² Miller-Idriss, Hate in the Homeland.

broader community. Therefore, this isolation makes individuals susceptible to seeking out alternative communities that validate their beliefs. As toxic behaviours become normalised within certain online spaces and individuals become desensitised to toxic rhetoric, extremist ideologies that advocate for violent measures as a solution to individuals' perceived grievances can appear increasingly acceptable.⁴³

Additionally, the intersectionality of different types of toxic behaviours can magnify vulnerabilities to violent extremist ideologies, with extremist recruiters exploiting these intersections to target susceptible individuals. For example, the overlap between misogyny and racism creates a volatile mix that can amplify vulnerabilities to violent extremist recruitment. Those who exhibit a combination of misogyny, racism, homophobia, or ableism may be particularly susceptible to extremist narratives that validate their toxic worldviews. Extremist groups exploit the emotional resonance of shared toxic beliefs, providing a sense of purpose and camaraderie that encourages individuals to adopt extremist ideologies and potentially engage in violent actions.⁴⁴

An illustrative example of the potential links between the complex tapestry of toxic cultures that can intersect in gaming spaces and violent extremism is the aforementioned 'Gamergate' incident of 2014. This event, while starting as an online harassment campaign targeting a female gamer and designer, eventually evolved into a fertile ground for the alt-right movement in the United States, 45 given the "strongly present extreme right language and various overlapping ideological sentiments." This example underscores how different forms of toxic beliefs can intersect and converge, creating an environment conducive to the proliferation of extremist narratives within the gaming community, ultimately leading to a potential pathway to violent extremism. Additionally, there have been multiple examples of VRWE actors, such as the Buffalo shooter, who have included in their manifestos expressions of racism, xenophobia, and other toxicity, while also indicating the importance of their gamer identities and communities. 47

SOCIALISATION AND RADICALISATION IN THE CONTEXT OF GAMING CULTURE

Online gaming environments are not just platforms for gameplay; they are also social spaces that foster distinct 'gamer' cultures and subcultures. These communities can have both positive and negative socialisation impacts, affecting individuals' sense of belonging, life satisfaction, self-esteem, and susceptibility to radicalisation.⁴⁸ Socialisation refers to the process through which individuals immerse themselves in the culture of gaming, absorbing its norms, values, and behaviours. This includes gamers becoming accustomed to and influenced by toxic behaviours and extremist ideologies, which can contribute to the pathways leading to violent extremism. The normalisation of intolerance and hostility, coupled with the cultivation of group identity, has the potential of priming gamers for extremist ideologies.

Identity Formation and Individual Factors

Online gaming environments serve as dynamic social networks where individuals bond over shared interests. These spaces facilitate the development of social bonds, trust, and respect among players, even in the absence

^{43 &}quot;Hate Is No Game".

⁴⁴ Gartenstein-Ross et al., "Composite Violent Extremism".

⁴⁵ Nagle, Kill All Normies.

⁴⁶ Kowert, Martel, and Swann, "Not Just a Game".

⁴⁷ Lamphere-Englund and White, *The Buffalo Attack and the Gamification of Violence*".

⁴⁸ Lamphere-Englund and White, *The Online Gaming Ecosystem*.

of physical contact.⁴⁹ The shared passion for the game creates a strong sense of belonging and connection, as individuals bond over their shared experiences, challenges, and victories within the gaming world. However, while gaming communities offer many of these positive social experiences to their members, these communities can also expose gamers to hateful speech and toxicity, as discussed in the previous sections, which can contribute to setting them on a path to radicalisation.⁵⁰

Central to this is the phenomenon of identity fusion, which involves a deep emotional bond with gaming culture.⁵¹ This emotional bond is created through shared, often challenging, experiences like collaborative efforts to conquer in-game enemies. This internalisation of group identity not only offers a strong sense of belonging, but it can also heighten the risk of individuals turning towards radicalisation pathways.⁵² That is, identity fusion has been found to be connected to extreme pro-group behaviour, which means that individuals prioritise their gamer group over all else and can be ready to engage in extreme actions for their fellow gamers, including a willingness to fight or die for gaming culture.⁵³

Research found that while identity fusion with gaming culture does not always lead to radicalisation or other extreme outcomes, certain factors in an individual made them similarly more likely to experience identity fusion in gaming environments and go through radicalisation processes. Particularly toxic and competitive gaming environments in certain games were found to be associated with a stronger link between identity fusion with gaming culture and antisocial outcomes than less toxic communities. Moreover, strong identity fusion in combination with certain attachment styles, particularly insecure or avoidant attachment styles, was found to be more likely to lead to extreme behaviour.⁵⁴

In addition, a number of other psychological, social, and gameplay-related aspects that may contribute to drawing individuals who are part of toxic gaming communities towards violent extremism have been identified in the literature. These factors include:

- Online Disinhibition Effect: Toxic behaviours within gaming communities can be fuelled by the online disinhibition effect, where individuals behave more aggressively or disrespectfully online due to reduced self-awareness and accountability. This effect is a significant predictor of toxic behaviour in online gaming.⁵⁵ This has the potential of fuelling a cycle of disinhibition as well as increasingly aggressive behaviour towards perceived out-groups.
- Social Identity Model of Deindividuation Effects (SIDE): This model suggests that the deindividuation
 or depersonalisation of group members can lead individuals to conform to group norms, even if these
 norms promote toxic behaviours. In online gaming, if group norms favour derogatory behaviours toward
 an out-group, individuals are more likely to exhibit such behaviours, thus reinforcing the toxicity within
 the community.⁵⁶
- **Personality Factors**: Various personality traits are associated with toxic behaviour among online gamers. These include sadism, psychopathy, and Machiavellianism, as well as social extraversion, a sense of

⁴⁹ Kowert, Martel, and Swann, "Not Just a Game".

⁵⁰ Ibid.

⁵¹ Ihid

⁵² Lamphere-Englund and White, *The Online Gaming Ecosystem*.

⁵³ Kowert, Martel, and Swann, "Not Just a Game".

⁵⁴ Ibid.

⁵⁵ Kowert, "Dark Participation in Games".

⁵⁶ Ibid.

inferiority, and depression. These traits are positively correlated with different forms of toxic behaviour, in gaming spaces, including trolling behaviour, with sadism showing the strongest correlation.⁵⁷

- **Age**: Younger players are more likely to perceive various forms of toxic behaviour as less serious or even normal, contributing to the prevalence of toxicity within gaming communities.⁵⁸
- **Gameplay Factors**: Games being too easy or too difficult for individual players as well as the competitive and multiplayer nature of games have also been found to contribute to toxic behaviours. For example, competitiveness in video games has been linked to higher levels of aggressive behaviour, regardless of the presence of violent content in the game. Verbal forms of toxicity, such as trash-talking, are more prevalent in competitive gaming environments. Games that emphasise competition over cooperation tend to foster a more competitive and aggressive social environment.⁵⁹

These factors collectively contribute to the development and perpetuation of toxic cultures within gaming spaces. In this way, vulnerable individuals within these communities may find extremist ideologies appealing, as the toxic environment may have already normalised aggressive and otherwise extreme behaviours.

Influence of Group Dynamics

Given how strongly individuals tend to identify with certain communities and groups in online gaming spaces, it is no surprise that practices of differentiation and demarcation, known as 'othering', play a significant role in this context. Othering involves defining a group (in-group) in relation to another (out-group), often perceiving the out-group as inferior. Such processes of differentiation contribute to the formation of social distance and the reinforcement of group identity.⁶⁰ Toxic behaviours, including racism, Islamophobia, sexism, misogyny, homophobia, and ableism, serve to draw boundaries and shape the norms within virtual communities, contributing to the concept of 'online othering'.⁶¹

Online gaming environments and video games themselves can provide fertile ground for these dynamics, potentially amplifying the risk of radicalisation. When games reflect ethnocentric views of the world or promote stereotypes, they can marginalise players who do not share those characteristics or beliefs. This marginalisation can lead to the formation of alternative communities based on in-group/out-group identities, presenting opportunities for extremists to infiltrate gaming culture and capitalise on already existing divisions.⁶²

Aside from fostering a sense of in-group/out-group divisions, socialisation into gamer communities and their unique norms can also play a significant role in contributing to the normalisation of toxicity, whether it manifests as hate speech, misogyny, racism, or other discriminatory actions.

When newcomers are socialised into these communities, they may initially perceive these behaviours as unconventional or shocking. Over time, exposure to toxic narratives and actions within the gaming culture can

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 $^{^{\}rm 58}$ Mattinen and Macey, Online Abuse and Age in Dota 2.

⁵⁹ Cook, "Between a Troll and a Hard Place"; Zubek and Khoo, "Making the Human Care"; Grandprey-Shores et al., "The Identification of Deviance and Its Impact on Retention in a Multiplayer Game"; Adachi and Willoughby, "The Effect of Video Game Competition and Violence on Aggressive Behavior".

⁶⁰ Lamphere-Englund and White, The Online Gaming Ecosystem.

⁶¹ Lumsden and Harmer, "Online Othering: An Introduction".

⁶² Lamphere-Englund and White, *The Online Gaming Ecosystem*.

lead to a desensitisation and normalisation of such narratives and behaviour. Toxicity that was once considered extreme may gradually become accepted as part of the norm.

Extremist ideologies can exploit this normalisation process. Recruiters subtly introduce extremist narratives within gaming conversations, often starting with innocuous topics to avoid immediate rejection. These narratives align with the normalised toxic behaviours, making them appear less radical. Individuals, in their quest for acceptance and conformity within the gaming community, may be more receptive to these views. As extremist narratives become subtly integrated and normalised, individuals may not immediately recognise the shift. They become desensitised to the extreme words and actions, viewing them as unremarkable aspects of their gaming environment. Therefore, this desensitisation can be a crucial step towards radicalisation.

SECTION 3: CHALLENGES,
EFFORTS & OPPORTUNITIES
TO BUILD RESILIENCE IN
GAMING CULTURES AND
SPACES

This section focuses on presenting positive social interaction efforts and opportunities in gaming communities and discusses ways to build resilience to toxicity, radicalisation and extremism in gaming cultures and spaces. It also outlines what policies and practices can be taken/applied from P/CVE and adjacent fields and how to apply them to gaming communities. The analysis is broken down into three sub-sections highlighting both efforts and opportunities at the levels of the gaming industry, government, and community and civil society.

INDUSTRY

Content Detection and Moderation

Historically, the gaming industry has largely avoided the scrutiny of governments and policymakers in the content moderation and regulation space.⁶³ This has, more recently, begun to change as there is increasing attention now on toxicity, radicalisation, and extremism within gaming and gaming-adjacent platforms. However, researchers have noted that although some gaming and gaming-adjacent platforms have made efforts and advances to mitigate toxic gaming cultures and extremism, they are still behind social media platform efforts in the same respects.⁶⁴

Gaming and gaming-adjacent platforms' primary content moderation methods involve text-based moderation and filtering of text chats. This moderation relies on identifying inappropriate behaviour through keyword or phrase detection, aligning with specific rules and guidelines established by platforms. While it can effectively flag clear violations, it has limitations. For example, it tends to lag as language and vocabulary evolve over time to evade detection, and it only covers a fraction of user-created content in games and in-game chats. Nonetheless, companies have increased their efforts and resources to enhance their content detection and moderation capabilities.

Despite their limitations in moderating text chats, many gaming and gaming-adjacent companies have introduced additional communication modalities, such as in-game voice chats and other audio-visual content, which present further challenges in moderation if companies are introducing these formats without the technical expertise and human capacity to moderate audio-visual and other content.⁶⁶

Investing in artificial intelligence (AI) tools to better detect toxic and harmful behaviours that violate community guidelines and policies, as well as detect and remove extremist content disseminated in real time, may be an opportunity for the gaming industry to improve their content detection and moderation capabilities.⁶⁷ However,

⁶⁴ Rosenblat and Barrett, "Gaming The System".

⁶³ Ibid.

⁶⁵ Kowert and Woodwell, "Moderation Challenges in Digital Gaming Spaces: Prevalence of Offensive Behaviors in Voice Chat".

⁶⁶ Rosenblat and Barrett, "Gaming The System".

⁶⁷ Ibid.

this should be done with caution as some experts still have doubts about exploring the use of AI for content moderation, viewing it as more of a risk or threat than opportunity.⁶⁸ For example, it will be essential to ensure that AI is not learning to perpetuate the very toxicity and extremism that content moderation efforts are trying to combat. To fill the knowledge gaps in this area, Ubisoft and Riot Games unveiled a new research project, Zero Harm in Comms, in November 2022 to explore how AI systems could be improved to protect players from harmful communication in gaming spaces.

"Through this technological partnership with Riot Games, we are exploring how to better prevent in-game toxicity as designers of these environments with a direct link to our communities," said Ubisoft executive director Yves Jacquier.⁶⁹

Trust and Safety Teams

Many tech and gaming platforms have established what are known as 'Trust and Safety' teams internally to comply with government policies and regulations. These teams are tasked with implementing strategies to proactively prevent and counter extremism and radicalisation on their platform, as well as a wider range of potential harms and illicit behaviours like hate speech, toxicity, discrimination, abuse, and more. The proactive and reactive strategies employed by these teams are often developed internally and not typically disclosed to the public. However, it is known that content enforcement decisions are often a combination of automated processes and manual removals by moderators, often third-party contractors worldwide.⁷⁰

Although there have been increasing efforts to enhance the capabilities of Trust and Safety teams, these teams tend to be small compared to platform user bases, partly due to resource constraints and expertise shortages in this field. Moreover, some platforms have downsized their Trust and Safety teams in response to financial pressures. This is also coupled with the fact that small Trust and Safety teams are responsible for a wide range of safety issues. Moreover, moderators may be exposed to harmful and traumatic content, impacting their mental health and workplace experiences, a challenge that requires more attention and resources.⁷¹

Despite these challenges, gaming and gaming-adjacent companies are taking steps to enhance platform safety and reduce toxicity and hate. Some gaming and gaming-adjacent companies have made positive progress by joining bodies such as the Global Internet Forum to Counter Terrorism (GIFCT), the EU Internet Forum (EUIF), and Tech Against Terrorism (TAT) to enhance their capabilities, gain valuable advice and guidance for improving their policies and actions, and gain access to real-time alerts and extremism-related content notifications. Additionally, some have joined the EGRN to access expert guidance and emerging research to inform their trust and safety efforts. Encouraging other gaming and gaming-adjacent platforms to engage with global organisations focused on P/CVE is essential for addressing toxicity, hate, and other harmful factors contributing to radicalisation and extremism within gaming communities. This engagement presents an opportunity for improvement in the industry's safety measures.

⁶⁸ Fahey, "AI Moderation Will Cause More Harm than Good | Opinion".

⁶⁹ Rousseau, "Ubisoft and Riot Team up to Develop AI for Safer In-Game Interactions".

⁷⁰ Lamphere-Englund and White, *The Online Gaming Ecosystem*.

⁷¹ ADL Center for Technology & Society, "Caught in a Vicious Cycle: Obstacles and Opportunities for Trust and Safety Teams in the Games Industry".

⁷² Rosenblat and Barrett, "Gaming The System".

⁷³ Lamphere-Englund and White, *The Online Gaming Ecosystem*.

Safety by Design

'Safety by design' to prevent and counter extremism and toxic culture on gaming and gaming-adjacent platforms refers to efforts made by game designers and gaming companies to develop online games and gaming environments that are more resistant to misuse by malign actors / for malign purposes and are more resilient to toxic cultures. As previously mentioned, games and gaming design has a history (and an ongoing trend) of inequality – namely related to sexism, racism, and other forms of discrimination. Only recently has the need to consider toxic and other harmful behaviours, including radicalisation and extremism, become apparent in game design and development. With this growing reckoning, organisations and networks, notably the Fair Play Alliance (FPA) – a global coalition of gaming professionals, developers, and companies well-versed on technical game designs - have taken steps to better understand the exploitation of game designs and narratives by malign actors. 74 This has contributed to better targeted preventive and proactive safety by design measures, wherein gaming companies and designers are more aware of the potential elements within the design and/or narratives of games that have been, or can be, misused for harm and perpetuating toxicity and extremist narratives, and thus have the ability to make design adjustments to the design and narratives of games to prevent such misuses.

Hash-Sharing Database

GIFCT's Hash-Sharing Database is another tool that allows companies to "quickly identify, and share signals, of terrorist and violent extremist activity in a secure, efficient and privacy-protecting manner."⁷⁵ Tech companies that are members of GIFCT, which includes a number of gaming-adjacent and gaming platforms such as Discord, Amazon (which owns Twitch), BitChute, and Microsoft (which hosts various games and gaming spaces), are granted access to this database to improve their ability to combat and prevent hate and extremist rhetoric and content on their platforms. 76 The database consists of unique 'digital fingerprints' – hashes – generated from known extremist content. When a piece of content is identified as extremist and added to the database, its hash is also added for accessibility/shareability across GIFCT members, which can enable members to identify and moderate this content on their own platforms more easily and quickly.

However, this venture remains membership-only, meaning that many gaming and gaming-adjacent platforms do not have access to the database. Therefore, growing GIFCT membership could enhance global coalition efforts against such content, presenting an opportunity to further improve measures in this space.⁷⁷

Livestreaming Response in Relation to Livestreamed/Gamified Attacks

Gaming and gaming-adjacent platforms have also implemented stricter protocols for immediate takedowns of livestreamed terrorist attacks. These protocols ensure that such content is swiftly removed from the platform to minimise its spread and impact. In this context, advanced AI and machine learning (ML) algorithms are employed to detect suspicious or harmful content in real-time during livestreams. This technology enables platforms to automatically identify and flag potentially dangerous content for human review.

⁷⁴ Fair Play Alliance, "FAIR PLAY ALLIANCE AND ADL RALLY INDUSTRY TO COMBAT HATE AND HARASSMENT IN VIDEO GAMES".

^{75 &}quot;GIFCT's Hash-Sharing Database".

^{76 &}quot;GIFCT Membership".

⁷⁷ Lakhani, Video Gaming and (Violent) Extremism: An Exploration of the Current Landscape, Trends, and Threats.

GOVERNMENT & INTERGOVERNMENTAL BODIES

EU Digital Services Act

The EU Digital Services Act (DSA) is a regulatory framework designed to create a safer digital environment for users by regulating online platforms and services, encompassing social media, gaming, and gaming-adjacent platforms.⁷⁸ It introduces a wide range of Articles and obligations to protect consumers and sets minimum standards and stronger accountability rules for online service providers.⁷⁹ These Articles and standards also aim to enhance user experiences, reduce toxicity, and combat hateful behaviour. Key aspects of the DSA include:

- Combatting Illegal Content: Gaming platforms must proactively detect and remove illegal and dangerous content by utilising advanced detection and moderation tools, including ML. Clear community guidelines defining such content and addressing toxicity, hate, and extremism must be outlined for users.
- **Promoting Diversity of Opinion**: Platforms are required to create an environment where users can express their opinions without fear of hate or harassment. This necessitates addressing toxicity, harmful behaviours, and hate speech while actively encouraging inclusive and respectful discourse.⁸⁰
- Transparency and Reporting Obligations: The DSA introduces reporting obligations to enhance transparency in content moderation practices, ensuring users have insights into how platforms handle online content.⁸¹

While the full impact of the DSA on the industry remains to be seen, it reflects a growing focus by governments and intergovernmental entities on regulating online spaces to reduce harm and enhance safety, extending these efforts to gaming and gaming-adjacent platforms.

Increasing Research and Programming Through Grants

Governments and the European Commission have, in recent years, increased their efforts to fund more research and improve programming to build resilience to toxicity and extremism on gaming platforms. For instance, the German government, primarily through the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth's 'Live Democracy!' programme, has provided funding for a project by the Amadeu Antonio Foundation called 'Good Gaming – Well Played Democracy', launched in 2020.⁸² The project aims to expose toxicity and hate in gaming spaces, namely sexism, racism, and anti-Semitism, and develop campaigns through civil society and gamer collaborations against toxic narratives and extremist rhetoric in gaming spaces.⁸³ Leveraging 'digital streetwork' (i.e., an effort to take parts of offline preventative social work into the online space to strengthen social resilience to harmful or extremist influences), the project focuses on creating a supportive and inclusive online environment, providing resources and assistance to individuals susceptible to radicalisation, as well as promoting positive interactions and resilience.

81 Couneson et al., "Gaming Series #2".

^{78 &}quot;The Digital Services Act".

⁷⁹ Härtel, "The Digital Services Act and Its Impact on the Games Industry".

⁸⁰ Ibid

⁸² Amadeu Antonio Stiftung, "Good Gaming - Well Played Democracy".

⁸³ Amadeu Antonio Foundation, "Digital Streetwork – Good Gaming".

Additionally, the European Commission announced a grant opportunity in 2022, under the Horizon Europe Framework Programme (HORIZON), on the 'Enhanced fight against the abuse of online gaming culture by extremists'.84 The grant aims to provide funding to expand research on toxic gaming cultures and their links to radicalisation and extremism, as well as to develop innovative ways to prevent and counter the misuse of gaming for these purposes.

COMMUNITY/CIVIL SOCIETY

Positive Gaming & Influencer Engagement

Numerous civil society organisations, particularly those focused on P/CVE, have implemented pro-social gaming interventions. These initiatives offer unique opportunities to combat toxicity and radicalisation within gaming spaces. Many of the promising efforts in this space engage gaming influencers, often with substantial audiences, in P/CVE or similar types of programmes. 85 Their participation contributes to making online gaming spaces more resistant to toxicity and radicalisation. Gaming influencers serve as credible messengers and ambassadors against extremism, leveraging their role model status for younger audiences.⁸⁶

One notable example of this type of engagement is the German Federal Agency for Civic Education's 'UnFAKE' project. This project engaged livestream gaming influencers on platforms like Twitch to create content addressing disinformation and give tips on how to deal with fake news.⁸⁷ Gaming influencers played games like 'Plague Inc. - Fake News Scenario', which demonstrated how disinformation works and offered tips on recognising and countering fake news in real life.88 Leveraging influencers as advocates against toxicity and extremism seems to hold promise for the success of future P/CVE campaigns in gaming spaces.

In-Game Self-Moderation Efforts

Civil society organisations and gaming companies have collaborated to encourage gamers to take an active role in self-moderation efforts. This approach can help fill the gap in monitoring and moderation capabilities, especially in cases where law enforcement may be limited in its ability to assist. 89 Gamers, given their familiarity with the gaming environment, are often well-equipped to identify and address toxic narratives, extremist rhetoric, and hateful content within gaming spaces. However, further efforts to empower gamers in self-moderation are needed, in addition to further developing central enforcement when violations of community guidelines and policies are reported by gamers. Additionally, safeguards must be established to ensure that community self-moderators are aware of the potential backlash they might receive and are taking appropriate steps to protect themselves.

Some existing efforts in this space involve the empowerment of gamers in self-reporting and moderation of gaming spaces, as well as civil society/non-governmental organisations with cyber expertise launching online initiatives. One such effort was a project called 'Detect to Act', delivered by several non-governmental

⁸⁴ European Commission, "Funding & Tenders: Enhanced Fight against the Abuse of Online Gaming Culture by Extremists".

⁸⁵ Lamphere-Englund and White, The Online Gaming Ecosystem.l

⁸⁶ Schlegel, "Countering the Misuse of Gaming-Related Content & Spaces: Inspiring Practices and Opportunities for Cooperation with Tech Companies".

⁸⁷ Bildung, "Webvideoprojekt UnFAKE Zum Thema Desinformation".

⁸⁹ Hartgers and Leidig, "Fighting Extremism in Gaming Platforms".

organisations in Europe.⁹⁰ The project "uses artificial intelligence to detect online hate speech and then encourages 'upstanders' — volunteers from various European countries who received training on countering digital hate — to respond to the hateful messages with text-based comments, GIFs or humorous cat memes."⁹¹ It employed gamification techniques by encouraging the bystanders of the project with friendly competitions and points given for rankings based on how many hateful posts they could respond to within 24 hours.

Serious Games and Gamifying P/CVE Efforts

Along the same lines, gamification – meaning "the use of game elements in non-game contexts" – has emerged as a tool for P/CVE initiatives and interventions. Although this is still a recent method of online P/CVE projects, the leveraging of elements of gamification for positive interventions has some promise. One of the key suggestions from research is that game elements applied to P/CVE efforts may present additional opportunities and metrics for user engagement. For instance, "collecting points, completing quests, or earning badges means that users must have engaged with the content presented. In contrast to, for instance, impressions and clicks, gamified elements may be used as an indicator of how sustained user engagement was." The prolonged engagement that gamification and gamified elements can provide, as has been seen with gamification of educational tools, can present further opportunities for building resilience to toxicity and extremism in gaming spaces.

Serious games are another P/CVE tool that has been used to educate gamers about toxicity and build resilience against it. These games provide immersive learning experiences that help individuals recognise and counter toxic behaviours. Video games themselves have many positive attributes that P/CVE efforts try to leverage for positive narratives and building resilience in entertaining ways for younger audiences. Some of these include: 1) video games as an education and learning tool for youth; 2) pro-social spaces to improve interpersonal communication skills, build friendships with other players and form communities, and more; and, 3) contributing to positive behaviour, perception, and social changes. As such, more and more efforts have been made by civil society actors to develop serious games to build digital literacy, educate gamers to recognise hate online, and enhance their resilience to toxicity and radicalisation in gaming spaces. Some examples of serious games already developed are Flashpoints, YoungRes, and DECOUNT.

There is still room for improvement with these games, for example balancing the creation of engaging and gamified functions in serious games, such as incentives, rankings and points, and goals, with the focus on 'serious' attributes, such as teaching players about tolerance, diversity, toxicity, and extremist narratives.¹⁰⁰ Nonetheless, games designed for the application in P/CVE contexts or to communicate positive narratives can

^{90 &}quot;DTCT | Detect Then Act: 'Taking Direct Action against Online Hate Speech by Turning Bystanders into Upstanders'".

⁹¹ Schlegel, "Countering the Misuse of Gaming-Related Content & Spaces: Inspiring Practices and Opportunities for Cooperation with Tech Companies".

⁹² Schlegel, "Let's play prevention".

⁹³ Lakhani, White, and Wallner, "THE GAMIFICATION OF (VIOLENT) EXTREMISM".

⁹⁴Schlegel, "Let's play prevention".

⁹⁵ Pisoiu, "Can Serious Games Make a Difference in P/CVE?"

⁹⁶ Schlegel, "Playing Against Radicalisation".

^{97 &}quot;Flashpoints".

⁹⁸ Panizo-Lledot et al., "YoungRes"; Menendez-Ferreira et al., "Improving Youngsters' Resilience Through Video Game-Based Interventions".

⁹⁹ Extremismus.Info, "DECOUNT - The Game".

¹⁰⁰ Pisoiu, "Can Serious Games Make a Difference in P/CVE?"

support the design of gamified interventions, and vice-versa, to find new and more engaging and entertaining ways to enhance resilience in gaming spaces and combat toxicity and extremism.¹⁰¹

P/CVE Mentorship Through Gaming and E-Sports

In recent years, community engagement and mentorship through gaming has emerged as a promising avenue for P/CVE. Several initiatives worldwide have demonstrated the potential of this approach in building trust and fostering mentorship relationships through the playing of e-sports. By leveraging the appeal of gaming and e-sports, P/CVE mentorship programmes aim to provide positive role models, foster understanding, and offer an alternative to extremist narratives.¹⁰²

While data continues to emerge from these types of mentorship efforts, there are several examples particularly between law enforcement and young people where these types of mentorship programmes have been and are being used to reach young people in vulnerable communities. Police forces have recognised the value of connecting through popular e-sports platforms, with officers engaging directly with local populations and creating a platform for open communication. These initiatives not only bridge the gap between law enforcement and youth but also serve as a practical means of maintaining contact and providing guidance.

For example, the Netherlands and the United Kingdom both ran similar pioneering programmes initiated and implemented by local police forces utilising video games and e-sports as a youth outreach mechanism. They ran under the assumption that by playing video games with youth they would be able to open more channels of communication with younger audiences and potentially reach marginalised communities, who may otherwise be difficult to reach. ¹⁰³ By participating in gaming activities, officers break down barriers and build rapport with young individuals. These interactions often lead to mentorship relationships, offering guidance and support to at-risk youth. The two projects highlight the ability to use both online and offline communication approaches with youth using games:

- Online: Gamen Met De Politie (Gaming with the Police) was implemented online and enabled young
 people to enter weekly gaming sessions with members of local police forces and play popular games
 together, including Call of Duty and FIFA, and communicate at the same time.¹⁰⁴
- Offline: Cops vs Kids took place in a youth centre to host competitive e-sports and gaming sessions with
 police officers playing on a team against young people in the area. This initiative also included
 cooperation with e-sports associations in the UK, highlighting efforts to generate better partnerships
 between the public and private sector which serves as a best practice for P/CVE actors and future
 initiatives.¹⁰⁵

¹⁰¹ Schlegel, "Playing Against Radicalization Why Extremists Are Gaming and How P/CVE Can Leverage the Positive Effects of Video Games to Prevent Radicalization".

¹⁰² Frenett and S, "Spotlight on Digital Challenges: Online Gaming Platforms".

¹⁰³ Schlegel, "Countering the Misuse of Gaming-Related Content & Spaces: Inspiring Practices and Opportunities for Cooperation with Tech Companies".

^{104 &}quot;Gamen Met de Politie".

^{105 &}quot;Gaming Used as a Successful Tool to Build Relationships between Police and Youth in Cops vs Kids Pilot - British Esports Federation".

CONCLUSION & RECOMMENDATIONS

This paper has explored various aspects of the multifaceted world of online gaming, demonstrating that gaming communities face a range of threats, from toxicity and hate speech to radicalisation and extremism. Toxic peer dynamics in gaming communities often replicate offline behaviours. Such dynamics can promote misogyny, racism, and extremism, making them crucial areas of concern. These issues are interlinked and require multifaceted solutions.

The gaming industry has in some cases taken steps to address these challenges, including through content moderation, Trust and Safety teams, safety by design, and participation in global forums. Civil society organisations similarly play a vital role in implementing positive gaming interventions, influencer engagement, self-moderation efforts, and the development of serious games for prevention. Also, policymakers are increasingly focusing on gaming as part of broader digital regulation, exemplified by the EU Digital Services Act. Grants and funding opportunities are also emerging to support research and initiatives and are highly recommended to continue and be expanded.

While these efforts are promising, the findings of this paper underscore the need for coordinated efforts among national governments and intergovernmental entities, gaming companies, and civil society organisations, as well as with gamers and gaming communities themselves to create safer and more resilient gaming spaces. The following recommendations provide a path forward for policymakers to address these challenges effectively.

KEY RECOMMENDATIONS

It should first be noted that one of the key recommendations for policymakers and EU MS governments in this space is to refrain from suggesting, or take care not to suggest, that online gaming is inherently problematic, causes violence, and/or is a negative anti-social space, either explicitly or implicitly. While toxicity has existed and continues to exist in gaming spaces, it should be considered that "there is currently no evidence that being a gamer or frequenting gaming spaces makes individuals more susceptible to radicalization processes." There is a tremendous number of positive effects and outcomes of gaming which should be emphasised. Thus, the following efforts can be made to effectively identify and address toxicity and radicalisation in gaming spaces:

Strengthening Content Moderation Efforts:

- Monitor the implementation of the DSA by gaming platforms.
- Encourage gaming companies within your jurisdiction to invest in advanced AI tools for more effective detection and removal of toxic and extremist content.
- Facilitate partnerships between industry and academia to support research on Al-based content moderation, including real-time content monitoring during livestreams.
- Advocate for transparency in content moderation practices to ensure user trust and accountability.

¹⁰⁶ Schlegel and Amarasingam, Examining the Intersection Between Gaming and Violent Extremism.

• Promote initiatives that empower and safeguard gamers to actively engage in self-reporting and moderation of gaming spaces. Encourage positive community engagement techniques.

Empowering Trust and Safety Teams and Better Integration of Safety by Design Measures:

- Fund further research assessing the scope of toxicity and threat of extremism in gaming spaces.
- Promote adequate resourcing of Trust and Safety teams, considering the scale of platforms and the breadth of safety issues they handle through public-private sector dialogues and regulations.
- Aid in the development of guidelines for best practices in content moderation and ensure the well-being of moderators exposed to harmful content.
- Encourage gaming platforms operating in your jurisdiction to join and further engage with multistakeholder organisations like the EGRN, GIFCT, EUIF, and TAT for valuable resources.
- Champion safety by design principles in the gaming industry, emphasising the need for environments resilient to toxicity and extremist narratives.
- Facilitate collaboration between game designers, developers, and researchers to identify and address potential misuses of game elements.

Enhance Private-Public Sector Dialogue and Multi-Stakeholder Partnerships:

- Focus on developing constructive and meaningful dialogue and partnerships between EU MS
 government entities, national law enforcement agencies, and gaming and gaming-adjacent platforms to
 promote user safety and counter hate, extremism, and illegal content in gaming spaces.
- Fund, leverage, and engaging with global coalitions and networks working in this space, in particular EGRN, GIFCT, TAT, and RAN Policy Support and Practitioners.
- Ensure representation and integration of the voices of gamers in the creation of policy frameworks, measures, and interventions through gaming-related civil society, non-governmental, and advocacy organisations, as their perspectives are essential and instrumental to designing effective policy responses.

Promoting Positive Gaming & Influencer Engagement:

- Encourage civil society organisations within your jurisdiction to collaborate with gaming influencers in P/CVE initiatives to combat toxicity and radicalisation.
- Foster partnerships that leverage influencers as credible messengers against extremism within gaming communities.
- Encourage collaboration between developers and researchers to strike a balance between gamified elements and educational content in serious games.
- Explore opportunities to replicate successful mentorship initiatives, such as the Cops vs. Kids e-sports project, in your own jurisdiction.

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REFERENCES

- Adachi, Paul J. C., and Teena Willoughby, "The Effect of Video Game Competition and Violence on Aggressive Behavior: Which Characteristic Has the Greatest Influence?", *Psychology of Violence*, Vol. 1, No. 4, 2011, pp. 259–274.
- ADL Center for Technology & Society, "Caught in a Vicious Cycle: Obstacles and Opportunities for Trust and Safety Teams in the Games Industry", March 2023. https://www.adl.org/resources/report/caught-vicious-cycle-obstacles-and-opportunities-trust-and-safety-teams-games.
- Amadeu Antonio Foundation, "Digital Streetwork Good Gaming", *Amadeu Antonio Stiftung*, n.d. https://www.amadeu-antonio-stiftung.de/good-gaming-well-played-democracy/digital-streetwork/.
- Amadeu Antonio Stiftung, "Good Gaming Well Played Democracy", n.d. https://www.amadeu-antonio-stiftung.de/projekte/good-gaming-well-played-democracy/.
- Bildung, Bundeszentrale für politische, "Webvideoprojekt UnFAKE Zum Thema Desinformation", *Bpb.De*, n.d. https://www.bpb.de/lernen/bewegtbild-und-politische-bildung/webvideo/unfake/.
- Bjarnegård, Elin, Erik Melander, and Jacqui True, *The Sexism and Violence Nexus, Peace Research Institute Oslo:*New Insights on Women, Peace and Security (WPS), 2020.
 http://dx.doi.org/10.13140/RG.2.2.28188.51841.
- Breuer, Johannes, Rachel Kowert, Ruth Festl, and Thorsten Quandt, "Sexist Games=sexist Gamers? A Longitudinal Study on the Relationship between Video Game Use and Sexist Attitudes", *Cyberpsychology, Behavior and Social Networking*, Vol. 18, No. 4, April 2015, pp. 197–202.
- Cicchirillo, Vincent, and Osei Appiah, "The Impact of Racial Representations in Video Game Contexts: Identification with Gaming Characters", *New Media and Mass Communication*, Vol. 26, No. 0, 2014, p. 14. https://www.iiste.org/Journals/index.php/NMMC/article/view/13685.
- Cohen-Peckham, Eric, "Confronting Racial Bias in Video Games", *TechCrunch*, June 21, 2020. https://techcrunch.com/2020/06/21/confronting-racial-bias-in-video-games/.
- Cook, Christine L., "Between a Troll and a Hard Place: The Demand Framework's Answer to One of Gaming's Biggest Problems", *Media and Communication*, Vol. 7, No. 4, December 20, 2019, pp. 176–185. https://www.cogitatiopress.com/mediaandcommunication/article/view/2347.
- Couneson, Guillaume, Jemma Purslow, Annabel Sim, and Garance Dekeyser, "Gaming Series #2: Online Safety and Gaming EU and UK Approaches to Regulation", *Passle*, June 5, 2023. https://techinsights.linklaters.com/post/102ig9a/gaming-series-2-online-safety-and-gaming-eu-and-uk-approaches-to-regulation.
- Cross, Liam, Linda K Kaye, Juris Savostijanovs, Neil McLatchie, Matthew Johnston, Liam Whiteman, Robyn Mooney, and Gray Atherton, "Gendered Violence and Sexualized Representations in Video Games: (Lack of) Effect on Gender-Related Attitudes", *New Media & Society*, February 11, 2022, p. 14614448221075736. https://doi.org/10.1177/14614448221075736.
- Díaz, Pablo Castillo, and Nahla Valji, "Symbiosis of Misogyny and Violent Extremism: New Understandings and Policy Implications", *Journal of International Affairs*, Vol. 72, No. 2, 2019, pp. 37–56. https://www.jstor.org/stable/26760831.
- "DTCT | Detect Then Act: 'Taking Direct Action against Online Hate Speech by Turning Bystanders into Upstanders'", Detect Then Act, n.d. https://dtct.eu/.
- European Commission, "Funding & Tenders: Enhanced Fight against the Abuse of Online Gaming Culture by Extremists", European Commission Funding & Tender Opportunities, June 2022. https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl3-2022-fct-01-03.
- Extremismus.Info, "DECOUNT The Game", extremismus.info, n.d. https://www.extremismus.info/decounten. Fahey, Rob, "AI Moderation Will Cause More Harm than Good | Opinion", GamesIndustry.Biz, November 18,
- 2022. https://www.gamesindustry.biz/ai-moderation-will-cause-more-harm-than-good-opinion.

- Fair Play Alliance, "FAIR PLAY ALLIANCE AND ADL RALLY INDUSTRY TO COMBAT HATE AND HARASSMENT IN VIDEO GAMES", Fair Play Alliance, December 16, 2020. https://fairplayalliance.org/fair-play-alliance-and-adl-rally-industry-to-combat-hate-and-harassment-in-video-games/.
- Fangen, Katrine, and Lisanne Lichtenberg, "Gender and Family Rhetoric on the German Far Right", *Patterns of Prejudice*, Vol. 55, No. 1, April 20, 2021, pp. 71–93. https://doi.org/10.1080/0031322X.2021.1898815.
- "Flashpoints: An Interactive Game on Counter-Terrorism", *International Centre for Counter-Terrorism ICCT*, n.d. https://www.icct.nl/node/58.
- Frenett, Ross, and Joost S, "Spotlight on Digital Challenges: Online Gaming Platforms", *Radicalisation Awareness Network (RAN) Practitioners*, May 26, 2021. https://home-affairs.ec.europa.eu/spotlight-digital-challenges en.
- "Gamen Met de Politie", *Politie Nederland*, n.d. https://www.politie.nl/onderwerpen/gamen-met-de-politie.html.
- "Gaming Used as a Successful Tool to Build Relationships between Police and Youth in Cops vs Kids Pilot British Esports Federation", *British ESports*, November 4, 2021. https://britishesports.org/news/gaming-used-as-a-successful-tool-to-build-relationships-between-police-and-youth-in-cops-vs-kids-pilot/.
- Gartenstein-Ross, Daveed, Andrew Zammit, Emelie Chace-Donahue, and Madison Urban, "Composite Violent Extremism: A Radicalization Pattern Changing the Face of Terrorism", *The Lawfare Institute*, November 22, 2022. https://www.lawfaremedia.org/article/composite-violent-extremism-radicalization-pattern-changing-face-terrorism.
- Gestos, Meghan, Jennifer Smith-Merry, and Andrew Campbell, "Representation of Women in Video Games: A Systematic Review of Literature in Consideration of Adult Female Wellbeing", *Cyberpsychology, Behavior and Social Networking*, Vol. 21, No. 9, September 2018, pp. 535–541.
- "GIFCT Membership", GIFCT, n.d. https://gifct.org/membership/.
- "GIFCT's Hash-Sharing Database", GIFCT, n.d. https://gifct.org/hsdb/.
- Grandprey-Shores, Kate, Yilin He, Kristina L. Swanenburg, Robert Kraut, and John Riedl, "The Identification of Deviance and Its Impact on Retention in a Multiplayer Game", *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing, CSCW '14*, Association for Computing Machinery, New York, NY, USA, 2014, pp. 1356–1365. https://doi.org/10.1145/2531602.2531724.
- Gray, K. L., "Deviant Bodies, Stigmatized Identities, and Racist Acts: Examining the Experiences of African-American Gamers in Xbox Live", *New Review of Hypermedia and Multimedia*, Vol. 18, No. 4, December 3, 2012, pp. 261–276. https://doi.org/10.1080/13614568.2012.746740.
- Härtel, Marian, "The Digital Services Act and Its Impact on the Games Industry", ITMediaLaw Rechtsanwalt Marian Härtel, June 22, 2023. https://itmedialaw.com/en/the-digital-services-act-and-its-impact-on-the-games-industry/.
- Hartgers, Menso, and Eviane Leidig, "Fighting Extremism in Gaming Platforms: A Set of Design Principles to Develop Comprehensive P/CVE Strategies", *International Centre for Counter-Terrorism ICCT*, June 1, 2023. https://www.icct.nl/publication/fighting-extremism-gaming-platforms-set-design-principles-develop-comprehensive-pcve.
- "Hate Is No Game: Harassment and Positive Social Experiences in Online Games 2021 | ADL", Anti-Defamation League, September 13, 2021. https://www.adl.org/resources/report/hate-no-game-harassment-and-positive-social-experiences-online-games-2021.
- Kowert, Rachel, "Dark Participation in Games", *Frontiers in Psychology*, Vol. 11, November 10, 2020. https://www.frontiersin.org/articles/10.3389/fpsyg.2020.598947.
- ———, "Extremist Action in Digital Gaming Spaces: The Role of Identity Fusion", *Global Network on Extremism and Technology (GNET)*, November 21, 2022. https://gnet-research.org/2022/11/21/extremist-action-in-digital-gaming-spaces-the-role-of-identity-fusion/.
- Kowert, Rachel, Alexi Martel, and William B. Swann, "Not Just a Game: Identity Fusion and Extremism in Gaming Cultures", Frontiers in Communication, Vol. 7, October 17, 2022. https://www.frontiersin.org/articles/10.3389/fcomm.2022.1007128.
- ———, "You Are What You Play: The Risks of Identity Fusion in Toxic Gamer Cultures", *Games: Research and Practice*, Vol. 1, No. 2, July 5, 2023, p. 17:1-17:3. https://dl.acm.org/doi/10.1145/3604402.

- Kowert, Rachel, and Liz Woodwell, "Moderation Challenges in Digital Gaming Spaces: Prevalence of Offensive Behaviors in Voice Chat", December 2022. https://www.takethis.org/wp-content/uploads/2022/12/takethismodulatereport.pdf.
- Lakhani, Dr Suraj, Jessica White, and Claudia Wallner, "THE GAMIFICATION OF (VIOLENT) EXTREMISM", Radicalisation Awareness Network (RAN) Policy Support, October 2022. https://homeaffairs.ec.europa.eu/system/files/2022-09/RAN%20Policy%20Support-%20gamification%20of%20violent%20extremism en.pdf.
- Lakhani, Suraj, Video Gaming and (Violent) Extremism: An Exploration of the Current Landscape, Trends, and Threats, Radicalisation Awareness Network Policy Support (RAN PS), February 2022. https://home-affairs.ec.europa.eu/system/files/2022-02/EUIF%20Technical%20Meeting%20on%20Video%20Gaming%20October%202021%20RAN%20Polic y%20Support%20paper_en.pdf.
- Lamphere-Englund, Galen, and Jessica White, *The Online Gaming Ecosystem: Assessing Socialisation, Digital Harms, and Extremism Mitigation Efforts*, Global Network on Extremism & Technology (GNET), May 2023. https://kclpure.kcl.ac.uk/portal/en/publications/the-online-gaming-ecosystem-assessing-digital-socialisation-extre.
- ———, "The Pentagon Leak: Childish Stunt or Dangerous Trend?", Royal United Services Institute (RUSI), April 26, 2023. https://rusi.org/explore-our-research/publications/commentary/pentagon-leak-childish-stunt-or-dangerous-trend.
- ———, "The Buffalo Attack and the Gamification of Violence", Royal United Services Institute (RUSI), May 16, 2022. https://rusi.org/explore-our-research/publications/commentary/buffalo-attack-and-gamification-violence.
- Latif, Mehr, Kathleen Blee, Matthew DeMichele, and Pete Simi, "Do White Supremacist Women Adopt Movement Archetypes of Mother, Whore, and Fighter?", *Studies in Conflict & Terrorism*, Vol. 46, No. 4, May 12, 2020, pp. 415–432. https://doi.org/10.1080/1057610X.2020.1759264.
- Lorenz, Taylor, and Kellen Browning, "Dozens of Women in Gaming Speak Out About Sexism and Harassment", The New York Times, June 23, 2020, sec. Style. https://www.nytimes.com/2020/06/23/style/women-gaming-streaming-harassment-sexism-twitch.html.
- Lumsden, Karen, and Emily Harmer, "Online Othering: An Introduction", Online Othering: Exploring Digital Violence and Discrimination on the Web, Palgrave Studies in Cybercrime and Cybersecurity, Palgrave Macmillan Cham, 2019. https://link.springer.com/chapter/10.1007/978-3-030-12633-9_1.
- MacDonald, Keza, "Is the Video Games Industry Finally Reckoning with Sexism?", *The Guardian*, July 22, 2020, sec. Games. https://www.theguardian.com/games/2020/jul/22/is-the-video-games-industry-finally-reckoning-with-sexism.
- "Masculinities, Misogyny and Violent Extremism | United Nations Development Programme", UNDP, January 5, 2023. https://www.undp.org/policy-centre/oslo/blog/masculinities-misogyny-and-violent-extremism.
- Mattinen, Topias, and Joseph Macey, Online Abuse and Age in Dota 2, 2018.
- McCauley, Clark, and Sophia Moskalenko, *Friction: How Radicalization Happens to Them and Us*, Oxford University Press, USA, 2011.
- McCulloch, Jude, Sandra Walklate, JaneMaree Maher, Kate Fitz-Gibbon, and Jasmine McGowan, "Lone Wolf Terrorism Through a Gendered Lens: Men Turning Violent or Violent Men Behaving Violently?", *Critical Criminology*, Vol. 27, No. 3, September 1, 2019, pp. 437–450. https://doi.org/10.1007/s10612-019-09457-5.
- Menendez-Ferreira, R., J. Torregrosa, A. Panizo-Lledot, A. Gonzalez-Pardo, and David Camacho, "Improving Youngsters' Resilience Through Video Game-Based Interventions", *Vietnam Journal of Computer Science*, Vol. 07, No. 03, August 2020, pp. 263–279. https://www.worldscientific.com/doi/10.1142/S2196888820500153.
- Miller-Idriss, Cynthia, Hate in the Homeland: The New Global Far Right, Princeton University Press, 2022.
- Nagle, Angela, Kill All Normies: Online Culture Wars From 4Chan And Tumblr To Trump And The Alt-Right, Zero Books, Alresford, GBR, 2017. https://dl.acm.org/doi/10.5555/3160953.

- Panizo-Lledot, Ángel, Javier Torregrosa, Raquel Menéndez-Ferreira, Daniel López-Fernández, Pedro P. Alarcón, and David Camacho, "YoungRes: A Serious Game-Based Intervention to Increase Youngsters Resilience Against Extremist Ideologies", *IEEE Access*, Vol. 10, 2022, pp. 28564–28578.
- Paul, Christopher A., *The Toxic Meritocracy of Video Games: Why Gaming Culture Is the Worst*, University of Minnesota Press, Minneapolis, 2018. https://muse.jhu.edu/pub/23/monograph/book/58306.
- Pearson, Elizabeth, "Why Men Fight and Women Don't: Masculinity and Extremist Violence", *Tony Blair Institute for Global Change*, September 13, 2018. https://www.institute.global/insights/geopolitics-and-security/why-men-fight-and-women-dont-masculinity-and-extremist-violence.
- Pearson, Elizabeth, Emily Winterbotham, and Katherine E. Brown, *Countering Violent Extremism: Making Gender Matter*, *Rethinking Political Violence*, Springer International Publishing, Cham, 2021. https://link.springer.com/10.1007/978-3-030-21962-8.
- Peckford, Ashley, "Right Wing Extremism in a Video Game Community? A Qualitative Content Analysis Exploring the Discourse of the Reddit GamerGate Community r/KotakuInAction", Criminological Perspectives from Crim 862, June 2020. https://www.sfu.ca/~palys/ACloserLookInUnusualTimes-2020-HR.pdf#page=71.
- Phelan, Alexandra, Jessica White, Claudia Wallner, and James Paterson, Introductory Guide to Understanding Misogyny and the Far-Right, Misogyny, Hostile Beliefs And The Transmission Of Extremism: A Comparison Of The Far-Right In The UK And Australia, Centre for Research and Evidence on Security Threats (CREST), February 20, 2023. https://crestresearch.ac.uk/resources/introductory-guide-to-understanding-misogyny-and-the-far-right/.
- Pilkington, Hilary, "'EDL Angels Stand beside Their Men ... Not behind Them': The Politics of Gender and Sexuality in an Anti-Islam(Ist) Movement", *Gender and Education*, Vol. 29, No. 2, February 23, 2017, pp. 238–257. https://doi.org/10.1080/09540253.2016.1237622.
- Pisoiu, Daniela, "Can Serious Games Make a Difference in P/CVE?", GNET, September 5, 2022. https://gnet-research.org/2022/09/05/can-serious-games-make-a-difference-in-p-cve/.
- Rennick, Stephanie, Melanie Clinton, Elena Ioannidou, Liana Oh, Charlotte Clooney, E. T., Edward Healy, and Seán G. Roberts, "Gender Bias in Video Game Dialogue", *Royal Society Open Science*, Vol. 10, No. 5, May 24, 2023, p. 221095. https://royalsocietypublishing.org/doi/10.1098/rsos.221095.
- Reyman, Jessica, and Erika M. Sparby, eds., "Digital Ethics: Rhetoric and Responsibility in Online Aggression", *Digital Ethics*, Taylor & Francis, 2019. https://library.oapen.org/handle/20.500.12657/41372.
- Rosenblat, Mariana Olaizola, and Paul M. Barrett, "Gaming The System: How Extremists Exploit Gaming Sites And What Can Be Done To Counter Them", NYU Stern Center for Business and Human Rights, May 2023. https://bhr.stern.nyu.edu/tech-gaming-report.
- Rousseau, Jeffrey, "Ubisoft and Riot Team up to Develop AI for Safer In-Game Interactions", *GamesIndustry.Biz*, November 16, 2022. https://www.gamesindustry.biz/ubisoft-and-riot-team-up-to-develop-ai-for-safer-in-game-communication.
- Schlegel, Linda, "Countering the Misuse of Gaming-Related Content & Spaces: Inspiring Practices and Opportunities for Cooperation with Tech Companies", Radicalisation Awareness Network (RAN) Practitioners, November 2022. https://home-affairs.ec.europa.eu/system/files/2022-11/countering misuse gaming-related content spaces inspiring-practices 112022 en.pdf.
- ———, "Let's play prevention: Can P/CVE turn the tables on extremists' use of gamification?", PRIF BLOG, March 29, 2021. https://blog.prif.org/2021/03/29/lets-play-prevention-can-p-cve-turn-the-tables-on-extremists-use-of-gamification/.
- ———, "Playing Against Radicalisation: Why Extremists Are Gaming and How P/CVE Can Leverage the Positive Effects of Video Games to Prevent Radicalisation", GNET, October 19, 2022. https://gnet-research.org/2022/10/19/playing-against-radicalisation-why-extremists-are-gaming-and-how-p-cve-can-leverage-the-positive-effects-of-video-games-to-prevent-radicalisation/.
- ———, "Playing Against Radicalization Why Extremists Are Gaming and How P/CVE Can Leverage the Positive Effects of Video Games to Prevent Radicalization", October 10, 2022.
- Schlegel, Linda, and Amarnath Amarasingam, Examining the Intersection Between Gaming and Violent Extremism, United Nations Office of Counter-Terrorism (UNOCT), October 5, 2022. https://www.un.org/counterterrorism/sites/www.un.org.counterterrorism/files/221005_research_lau nch_on_gaming_ve.pdf.

- "Sexism in the Gaming Industry: Are Things Beginning to Change? Society of Women Engineers Magazine", Magazine of the Society of Women Engineers, May 2023. https://magazine.swe.org/gaming-sidebar/.
- "The Digital Services Act: Ensuring a Safe and Accountable Online Environment", n.d. https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-services-act-ensuring-safe-and-accountable-online-environment_en.
- Wells, Garrison, Agnes Romhanyi, Jason G. Reitman, Reginald Gardner, Kurt Squire, and Constance Steinkuehler, "Right-Wing Extremism in Mainstream Games: A Review of the Literature", *Games and Culture*, April 11, 2023, p. 15554120231167214. https://doi.org/10.1177/15554120231167214.
- Weststar, Johanna, Eva Kwan, and Shruti Kumar, *Developer Satisfaction Survey 2019 Summary Report*, International Game Developers Association, November 20, 2019. https://s3-us-east-2.amazonaws.com/igda-website/wp-content/uploads/2020/01/29093706/IGDA-DSS-2019_Summary-Report_Nov-20-2019.pdf.
- Wong, Kristen, "The Lack of Diversity in Video Games: A Forum Post", STYLUS KNIGHTS WRITE SHOWCASE SPECIAL ISSUE, Spring 2018. https://cah.ucf.edu/wp-content/uploads/sites/27/2019/10/KWS18_Wong.pdf.
- Zubek, Khoo, and Aaron Khoo, "Making the Human Care", Evanston, IL: Northeastern University Computer Science,

 https://www.qrg.northwestern.edu/resources/aigames.org/papers2002/2SSS202RZubek.pdf.