INTRODUCTION

This Quarterly Research Review (QRR) provides an overview of the current state of research in relation to hate speech and gamification. This review aims at presenting policymakers with a compilation of recent open-source and grey literature publications on the topics of hate speech and gamification.

The QRR is structured around the following subtopics:

- **Problem scope**: this section includes papers discussing the concepts of gamification and hate speech online and their underpinning components;
- **Online hate speech gamification**: this section includes papers outlining the use of gaming and gamification tools and elements by (violent) extremist groups, including fostering the development of hate speech online;
- **Gamification as a P/CVE tool**: this section maps use cases of P/CVE interventions leveraging gamification to address the spread of online hate speech;
- **Future trends and technological developments**: this section includes papers exploring new and emerging technological developments and future trends in the gaming and gamification ecosystem, which may impact the spread of hate speech online;
- **Conclusions**: this section provides an overview of key findings stemming from a cross-cutting analysis of evidence and insights from all selected papers.

METHODOLOGY

The study conducted an initial targeted literature review to identify relevant sources discussing the proposed subtopics of interest in relation to hate speech and gamification. The search was conducted in English and included:

- Sources published in the past 36 months.
- Sources that are accessible either as open-source publications through *inter alia* academic journals or as grey literature publications (i.e. research published outside of traditional commercial or academic publishing and distribution channels).

Research identified 14 relevant sources. The study team extracted the core findings of each paper, focusing on the selected subtopics for this review:

- Problem scope;
- Online hate speech gamification;
- Gamification as a P/CVE tool;
- Future trends of gamification.

This review spans a significant range of relevant and contemporary sources on hate and gamification since 2019. However, this QRR is not an exhaustive review and the following caveats and limitations should be noted:
• The review only included open-source literature available in the public domain, ensuring the accessibility of the papers presented by limiting the scope of papers to be included, this, therefore, does not reflect the whole range of literature recently published on the selected subtopics.

• Time and resource constraints did not allow the study team to consider all available literature through systematic searches. Instead, the study team focused on identifying relevant open-source and grey literature under each of the selected subtopics through targeted searches.

• Literature searches were conducted in English therefore there remains potential to widen the scope of the review to integrate viewpoints from a broader geographical range, for example across European Member States.

• There is a limited understanding of the phenomenon of gamification beyond stigmatising those who take part in gaming activities. Gaming and gamification remain relatively new issues in the context of P/CVE.

STRATEGIC SUMMARY

This Quarterly Research Review (QRR) has investigated the state of contemporary literature in relation to the topics of hate speech and gamification. Gamification can be understood as the use of gaming-like elements (e.g. points or scores) beyond traditional gaming contexts.¹ The QRR fits with past RAN PS papers and events that are considering the rise of gamification and the spread of hate speech online. The QRR analysed sources across four subtopics including, problem scope, online hate speech gamification, gamification as a P/CVE tool and future trends and technological development to provide a wide-ranging understanding of the state of academic and grey literature perspectives and developments on the topics of hate speech and gamification.

Key takeaways identified through this review include:

• Gamification as a research topic in the field of radicalisation remains nascent and further research is needed not only to better understand this phenomenon but also in relation to its use by extremist organisations as well as authorities and practitioners as a P/CVE tool.

• Extremist organisations have leveraged the increased use of online platforms to utilise video games and game-like features to attract new supporters but also to spread their messages and communicate more widely.

• There is a lack of consensus on the primary objective pursued by extremist groups through the use of gamification. Some scholars argue that gamification is developed to recruit new supporters beyond their existing supporters. Others posit that the use of gamification is likely to support the normalisation of extremist beliefs and viewpoints. By reaching out to new audiences, they can also attract new supporters.

• The development of online spaces of socialisation that normalise exposure and engagement with extremist content through repetition can support radicalisation efforts and the spread of hate speech online.

• Echoing a RAN PS Thematic Research Meeting (TRM) organised in July 2022 on the topics of gamification and hate speech online, this QRR points to the limited examples of P/CVE interventions leveraging gaming and gamification tools and approaches, but these attempts
appear to be positive both with regards to radicalisation and more specifically to address the spread of hate speech online. These initiatives encompass the use of games developed by news outlets to raise awareness of refugees’ situations and experiences; the development of serious games to directly address the spread of hate speech online or pathways to radicalisation, or to develop young people’s media literacy skills in an online environment.

- Hate speech online appears to materialise primarily through harassment for a majority of users of gaming or gaming-like online platforms.

- Extremist organisations have adapted to mitigation efforts taken by technology companies and/or law enforcement authorities, taking advantage to of technological developments and features such as the spread of closed online spaces to maintain their presence online and continue their outreach activities.

- Financial incentivisation features on gaming and gaming-like platforms are likely to be exploited by extremist groups for their financial benefit.

KEY MESSAGE:
- The relationship between gaming, gamification and radicalisation is not clearly established and needs to be further researched both regarding Salafi-Jihadism and Right-wing extremism. Three mechanisms could enable this process: (i) supporting psychological needs; (ii) increasing exposure to extremist ideology entertainingly; and (iii) increasing social interaction on extremist platforms.

This paper discusses potential links between gaming, gamification and radicalisation but recognises the need for additional research on this topic, including the role of non-violent video games. Gaming and gamification are being used by both right-wing and Islamist extremist groups for various purposes and goals and suggest pathways on how gaming and gamification may lead to or facilitate radicalisation. The article explores how games and gamification could increase the susceptibility of some individuals to radicalisation but does not provide a holistic account of radicalisation. Highlighting the debate between violent video games and violent behaviour more generally, and despite some findings establishing a link between violent video games and physical and verbal aggression, there is a lack of conclusive evidence on the causal relationship between games and violence.

Noting that evidence on the underlying mechanism of gamification in radicalisation is limited, the author highlights three potential ways in which gamification could facilitate radicalisation: meeting players’ basic psychological needs: feeling competent, feeling autonomous and experiencing social relatedness. First, gaming could normalise engagement with extremist content as it incentivises players to continue playing and remain engaged with extremist content. Second, gamification can also be used by extremist groups to educate users with regard to extremist ideologies in a playful manner. Thirdly, gamification can encourage social interaction through friendly competition and peer motivation. This could facilitate radicalisation both by encouraging individuals to engage more thoroughly with extremist content as they obtain rewards (e.g. points) which could potentially improve their social status within the group, and by being recognised as good players by other users.

The author also discusses top-down and bottom-up gamification processes. Top-down gamification comprises mechanisms through which extremist organisations seek to increase user engagement with their content and platforms, e.g. by passing levels and gaining ranks or points. Bottom-up gamification refers to how individuals in the radicalisation process are likely to use gamified language and other features to spread extremist content. Online discussions in the aftermath of the 2019 Christchurch attack used various gaming terms.

Games may also facilitate radicalisation through:
- **moral disengagement**: distorting the consequences of violence and rewarding players for their engagement in violence could increase an individual’s susceptibility to radicalisation through familiarity with violent content;
- **familiarity**: increasing the cultural appeal of extremist groups through gaming imagery and practice may increase the resonance of extremist propaganda;
- **self-efficacy**: believing in one’s ability to commit real-world violence and bring about genuine political change;
- **retrofian appeal**: games can immerse players in worlds that communicate visions of a glorified past and give them power by allowing them to seek quests of significance, which could motivate individuals to seek this past offline.
Fizek, Sonia and Anne Dippel (2020) ‘Gamification of Terror – Power Games as Liminal Spaces’ in Games and Ethics, Theoretical and Empirical Approaches to Ethical Questions in Digital Games Cultures. As of 17 October 2022: https://www.academia.edu/49329412/Gamification_of_Terror_Power_Games_as_Liminal_Spaces?from=cover_page

KEY MESSAGES:
• The combined use of video games and online social platforms could enable the development of ritualised spaces for right-wing communities.
• The gamification of attacks has led to competition between attackers and their increased personification.

Based on the observation of recent terrorist attacks, this paper aims to understand what the authors designate as the ‘gamification of violence’. Through theoretical and rhetorical analysis, the authors argue that video games and online social platforms play a crucial role in the gamification of extremism. These platforms help create spaces, called ‘liminal spaces’, for far-right communities to form, within which the boundaries between fact and fiction are blurred, and users are encouraged by the gamification of acts of terror.

The authors highlight the recent rise in attacks carried out by right-wing white male extremists acting as ‘lone wolves’ and outside specific extremist group structures. These individuals were radicalised on online gaming boards such as 4chan, 8chan and Gab and their attacks used gamified aspects such as employing expressions such as ‘high scores’ and live streaming their attacks. The authors challenge the narrative that video games directly lead to violence, instead suggesting that it is video games’ community-building capacity to create relationships between individuals through ritual, repetition and competition that can be abused by human actors to encourage individuals to undertake acts of violence.

The authors highlight how community formations within online social platforms provide a necessary space for the growing alt-right community, comprised of scattered, angry and scared white men. Within these communities, violence is being gamified, ritualised and staged as a mass entertainment spectacle. The authors suggest that alternative online social platforms are combined with video game aesthetics to create transitional spaces that blur the lines between fact and fiction. As users are often unable to distinguish between these two spaces, alternative realities and conspiracy theories are spread within these communities.

The authors highlight the role of unmoderated platforms and decentralised online social spaces, such as Gab, 4chan and 8chan in the development of spaces for far-right extremists to share their ideologies and create communities.

The authors distinguish between video games in general and what they designate as ‘power games’. These power games, a subcategory of video game, are characterised by control, combat and violence. The elements are important rhetorical tools for far-right communities which believe violence is an effective method for solving social tensions and preserving a community they believe to be endangered by other groups according to the theory of the ‘Great Replacement’ adopted by right-wing extremist groups.

The authors also discuss how, through the gamification of their attacks, perpetrators are able to influence the realities of their target audiences. Attackers use personalisation, visualisation, dramatisation, narrativisation and authentication of reality to gamify their attacks and create mass spectacles. Furthermore, far-right communities can encourage attacks through their scoring of the performance of shooters which promotes competition over death tolls and elevates the status of the attacker within the community.
This paper investigates how extremists seek to use games within their target audience and proposes a three-element framework for understanding the relationship between video games and terrorism. This paper suggests that extremists use video games primarily to target audiences that already share their worldview, rather than as an attempt to recruit ‘normal’ individuals. The authors also suggest that more research should be conducted on the extremism-terrorism-gamification triangle.

The authors reflect on the scholarly debate around the use of gamification for recruitment or other purposes. The authors posit that extremist groups use games as propaganda, primarily to normalise the beliefs and motivations of individuals within the movement, rather than as a recruitment tool targeting ‘normal’ individuals that are not already inclined to extremist ideology and viewpoints. Indeed, many extremist games contain iconography and specialist knowledge that would resonate only with individuals already cognisant of their ideology and assume the player already holds a specific worldview. The authors note, however, that most of the existing literature on the production and dissemination of extremist video games has focused on recruitment, particularly of young, male and technically savvy individuals.

The authors recognise that extremist organisations, including IS, have echoed video game styles in their propaganda and used clips from video games to appeal to the ‘global youth demographic’. The authors also recommend urgent research to explore the motivations of extremist game designers and players, as well as to understand what players ‘gain’ from playing extremist made video games.

The authors highlight that extremist groups have transitioned from producing their own games to modifying existing games and developing propaganda that appropriates mainstream popular cultural iconography.

The authors also explore the importance of the interactive aspect of video games. The authors develop a three-element framework for understanding the interplay between interactivity and propaganda:

1. The authors argue that the interactive nature of games increases their persuasiveness as games allow individuals to explore and challenge the rules that underpin society and allow extremist groups to present their alternative narratives.
2. The authors highlight how games allow individuals to frame meaning through their interpretation of sound, visuals, narratives and interactive gameplay and that while games do not brainwash individuals, individuals can still be impacted by gameplay, particularly younger or more immature players.
3. The authors highlight how extremist groups use interactive gameplay to provide engaging yet challenging experiences for players. When games are too easy, gamers are likely to become bored and disengage, whereas if games are too hard, gamers are likely to become frustrated and disengage.

KEY MESSAGES:
- The intersection between gaming culture and violent extremism is multifaceted, but while there is no direct link between violent games and violent behaviour, it is apparent that extremist groups are leveraging gaming and gamification to promote their ideological messaging and engage with new audiences.
- Extremist groups exploit existing hateful narratives which are already prevalent on gaming platforms, such as misogyny and racism, but seek to drive these in more severe directions.
- There are opportunities for P/CVE practitioners to exploit the same dynamics inherent to the gaming world as extremist organisations do. To do so successfully will require knowledge of the gaming subculture and deep engagement with positive aspects of the gaming community.

This report for the UN Office of Counter-Terrorism assesses the nature and scale of violent extremist groups’ use of online gaming, how policymakers can attempt to counter this emerging threat, and how gaming may be utilised in P/CVE efforts. The authors have conducted a literature review of existing research on the topic and consolidated these findings alongside focus groups with experts and active gamers, as well as the results from an online survey distributed to 600 active gamers. While the findings present evidence of extremist groups exploiting gaming spaces to engage users around their respective ideologies, the authors reject causal links between online gaming and tendencies towards violent behaviour.

The authors contest a causal link between violent influences and violent behaviour among gamers compared to the general population. Gamers with extreme views may have been radicalised prior to joining gaming communities, examples of which include the Christchurch and Halle terrorists.

Right-wing and jihadist extremist groups have produced bespoke games in the post-9/11 era, but the overall focus is on exploiting and modifying existing games, not least because this provides a much broader scope for engagement with new users who may not yet be committed to extreme ideology.

Extremist groups also leverage elements of gaming to amplify the reach and impact of their propaganda and maximise audience engagement through scoreboards, point systems, trophies or badges in addition to visual elements.

Extremist groups also migrate to so-called gaming-adjacent platforms that are less to non-moderated and offer closed spaces that are less detectable. The authors identified a correlation between sophisticated networking features of gaming and gaming-adjacent platforms, and their use by extremist groups to boost their direct engagement mechanisms.

The report found substantial evidence of the prominence of hate speech in online gaming communities, including in non-extremist communities, reporting ‘toxic’ and ‘problematic’ behaviour, including racism, misogyny, and anti-LGBT attitudes that often take on a casual or so-called ‘borderline’ nature rather than explicit extremism targeting individual users to mitigate moderation efforts. Users who engage positively with this type of content in open forums may then be invited to join closed groups where extreme rhetoric and violent attitudes increase in severity.

The authors highlight the need for larger-scale P/CVE interventions utilising gaming and better performance assessments of these interventions. The gaming dynamics that extremist groups now exploit are also open to counterexploitation by P/CVE initiatives through digital literacy education requiring an increased understanding of gaming culture to gather more support.

KEY MESSAGES:

- There is clear evidence that online hate has increased over the past few years, which can harm individuals and also escalate to hate crime offences in offline spaces.
- The lack of consistent legislation presents challenges for both law enforcement and tech companies to combat and prevent online hate speech.
- Bots and fake accounts constitute a particular risk to spreading online hate at a great scale, as they take little to maintain while also not responding to interventions.

This high-level report outlines the current challenges and opportunities relating to online hate speech in the UK and wider European context. The study provides an overview of previous academic work conducted on this topic. The legal and political frameworks concerning hate speech and online abuse are presented alongside findings of the prevalence of the phenomena, as well as ongoing initiatives to combat these issues. Hate speech is difficult to define and therefore to address from a legal standpoint.

The data presented in the paper indicate that hate speech has increased over the past few years. Reported online hate crimes increased by 40% between 2017 and 2018 alone, and the author estimates that this is a clear underestimation of the true extent of online hate given both the underreporting of offences and disparities in how these offences are both recorded and pursued by police officers. Moreover, there is also evidence that hate speech online increases prominently after disruptive world events such as terrorist attacks.

There are also notable gaps in gathering robust data, as there is no single definition of hate speech or hate crime which adequately applies to the various online harms laid out in the research. For example, certain inherent characteristics such as religion and race are protected, whereas gender is not. There is strong evidence that misogyny is one of the most prevalent forms of online hate today, but online abuse towards women would not be classified as a hate crime under the current UK legislation.

Governments have called for increased content moderation by tech companies on whose platforms the hateful offences occur. However, given the lack of clear legislation and clear definitions of hate speech, progress in this area remains slow. There are also substantial differences in the extent to which platforms have the resources to moderate content, smaller ‘fringe’ platforms appear to have fewer capacities than large mainstream ones. Preventing online hate is increasingly rising on the political agenda.

A more recent issue is that of bots, or fake accounts, being created by adversarial state actors to spread disruptive or hateful messaging in online spaces. Bots are non-receptive to interventions such as counter-speech as they are not designed to interact organically with other users. Such bots have been identified en masse both following terrorist attacks and in the context of major political events.

Interventions such as counter speech are likely to be effective in undermining hate speech and abuse online narratives. Terrorist attacks and other significantly disruptive societal events are likely to lead to increased engagement with counter-speech campaigns and narratives. Strategic engagement with new audiences and dismantling disinformation or hateful discourses can further support these efforts. Counter-speech interactions with individuals on Facebook who exhibited extreme-right-wing sentiments assessed three variables of successful engagement: initial responses to interventions, sustained engagement with interveners, and critical reflection on or changes to their initial ideological sentiment and online behaviour. 64% of respondents sustained their engagement over some time, while some showed changes in their opinions or online behaviour following the intervention.

Legislative changes, including the ‘Digital Services Act’, may lead to the establishment of regulatory bodies to counter illegal content online, including hate speech.
ONLINE HATE SPEECH GAMIFICATION


KEY MESSAGES:

• The Christchurch attack is characterised as an example of bottom-up gamification, the attacker used gamified language and tactics online in the set-up and execution of his attack, as have other right-wing extremists.
• More research is needed on gamification and violent extremism to continue developing the framework presented here.

This paper investigates the 2019 Christchurch attack as an example of bottom-up gamification to explore the application of gamification concepts in violent extremism. The authors used content analysis and the theoretical MDE framework (mechanics, dynamics and emotions) to investigate the theme of gamification in the various steps of the Christchurch attack: the publication of the attacker’s manifesto, the live stream of the attack, and online reactions and discussion to the attack and surrounding content on the 8chan platform. Through the analysis of this attack, the author identifies similarities with other so-called ‘gamified’ attacks conducted by right-wing extremist groups.

The authors highlight that although gamification alone is not likely to motivate people to engage in violent extremism, it can play an important role in contributing to blurring lines and boundaries between online and offline spheres, can appeal to wider audiences and can also create confusion by the posting of large amounts of content online in a short time period, also known as ‘shitposting’. Furthermore, even when gamification does not encourage individuals to participate, it may encourage individuals who have already decided to participate to attempt to cause more death and destruction than previous attackers.

This paper focuses on bottom-up gamification, meaninggamification that emerges within communities and is not driven by extremist organisations. The authors highlight four roles that individuals/groups can take: (i) players that are directly engaged in the gamified experience; (ii) designers who develop, maintain and manage the gamified experience; (iii) spectators who do not directly compete but can influence the gamified experience; (iv) and observers who are often potential players or spectators.

Looking specifically at the Christchurch attack, the authors highlight that the perpetrator was a ‘digital native’, experienced in the language typically used by both gamers and right-wing extremists.

In his manifesto, he develops himself as a protagonist character seeking to “ensure a future for [his] people”, provides a narrative of white genocide and presents his list of enemies, including all those who are non-white. He also presents the rules of the game by setting goals, dispelling existing rules and defining legitimate targets.

During the attack, he parallels popular ‘Let’s Play’ videos through his use of a mounted GoPro camera, using multiple weapons, music, erratic driving and his ongoing narrative throughout the attack.

Although online spectators do not appear to have influenced the attacker’s behaviour, comments on the 8chan post used gamified language and gaming references and images in their responses to the attack, such as commenting ‘F’ to pay their respects and counting the attacker’s ‘score’ or body count.

KEY MESSAGES:
• Individuals likely experience gamified content in different ways and thus experience different pathways of radicalisation. Five profiles can be distinguished: (i) the Socialiser; (ii) the Competitor; (iii) the Achiever; (iv) the Meaning Seeker; and (v) the Disrupter.
• These user types should be tested and refined to increase our understanding of how gamification can motivate individuals to engage with extremist content and how this relates to radicalisation.

This article explores the concept of user types within digital radicalisation to explain how different individuals may be drawn to gamified extremist content and how they can hold various motivations to remain engaged in the extremist space. The author presents five user types who experience different motivations and may have different pathways to radicalisation. However, the author cautions that this research is exploratory and theoretical and needs to be tested in empirical research.

The author highlights how gamification may facilitate digital radicalisation processes by making extremist content more appealing and engaging for users, particularly through its ability to reward desired behaviours. However, the author notes the lack of a theoretical and empirical basis for a theory on the gamification of radicalisation.

Gamification has been used as a tool for making digital extremist content more attractive to potential audiences. The author acknowledges the multiple ways in which extremist groups can use gaming, video games and gaming-like approaches, though limits the scope of this paper to gamification. The concept is defined as the transfer of gaming elements outside of game and gaming contexts encompassing a wide range of elements such as points, ranking or missions, adding playful elements.

The author builds upon Marczewski’s framework of user types to investigate how different types of individuals may experience extremist content, though individuals may experience multiple user types as they are not mutually exclusive, and individuals’ motivations can change over time:

• the ‘Socialiser’ seeks to connect and collaborate with others, online and or offline. Socialisers are receptive to gamified elements encouraging community building and experience sharing (e.g. receiving points, likes, reactions or using chat functions and/or collaborating with others). Socialisers are likely to seek connections with small groups of like-minded individuals rather than larger groups.
• the ‘Competitor’ seeks personal gain through increasing their status and gaining the most points vis-a-vis other users. Competitors may enjoy any reward mechanism (e.g. points, and badges) within extremist communities and seek to gain more, possibly through extremist actions. Competitors are likely susceptible to groups that promise to elevate their status.
• the ‘Achiever’ seeks to learn new skills and wants to be part of an elite group. Achievers are motivated to increase their understanding and solve puzzles to produce ‘the truth’. Achievers’ desire to discover the ‘truth’ may draw them to gamified content which can provide them with opportunities to discover this.
• the ‘Meaning Seeker’ wants to feel that they are part of something big and important. Within games, Meaning Seekers may be motivated by epic narratives that have underlying ideological content and allow the user to make sense of the game and give meaning to tasks. The individuals are likely to be engaged by extremists’ narratives that promise to provide meaning to their lives and by calls to transform battles from games into reality.
• the ‘Disrupter’ seeks to challenge or upset both other users and, more broadly, the system. Disrupters likely respond well when rewarded for displaying negative online actions, which can encourage them to continue their engagement and feel socially validated for their actions.
HATE SPEECH AND GAMIFICATION
QUARTERLY RESEARCH REVIEW


KEY MESSAGES:
• The authors recommend that game developers and publishers improve content moderation processes.
• The authors suggest civil society organisations support scholars and practitioners in fighting bias, hate and harassment in games.
• The authors recommend that governments strengthen and enforce laws protecting targets of online hate and harassment.

This paper presents the results of a country-wide survey exploring the experience of US gamers to understand the nature of online interactions within online video games. The results of the 2022 survey demonstrate both positive and negative experiences from those users. This paper also recommends that game designers and developers, civil society and the government further seek to challenge the normalisation of online harassment and hate speech.

The authors highlight the prevalence of online harassment in video games, citing other research that finds only a few players call out this harassment, with most choosing to ignore it or join in. Given the popularity of online video games, the authors emphasise the need for the public, industry, civil society and the government to challenge the normalisation of hate and harassment within games.

The authors highlight that while video games have been popular in the US for over three decades, revenue from video games increased by 9.3% in 2020, suggesting an increase in popularity, in part due to the implications of the COVID-19 pandemic and accompanying restrictions. As with other social platforms, video games offer opportunities for both enriching and harmful interactions.

This paper presents the results of ADL and Newzoo’s 2020 Survey of American gamers (aged 18-45). Overall, 95% reported positive social experiences when playing: 86% reported helping other players, 83% reported making friends and 83% felt they belonged to a community. However, 81% of respondents reported experiencing some form of harassment, with 64% responding that this harassment shaped their gaming experience. Furthermore, 68% of respondents experienced severe abuse, such as physical threats, stalking and sustained harassment. Of those experiencing harassment, 53% reported that they were targeted because of identity characteristics, including race/ethnicity, religion, gender, sexual orientation and ability status.

The survey also examined the impact of harassment upon players: 28% reported avoiding certain games due to their reputations for hostile environments, 22% stopped playing certain games, 16% indicated they became less social, 14% felt isolated, 10% took steps to reduce risks to their physical safety, 11% had depressive or suicidal thoughts, 13% contacted game companies and 9% called the police to ask for help or report harassment.

Additionally, 9% of respondents witnessed discussions on white supremacist ideology, 17% witnessed hateful messages linking the COVID-19 pandemic to the Asian community, 12% observed disinformation around Antifa and Black Lives Matter protests and 10% witnessed Holocaust denial discussions.

ADL and Newzoo’s survey also asked respondents about how users responded to harassment. While 36% reported other players, 16% of respondents said that they did not report harassment because the previous reporting did not result in meaningful action and 25% did not report other players because they felt their experiences were not disruptive enough. However, players did find some features effective in curbing harassment: 60% said blocking certain players from joining their team was effective in reducing harassment, 58% said muting other players was effective and 58% said that playing with those they trust was effective in reducing harassment.
This paper analyses the use of newsgames published by mainstream media outlets to counter hateful xenophobic speech following the onset of the 2015 refugee crisis in Europe. The author assessed the impact of engaging with newsgames where the aim is to foster attitudes of empathy and awareness of the plight of refugees fleeing conflict. 16 newsgames were identified for the paper, five of which were developed to address the refugee crisis in Europe and to identify sentiment patterns within the games’ discourse. Results from the study suggest that immersive newsgaming can shape public attitudes towards societal issues where hateful or extreme rhetoric is prevalent.

The authors observed a rise in hate speech and xenophobia following the influx of refugees to Europe in early 2015. They noted that mainstream media appeared ineffective in countering these narratives through fact-based reporting, and in some cases contributed to reinforcing negative stereotypes of migrants and refugees as “anonymous passive victims” (Wright, 2014). Xenophobic messaging from politically extreme outlets gained increasing traction within broader public discourses, which highlighted the need for effective ways to counter hate speech through alternative news engagement. The development of newsgames by media outlets was thus aimed to foster more empathetic and factful interaction with news stories.

Findings from the study highlight the role of emotional information in gaming users’ attitudes towards refugees. Building on high-quality journalism, the storylines developed in the newsgames allowed users’ emotional reactions to develop more empathetic attitudes towards refugees. The five newsgames reviewed in this study used reactive empathy as the narrative tool to construct refugee characters that were relatable instead of being presented as ‘other’ or ‘them’. The ability to engage with characters and storylines in a nuanced way resulted in heightened empathetic responses compared to the consumption of purely fact-based news. The emotional information was integrated into the overall gaming experience in a manner that passive news consumption cannot facilitate to the same extent, as users have partial control over the narrative arc of the characters’ journeys. Broadly, the more control the gamers had over the storylines, the more they identified and empathised with the characters.

The authors identified three lessons from the gamification of news discourses to influence the construction of hate speech. Firstly, news stories presented more interactively are likely to engage audiences emotionally. Secondly, by enabling users to make a choice that will impact the storyline, they are likely to reflect on the complexity of an issue. Thirdly, fully immersive newsgames constitute a largely untapped resource for media outlets to present comprehensive news stories to counter the fragmented and often inaccurate information viewers consume online. Moreover, the authors draw a distinction between newsgames as fully immersive gaming experiences, and informational gaming, which may incorporate interactive elements from traditional games to convey news stories. Both genres allow media outlets to present news to audiences in participatory and engaging ways, while the former may also promote more opinion-style news content.

The authors recommend further research into the lasting effects of newsgaming, and how variations of newsgames can shape attitudes towards a variety of societal issues. They also propose that newsgames produced by media outlets will foster public trust as audiences will engage with news in a way similar to other types of online content and limit the polarisation and fragmentation of the information landscape.

**GAMIFICATION AS A P/CVE TOOL**


**KEY MESSAGES:**

- Newsgames can be utilised as a journalistic tool to promote empathy, awareness, and engagement with audiences and hamper the development of hate speech as in the case of the games developed in the aftermath of the 2015 refugee crisis.
- Further research is needed on the long-term attitudinal changes resulting from immersive newsgame participation.
This research paper seeks to evaluate the impact of serious gaming on the acquisition of ‘21st-century skills’, an educational framework designed to foster communication competency and address hate speech online, aimed at ‘Communication Degree’ students. Using an analytical framework assessing the core drivers of certain behaviours in digital spaces, the research team found that serious gaming positively impacts core competencies of emotional intelligence and attitudes of equity and empathy among users. Four serious games were tested: ‘Another Lost Phone: Laura’s Story’; ‘Bury Me, My Love’; ‘Life is Strange: Out of Time’; and ‘Never Alone’.

The authors view hate speech as a primary driver of discrimination and violence, as well as a barrier to societal attitudes toward equality and pluralism. Following this, they view combating hate speech as essential to fostering democratic dialogue, peace, and stability, and do not see these efforts as contradictory to freedom of speech and expression. On the contrary, building social competencies to counter hate speech and foster social equity and inclusion is considered crucial to prevent discrimination and violence against minorities and vulnerable groups.

Building on the analytical framework, the paper examines eight core drivers affecting the motivations of gaming users/gamers: (i) epic meaning & calling; (ii) development & accomplishment; (iii) empowerment of creativity & feedback; (iv) ownership & possession; (v) social influence & relatedness; (vi) scarcity & impatience; (vii) unpredictability & curiosity; (viii) and loss & avoidance. These factors drive particular dynamics within gaming spaces, including fostering a sense of life purpose and belonging. In the absence of these core drivers, there is little to no motivation to play.

The authors categorise hate speech as an information disorder in relation to mal-information that intends to harm either individuals or groups. Digital technologies can foster hate speech by increasing its dissemination at unprecedented rates and scales and enable the anonymised targeting of individuals based on race, gender, sexual orientation, religion, and class to heightened degrees. The authors reference discriminatory language and verbal attacks directed at individuals as a phenomenon that pervades online spaces.

The four games tested against the core drivers’ framework appear to present opportunities to promote the acquisition of digital competencies to counter hate speech online. By featuring serious games in academic training, the authors assess how this interactive form of online engagement can promote empathetic and inclusive behaviours, assigning social values to what is broadly perceived as a technical role. Digital communication professionals are in a unique position to prevent hateful, extremist, and violent behaviour which originates online.

The authors recommend further research to assess the effectiveness of serious games and style interventions in combating hate speech online. This is partly envisioned as a pre- and post-test following participation in serious games, as well as broader competency requirements in academic training for the relevant fields.
This paper focuses on examining the potential of video games as educational tools. The authors present the ‘Play your role’ intervention they developed to address hate speech. Results from the intervention suggest the positive role video games can have including for educational purposes with teenagers, and to address the spread of hate speech online.

The authors highlight how gaming and gaming communities are part of everyday life for many teenagers and that prejudice and hatred, including outrageous and offensive comments, harassment, physical threats and stalking, are common on these platforms, with victims often targeted because of their race, religion, ability, gender, gender identity, sexual orientation or ethnicity. The authors also note that hate speech has become increasingly frequent since 2000. The authors acknowledge both the positive and negative impacts of games on young people.

Though games can suspend ethical and moral considerations and create an alternative reality for players, including by showcasing illegal behaviours such as murders, games also provide players with opportunities to learn new concepts, receive feedback on progress, have autonomy and freedom, interact with others, explore creatively and play cooperatively and competitively. The anonymity and absence of consequences in game worlds may facilitate players using hate speech to demonstrate their power or relieve frustration, even if they would not initially be willing to do this in real life. Gaming platforms can both facilitate and prevent the spread of hate speech. However, content such as live streams can be challenging to moderate because of its real-time nature. The authors also highlight that discussions about game messaging and content may be more effective than banning certain games, as this could increase their appeal.

The authors highlight the need to increase video game literacy and how video games can contribute to learning. Opportunities comprise the ability to take risks without real consequences, develop social skills, learn interactively, solve problems and navigate challenges. Barriers to using video games include high costs, initial learning time, difficulties in accessing games, and preferences for traditional methods despite experience showcasing their benefits. Some limitations also apply: games often have an unappealing appearance, and they are often associated with one exclusive skill, leading players to discard the game once they have learned the skill. They often require players to read instructions before they start, they can be difficult to access, and they are not often available on all platforms. Additionally, the success of serious games depends on the player’s awareness, immersion and feelings of progress, danger and conquest when playing.

The authors describe their ‘Play your role’ project, which has the primary goal of preventing hate speech in video games and hopes to better understand online hate speech, help young people to engage in critical thinking and motivate them to act against hate speech. The project involves gamers, teachers, educators, video game enterprises, video game developers and civil society and is working on four interrelated activities:

- researching video game communities to identify challenges and potential solutions;
- creating pedagogical itineraries for teachers to promote gaming as a learning tool and changing perceptions of gaming;
- organising a European level Hackathon;
- implementing an online platform to provide new tools and organise events.

The project is innovative in that it uses video games to form strangers into communities by allowing individuals to discover people who are different from them, develop empathy, build connections and common interests and create something together.

**KEY MESSAGES:**
- Serious games are an increasingly explored avenue to counter online radicalisation, particularly among younger individuals.
- The Austrian game DECOUNT is based on a “rational actor concept” which takes its players through stages of radicalisation, and it received positive feedback from its players after the evaluation workshop.
- Serious games may be less effective in P/CVE efforts with older individuals whose radicalisation process is highly entrenched but may have better effects in preventative efforts.

This short insight piece assesses the use of serious gaming for P/CVE purposes. Serious games were developed for educational purposes, utilising the interactive format of online gaming to engage deeper with its audiences as active users rather than passive recipients of information. DECOUNT, an EU-funded project developed in Austria, is the subject of this review. The review outlines opportunities and challenges for serious gaming as part of P/CVE efforts and evaluates the results from the DECOUNT study.

The author references the current research landscape which shows a link between online gaming and terrorist activity. Specifically, the reviewed literature includes data on how extremists have created bespoke video games, the fact that terrorist attacks have featured elements from the gaming world such as live streaming from the attacker’s point of view, as well as terrorist organisations utilising existing online gaming spaces to promote extreme ideology and reach new audiences.

DECOUNT was developed using the ‘occupational change’ radicalisation model which focuses on individual motivations and grievances to explain why certain people are vulnerable to radicalisation, rather than a root-cause approach which generalises push-and-pull factors for certain groups. Primary data was utilised to create dynamics of recognition and reward within the gaming space, allowing the developers to tailor experiences. The game also followed the “rational actor” premise, in which individuals move through stages of radicalisation, often motivated by prospects of personal gains rather than an abstract ideological cause. The game consists of a storyline where players can stay on the “right track” or take pathways towards radicalisation.

Overall, the formulation of a target group for the game presented two key challenges for the developers. Firstly, there is insufficient robust evidence to suggest a clear profile of individuals vulnerable to extremist radicalisation. Secondly, profiling such individuals on their socioeconomic, ethnic, and religious backgrounds would entail ethical risks in research. The target audience was eventually derived from an interest-based selection process which informed the development of game aesthetics and storylines. The game was disseminated both through adverts and by the live streaming of two influential players playing the online game on the gaming-adjacent platform Twitch. Audience feedback on the live streams was overwhelmingly positive. Surveys conducted before and after the gaming workshop also showed a decrease in extremist attitudes held by the players, and positive improvements in critical thinking and independence markers.

The suitability of serious games to prevent radicalisation will depend largely on the target audience. For example, older extremist individuals may not have any connection to the online gaming space and might be less likely to engage in this type of intervention. One of the lessons learned from evaluating DECOUNT aligns with similar observations regarding the independent use of standalone P/CVE content (including video campaigns) and their lesser impact against already radicalised individuals. This type of content is likely to trigger cognitive dissonance instead of engagement. In addition, the author highlights a known challenge for serious games that are aimed at education processes: integrating some of the most engaging and rewarding elements of traditional gaming such as incentives and goals (as these are often achieved through some sort of combat).
FUTURE TRENDS AND TECHNOLOGICAL DEVELOPMENTS


KEY MESSAGES:
- There was little evidence of extreme-right groups leveraging gaming platforms as recruitment tools to initiate radicalisation with individuals outside of their spheres, rather they use them as tools for socialisation and entertainment.
- Increased content moderation efforts have led to less concentrated extreme-right groupings on the reviewed platforms. Users are spreading their dissemination across multiple arenas to minimise the risk of complete takedown and take advantage of platforms’ technical features.

This paper assesses the role of online gamification in the strategic activities of far-right extremist groups. The paper introduces a series of reports exploring gaming and extremism by the Institute for Strategic Dialogue (ISD), which comprises a qualitative analysis of four gaming-adjacent platforms: Twitch, Discord, DLive, and Steam. Through mapping and analysis activities, emerging trends were identified. Extremist groups use multiple rather than single gaming and gaming like-platforms. As the market keeps growing and diversifying, they are likely to increase their presence. They also exploit platform functionalities and are increasingly present on less-moderated platforms. The researchers identify online gaming as a key factor in the development of contemporary extreme-right ideology and culture. Notably, the online campaign ‘Gamergate’ rose to mainstream media attention as hateful misogynist rhetoric spread from online gaming forums against female gamers and journalists in an attempt to exclude them from the gaming sphere. Gamergate drew significant attention to the new ‘alternative right’ and online hate against women and minorities.

The development of the gaming sphere, accounting for about three billion players worldwide, is increasingly receiving attention as a potential arena for radicalisation. The authors note that the research produced for this publication’s series has not found gaming platforms to constitute key arenas for recruitment into extremist groups. Rather, gaming platforms were utilised first and foremost as an arena for socialisation between already-radicalised individuals. While socialisation is the primary function of gaming for both radical and non-radical users globally, the nature of the discourse in extreme-right forums evolves around white supremacy, misogyny, and racism. Calls to ‘raid’ online users on Steam and Discord were identified and cyberbullying or harassment tactics were employed by online trolls targeting ‘adversary’ groups or individuals.

Whereas multiple extreme-right accounts and forums were identified on the four platforms in this study, only two groups on Steam were directly connected to extremist groups which have committed violence in offline spaces. For example, the Misanthropic Division (MD) is a Russian group of about 500 members seeking to recruit individuals into a pro-Russia paramilitary group in the Donbas region of Ukraine in various European countries. The second group identified was the Nordic Resistance Movement (NRM), which is primarily active across Finland and Sweden, some members of which are under investigation for violent crimes.

The four platforms examined in this study exhibited somewhat different dynamics and characteristics of extreme-right-wing users and forums:

- **Steam** appears as the most well-established platform for extreme-right groupings. Some of these groups have been active since 2016.
- The platform **DLive** is primarily used as an amplification space where prominent influencers can reach new audiences through the live stream function as a result of content moderation efforts.
- **Discord**, initially a gaming platform, appears to host very young users, with small and short-lived servers, primarily hosting racist forums and coordinated online trolling campaigns towards minority groups and women.
- **Twitch** appears to host sporadic and uncoordinated extremist content by less-known users, conspiracy theorist content, as well as misogynistic and white supremacists.
This paper presents a high-level overview of the exploitation of online gaming spaces by violent extremist groups. It presents the extent to which platforms are used to promote ideologically extreme content and radicalise individuals, as well as the ways in which this occurs. The authors have reviewed existing research in the field and identified the following trends: the few regulations developed allow extremist groups to exploit gaming platforms and increasingly move to platforms that have little to no content moderation, extremist groups distort new platforms’ functionalities to their benefit.

The authors draw attention to the increase in online gaming following the COVID-19 pandemic when online interaction became the norm. Globally, gamers now number almost 3 billion and consist of increasingly demographically diverse groups. While terrorist and violent extremist groups have exploited online gaming spaces for the past two decades, the spike in the popularity of gaming following the 2020 lockdowns has seen a corresponding increase in extremist exploitation of gaming and gaming-adjacent platforms.

While the authors acknowledge the lack of causal links between online gaming and violent behaviour, they also highlight the other forms of online harm that players may be susceptible to. Importantly, gaming platforms often include closed-space features such as private chatrooms where individuals can be drawn into ideologically extreme environments. Extremist groups also use gaming platforms as a tool to establish initial contact with users, before they migrate off-platform to more obscure channels of communication that are harder to monitor for P/CVE practitioners.

Furthermore, the authors have identified factors which influence the extent to which terrorist and violent extremist groups are able to exploit online gaming spaces. Firstly, the extent to which platforms are reviewed and moderated allows for the takedown of problematic content. Overall, larger platforms such as Facebook and YouTube have increased their moderation efforts to this end over the past few years. Meanwhile, smaller platforms with fewer resources are unable to monitor their users to the same degree, particularly on platforms where private chats and servers are the norm. Extensive Terms of Service agreements can provide platforms with the mandate to govern behaviour to a greater extent, but this ultimately must be supported by national legislation against hateful online content.

Secondly, some of the financial incentivisation features within games have been exploited by extremist groups for illicit financing. These features include sponsorship through live streaming and gifting fellow players cryptocurrencies for money-laundering purposes. Non-fungible tokens (NFTs) could also be leveraged for laundering purposes.

The authors observe a dynamic relationship between the appropriation of gaming features by extremist spaces and the infiltration of gaming spaces by the presence of extremist groups. For example, imagery in popular games such as Roblox has been used to promote misogynist, racist, and anti-Semitic content in ways that may present more like humour rather than hate speech or violence. Extremist groups aim to spread their ideological sentiment through the normalisation of such content, which may escape moderation efforts, even on larger platforms.

The authors highlight that gaming can also be used for positive ends, such as building tight-knit online communities. They also mention initiatives in the Netherlands and the UK that use gaming-based communication to engage younger, vulnerable audiences with P/CVE. The effects of these initiatives are not yet clear, and future research in this area is warranted.
CONCLUSIONS

Through this QRR and the review of the selected papers, key findings relevant to the review’s subtopics have been identified. Some of the research papers reviewed also include relevant insights from cross-cutting themes. The following table draws on a cross-cutting analysis of their evidence and insights and echoes previous RAN PS work on the topics of hate speech and gamification.

PROBLEM SCOPE

- There is consensus from the literature reviewed in this QRR and past RAN PS work that gamification remains a relatively new topic in the radicalisation sphere. The limited understanding of this phenomenon would benefit from further research, including on the relationship between gaming and gamification with extremism and radicalisation pathways.²

- Research does not clearly establish a link between online radicalisation and the perpetuation of violence or violent behaviour offline. Various mechanisms could nevertheless play a role in facilitating or supporting the online radicalisation process.³

- The use of gaming and gamification elements by extremist groups should not be understood as a mechanism solely for recruitment purposes but also for other purposes such as communication. There is little consensus in the literature on the primary objective pursued by extremist groups through gamification.⁴

- Gaming and gamification can be leveraged by extremist groups as well for P/CVE interventions.⁵ This QRR and previous RAN PS activities provide various examples of P/CVE interventions leveraging gamification including addressing online hate speech, developing young people’s media literacy skills or raising awareness of refugees’ experiences.⁶

- Gamification can take place through top-down or bottom-up gamification, either by extremist organisations towards their users or by users themselves impacting wider practices online.⁷

ONLINE HATE SPEECH GAMIFICATION

- There is consensus that online hate speech has increased over the last few years but there are difficulties in assessing the extent of the phenomenon.⁸ Previous RAN PS work highlighted the specific negative impacts of online hate speech on minority groups including women.⁹

- Gamified extremist content can be received differently by users of gaming and


³ Schlegel (2020); Fizek & Dippel (2020); Amarasingam & Schegel (2021)

⁴ Robinson & Whittaker (2021).

⁵ Amarasingam & Schegel (2021); Englund & Luxinaree (2022).

⁶ RAN PS (2022b).

⁷ Schlegel (2020).

⁸ Williams (2019).

⁹ RAN PS (2022b).
gamification platforms. Five user profiles can be distinguished based on the drivers that could facilitate their radicalisation and those that support their engagement with gaming and gamification. The user types include:

(i) the Socialiser who seeks to engage and connect with other users;
(ii) the Competitor who seeks peer recognition and reward to support their status;
(iii) the Achiever looking to develop new skills and progress;
(iv) the Meaning Seeker looking for purpose through shared experiences; and
(v) the Disrupter looking for challenges and adventures.

 Efforts to moderate and limit the spread of online hate speech by technology companies and policymakers remain limited. Extremist groups tend to move to platforms that have limited or no content moderation functionalities.

GAMIFICATION AS A P/CVE TOOL

• The use of gamification as a P/CVE tool for interventions remains limited and appears to focus on engagement with youth.

• News media outlets have leveraged ‘newsgames’ to address the issue of online hate speech specifically targeting refugees in the aftermath of the so-called 2015 refugee crisis. These games rely on immersive experiences to develop a better understanding of the issues and challenges faced by refugees.

• Gamification can also be leveraged to support the acquisition of communication competencies and related skills that are likely to support the reduction of hate speech.

• Gamification can support wider media literacy efforts for young people and teenagers despite existing challenges relating to their use for educational purposes.

FUTURE TRENDS AND TECHNOLOGICAL DEVELOPMENTS

• Extremist groups keep adapting to mitigation efforts to spread their extremist content online. These trends are likely to continue as platforms put new content moderation strategies in place. Previous RAN activities have suggested that smaller platforms and technology companies could face increased capacity challenges to moderate extremist content online.

• Extremist groups are present on numerous gaming and gamification platforms to fulfil their objectives such as engaging with non-radicalised audiences, and relaying content on and/or towards other platforms. Echoing past RAN work, extremist groups are early adopters of technological developments and trends and they are likely to keep exploiting new trends for their benefit.

10 Schlegel (2021).
11 Williams (2019); ADL (2022); RAN PS (2022b); RAN PS (2022c).
12 Englund & Luxinaree (2022).
13 Gómez-García et al. (2021).
14 Pérez-Escolar et al. (2022); RAN PS (2022b).
15 Mendes da Silva et al. (2022); Pisoiu (2022); RAN PS (2022b).
16 Englund & Luxinaree (2022).
17 RAN PS (2022c).
18 Davey (2021).
Extremist groups are likely to keep exploiting new features developed by online gaming and gaming-like platforms to fulfil their objectives. Papers reviewed in this QRR and past RAN work suggest that the development of NFTs and other financial incentives could support extremist groups’ financial means. The development of the Metaverse could also provide an alternative and immersive environment that could also support extremist groups’ outreach and propaganda activities.¹⁹

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¹⁹ RAN PS (2022a); RAN PS (2022c).
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