Humanities & Social Sciences Communications

ARTICLE

https://doi.org/10.1057/s41599-024-03680-4 OPEN

Media framing of far-right extremism and online radicalization in esport and gaming

Holly Collison-Randall[1,2]✉, Ramón Spaaij[2,3,4], Emily J. Hayday[1] & Jack Pippard[1]

Gaming adjacent platforms have created an expanding ecosystem of online gaming, esport, and social media actors sharing online space, content, communication tools, and users. Esport, in particular, has grown beyond all expectations and is now a global leader in sport fandom and spectatorship. At the same time, the online infiltration and influence of far-right extremism have resulted in increased challenges of online radicalization. Gaming and esport form a foundational part of youth digital culture today, and this has provided a fertile ground for far-right extremist groups to communicate and connect with users globally. This paper uses framing theory and qualitative document analysis to examine how media articles frame the relationship between far-right extremism and esport. The findings enhance our understanding of how narratives of far-right extremist influence in esport and gaming are framed in the media and how this coverage shapes contemporary societal discussion. This is important because as far-right extremism continues to be propagated and performed in esport and gaming spaces, how this is framed to public audiences can have a critical influence on esport and gamer identities, victimization or criminalization of online spaces, and future activities or approaches to counter radicalization within the online environment.

[1] Institute for Sport Business, Loughborough University London, London, UK. [2] Centre for Sport Leadership, Stellenbosch University, Stellenbosch, South Africa. [3] Institute for Health and Sport, Victoria University, Melbourne, VIC, Australia. [4] School of Governance, Utrecht University, Utrecht, The Netherlands. ✉email: h.collison@lboro.ac.uk

Introduction

How societal issues such as terrorism and violent extremism are framed can have a profound impact on public attitudes, collective action, and public policy. Research indicates that frames are less static and more shiftable than was previously thought, and that a frame's emotional array is central to this (Klein and Amis 2021). Critical or "focusing" events, such as a terrorist attack, can alter or reframe public opinion or a policy debate (Norris et al. 2003; Schnell and Callaghan 2005).

Framing involves an active process that "implies agency and contention at the level of reality construction" (Benford and Snow 2000, p. 164). Frames are by no means neutral, objective, or complete. Rather, they are rhetorical devices to convince people of the value of any given position, selecting certain aspects of perceived reality to make them more noticeable (Klein and Amis 2021). For example, terrorist movements attempt to develop frames that resonate with their audiences and achieve desired outcomes by exploiting places, history, and other resources to influence targeted audiences (Druckman 2001). In this context, the media can offer terrorist causes wide-ranging reach and influence, while the media can benefit from terrorism's public attention (Eid 2014). Frames often simplify the message to mobilize people, garner support, and demobilize antagonists (Klein and Amis 2021), with potentially profound consequences. Media framing can influence public (mis)perceptions of extremist violence and threats in ways that harm counterterrorism policy. For example, Betus et al. (2021) found that "news media present an incomplete narrative of the landscape of terror attacks. Misperceptions like these promote prejudice and reduce the likelihood that security threats will be appropriately addressed" (p. 1149).

Several high-profile terrorist attacks, such as the 2019 terrorist attacks on two mosques in Christchurch, New Zealand (perpetrated by Brenton Tarrant), which killed 51 people, have propelled the nexus between far-right extremism and online gaming to global public and policy concern. They have similarly sparked growing interest among researchers in gaming as a new frontier for far-right extremist influence (Wells et al. 2023). In October 2022, the Australian Federal Police (2022) issued a warning to parents and guardians to be aware of extremist groups accessing online games to recruit children and young people. This warning has been echoed in media reports of far-right extremist influencing and corruption in online gaming spaces. For example, a yearlong investigation by the British free-to-air public service television network Channel 4 revealed how the far-right group Patriotic Alternative deliberately targets Generation Z, with social media and online gaming spaces serving as mechanisms through which individuals are seduced into far-right extremist groups (Channel 4, 2022). A Metropolitan Police spokesperson stated that extremist groups know how to present "something which is very attractive, potentially, to a vulnerable, young person, a young boy who spends a lot of time gaming" (Sharpe 2022). There has been acknowledgment amongst law enforcement and intelligence agencies of the increased use of video game platforms, live streams, and memes to spread extremist ideologies.

While there is a nascent body of scholarship that examines the nexus between gaming and violent extremism (e.g., Lakhani 2021; Schlegel 2020; Schlegel and Kowert 2024; Wells et al. 2023), this literature has thus far been relatively narrow in its focus on in-game representations and, to a lesser extent, the role of interactive gameplay in promoting the strategic communication and propaganda aims of extremist groups (Robinson and Whittaker 2021). We would argue that, especially at this nascent stage (Robinson and Whittaker 2021), it is vital that analyses also examine the narrative structures and discursive practices through which meaning is constructed and issues are framed. In this paper, we are particularly concerned with esport as this phenomenon has received little research attention compared to online gaming. Far-right extremism's perceived influence in online gaming spaces may challenge the values of esport as a platform and space for youth communities to engage and interact in prosocial ways (Hayday et al. 2022; Hayday and Collison 2023). The research question we address in this paper is: how do media articles frame the relationship between far-right extremism and esport? This focus on media framing is consistent with and advances critical terrorism studies' commitment to appreciating and understanding the politically constructed nature of terrorism knowledge (Jackson 2007). This paper also contributes to theoretical and empirical understanding of the growing participation, evolution, and distinctiveness of esport, which to date has often been collapsed within the broader gaming literature and media vernacular.

In the following sections, we briefly outline the evolution of esport and gaming adjacent platforms and the existing literature on the nexus between violent extremism, online gaming, and esport. This will be followed by an overview of the theoretical framework and methods used in this study. We will then discuss the results of the qualitative document analysis and reflect on the key findings and implications.

Esport, online gaming, and violent extremism

Electronic sport or esport is defined as competitive video gaming between two or more individuals, which can take place in front of live audiences, be broadcast on television or streamed online and can be understood as a subset or variant of video gaming (i.e., electronic gaming) (Chan et al. 2022; Chung et al. 2019). To be involved in esport you do not have to be a participant and compete yourself, although many individuals do. You can also be an esport fan or spectator watching competitive video games on online platforms such as Twitch (Esports.net 2023). Newzoo (2019) estimated that by 2025, the esport audience will be 640 million (made up of esports enthusiasts and occasional viewers). Research by Macey et al. (2022) identified a significant relationship between watching intention and gaming intention, exposing the overlap between spectating and participating within the sphere of esport. Esport can be seen as a consumer engagement tool, as a purposeful way to market individual game titles, leveraging the innate competitive underpinnings and capitalizing on the experience surrounding game consumption (Macey et al. 2022).

There is a significant global audience and player base, yet individuals do not exclusively populate esport spaces in isolation. Esport, although a product and industry in and of itself, has been identified as a mechanism to prolong individuals' engagement with video games, with many converting from casual viewers to fans and displaying varied forms of social facilitation online through streaming and social media platforms (Fletcher 2015; Macey et al. 2022). Individuals will engage with multiple platforms as part of their esport and gaming identity, as esport sits within a broader online gaming culture, which the former EU Counter Terrorism Coordinator Gilles de Kerchove identified as having a clear social media dimension (Whittaker 2022).

Esport and online gaming have come under increased scrutiny as platforms that extremist organizations use strategically to advance their causes, but also as spaces where individuals with (potentially) extremist beliefs interact more organically (e.g., Koehler et al. 2023; Schlegel 2020; Lakhani 2021; Schlegel and Kowert 2024). It is believed that these spaces are being used to transmit violent extremist narratives (Lakomy 2019; Robinson and Whittaker 2021), with 23 percent of players reported by

Ingersoll (2019) to have been exposed to discussions on white supremacist ideologies (see also Anti-Defamation League, 2021). Prinz (2024) notes that right-wing populist and far-right actors have long used video games and their platforms as strategic tools for three reasons: to propagate far-right ideology as widely as possible ("metapolitics"), as a networking tool, and as a tool for mobilization.

The content of online games and their enactment of violence raise similar concerns, especially the so-called gamification of violent extremism (Lakhani 2024; Schlegel 2020). Gamified elements of violent extremism may be evident in, for example, achievement systems and first-person shooter aesthetics, such as points, kill counts, leader boards, badges, or avatars (Fizek and Dippel 2020; Lakhani 2024). For example, the Federal Bureau of Investigation (2014) found that First-Person Shooter (FPS) games were being used to train extremists in weapon operations and battle simulations. Furthermore, sites away from the console where players can use chat rooms and messaging apps to discuss gameplay are plentiful. These provide another opportunity for extremist organizations to interact with a wider audience (Wells et al. 2023) on gaming platforms such as Discord, Steam, and Twitch. A report by the Anti-Defamation League (2020) on the threat of extremism on Steam concluded that it is awash with Nazi and white supremacist ideologies, noted in the screen names, bio descriptions, profile pictures, and user comments. However, it is important to note that gaming is a mainstream activity and not intrinsically linked to, or a cause of, radicalization. Schlegel (2020) observes that "games and gamified elements do not by themselves give rise to radicalization." Rather, they "can draw players in, immerse them more tightly within extremist communities, cause increased engagement and identification with extremist content" (Schlegel 2020, p. 29).

The nature and impact of the nexus between violent extremism and online gaming and esport has thus been recognized in the academic literature. However, our understanding is still limited as "games and gamification have so far received less attention than other factors potentially facilitating radicalization processes" (Schlegel 2020, p. 2). This is particularly the case with esport, a relatively new issue that has received very little research attention. For example, esport only receives six brief mentions in the authoritative book on *Gaming and Extremism* (Schlegel and Kowert 2024), and only one mention explicitly links it to extremist movements (i.e., the far right; see Prinz 2024, p. 65). Within this context, we analyzed how media articles frame the relationship between far-right extremism and esport. We recognize that media outlets report on new trends more rapidly than academic publications. It is important to analyze the framing in media articles because, in the absence of academic analyses, opinion formation on the topic is largely driven by media articles.

Methods

Theoretical framework. Goffman's (1974) framing theory provided a theoretical framework that influenced the study's methodology and focused the analysis. Goffman's concept of frames is a philosophical approach that centers the meaning of the world as it is constructed by individuals, in this context, the perceived relationship between far-right extremism and esport. The basis of framing theory for this study was that the media focuses on major extremist events affected by online radicalization and then places them within a field of meaning. This study sought to better understand the nuances of this media framing. Drawing on framing theory, we utilized a media analysis to identify how the media frames the relationship between far-right extremism and esport. In this context, frames were defined as organizing ideas or themes, linking stories together, and building up a narrative over time and across political space.

The analytical approach taken in this paper builds on studies of media framing of terrorism, particularly the work of Brinson and Stohl (2010, 2012). The latter directly informed our operationalization of media framing, demonstrating how frames form the narrative structure through which newsmakers produce, organize, and explain issues or events. More specifically, Brinson and Stohl (2012) show how media frames employed to report major terrorist attacks, such as the 2005 London bombings, defined and diagnosed the problem, made moral judgments through evaluation, and prescribed remedies. Moreover, they found that media coverage of terrorist incidents was biased towards authority. Media typically supports governments and their policies by framing their coverage in the language introduced by government spokespersons and counterterrorism agendas (Brinson and Stohl, 2010, 2012). In this regard, Holmes and Sullivan (2014) speak of a common-interest game between states and media in promoting and tapping into audience anxieties about terrorism.

Qualitative document analysis. A media scrape and qualitative document analysis (QDA) were conducted to identify media frames. QDA was employed to explore and capture the frequency, forms, and framing of online radicalization in relation to esport and gaming. QDA involves discovering and describing contexts, underlying meaning, patterns, and processes (Altheide et al. 2008). A systematic and analytical process was undertaken whereby a sample of documents was identified according to predetermined criteria and keywords. This allowed a clearly defined issue to be targeted (online gaming, esport, radicalization, and violent extremism) as the specific area for investigation within those documents. Through a familiarization process with the data sample, the research team developed a coding protocol and procedure, which was then followed for data coding (Altheide et al. 2008). Three research team members met to undertake intercoder reliability, using this sample of data. Themes and frames constructed from the data were examined, leading to a collective discussion on the themes and their meaning until agreement on the central themes was achieved. This ensured clarity for the research team regarding their interpretations of the data, which aided data trustworthiness. The following sections describe the process used to carry out QDA for the current study.

Sample selection. Document searches were performed using LexisNexis database to identify relevant documents, including grey literature. Using a Boolean method, the following keywords were used in both media scrapes, "online gaming" or "esport" and "radicalization" or "violent extremism." Critically, as noted earlier, given the connected nature between online gaming and esport environments, it was decided as paramount to investigate both terms within this research. This targeted set of four keywords was selected to identify any esport or online gaming-related content, rather than targeting specific gaming platforms or spaces specifically, as the research team applied an exploratory approach to see what media articles chose to report on. Search parameters were limited to English-language news-related documents, which included newspapers, newswires and press releases, industry trade press, web news, transcripts, audio, video, and blogs). Given the evolution of how extremists are using online environments, the search was limited to the last six years to focus on contemporary approaches and insights.

The data scrape collected articles published between May 5, 2017, and May 4, 2022, and a second scrape collected articles between May 5, 2022, and February 2, 2023. This second scrape

was conducted to ensure the most recent articles were included at the time of analysis and writing. These two data scrapes yielded a total of 167 documents. After a close review of article relevance and with duplicates being removed, the final dataset consisted of 81 documents from 10 countries (United Kingdom: $n = 35$; United States: $n = 23$; Australia: $n = 4$; Singapore: $n = 3$; India: $n = 2$; Canada: $n = 1$; China $n = 1$; Lebanon: $n = 1$; New Zealand: $n = 1$; Thailand: $n = 1$) across five document types (newspaper articles, online news webpages, press releases, government publications, and independent reports). These 81 news-related documents were examined and subsequently coded.

Coding and data analysis. The framing analysis conducted focused on the aforementioned research question: how do media articles frame the relationship between far-right extremism and esport? This question was supported by sub-questions that considered the what, how, why, and who of far-right extremism in esport, in order to better understand the range of frames applied. QDA was employed to analyze the data with one experienced qualitative coder analyzing the entire data set. Initial coding involved entering information into a spreadsheet, which included the article title, date of publication, author(s), country in which it was published, and brief notes related to each news article. This included relevant key information from each document, which supported theme development. During analysis, if prospective themes surfaced from a document being analyzed, the researchers would confer and reflect on previously coded articles to ensure all relevant information was appropriately and correctly captured and coded, enhancing intercoder reliability. This is known as the constant comparison method and is commonly used in QDA (Altheide et al. 2008).

Findings

The findings from the media scrap revealed the presence of four types of media frames: informative, provocative, derogatory versus victim personas, and human-interest reporting versus policy steering. The following will demonstrate how each frame can influence thoughts and opinions on the use of gaming, esport, and adjacent gaming platforms by violent extremists for the purpose of radicalization. In addition, each frame is discussed in relation to how different types of media favor using specific frames to accommodate or attract their readership.

Conflation of esport and gaming. An initial, overarching finding is the imprecise use of gaming and esport terminologies in the documents. The language commonly identified during the analysis centred around "online gaming and esport," using these terms interchangeably even when specific esport games and publishers were referred to (for example, games such as Minecraft and Call of Duty). The distinctiveness between esport and online gaming was almost entirely ignored. This demonstrates a lack of awareness and understanding of the nuances between online gaming and esport. Therefore, while the research question and subsequent media scrape isolated esport, it was evident that the two online spaces were not discussed or presented as separate online ecosystems in the context of media framing. In addition, there was little reference to specific esport characteristics, such as professional tournaments, leagues, athletes, and known streaming platforms, despite these being well-acknowledged features of the esport sector (Hayday et al. 2022). This suggests a lack of nuanced commentary surrounding specific incidences of far-right extremism or radicalization that have occurred within esport repertoires and adjacent offerings. Critically, it is not at the highest level of esport competition where radicalization occurs but through online spectators and exposure to instant chat functions, or at more general population levels of competition (Oreskovic 2024).

The conflation of esport and gaming is an important finding that indicates the nuances of the evolved esport, gaming, and gaming-adjacent offerings that exist amongst overlapping and highly connected spaces. The Global Network of Extremism and Technology suggests:

> The extension of esports communities across multiple online platforms may place participants at particular risk of encountering everyday extremism organically through emergent gamification, pop culture, and in-game communications. Once encountered, strategic top-down and bottom-up efforts may funnel at-risk participants into less-than-public spaces designed with the intent of radicalisation (Oreskovic 2024).

This merging of online gaming, social media, and communications functions resonates with what Chadwick (2007) calls "dysfunctional hybridity." Otherwise known as gaming-adjacent repertoires and offerings, hybridity across gaming, esport and social domains has amplified the repertoires of online environments which in turn has increased the opportunities for extremists. Users and spectators share online spaces, across gaming and esport environments, which is a fundamental cultural feature of the nuances of the esport environment. In relation to radicalization, the distinction between gaming and esport is difficult to place boundaries around due to users inhabiting shared spaces and gaming-adjacent offerings; this enables both radicalization entry points and a misunderstanding of the close relationship between gaming and esports. This does not apply to the highest forms of esport competitions or leagues, as these are highly monitored and would not be attractive to radicals seeking to influence and isolate. It is understandable why reporting by mainstream media outlets, policymakers and authors of grey literature often conflates esports role due to the messiness of gaming cultures and evolving offerings.

Framing technique 1: informative. The first framing technique presented information in a "factual," informative manner that included materials based on the supply of empirical information. The first issue to which this framing technique was applied was the proliferation of far-right extremism in gaming, esport, and adjacent offerings. A significant aspect of informative commentary included the description of esport platforms utilized by far-right extremists to engage captive audiences and disseminate propaganda. Within these reports, the advantages of using online gaming and esports spaces as forms of communication were commonly highlighted. News articles positioned online gaming spaces as ideal settings for enabling extremists to target mainstream audiences while remaining anonymous, through affiliated chatrooms and message boards. This has been found to exist within both games and gaming adjacent platforms. Gaming adjacent platforms facilitate the interconnectivity of gamers away from games, supporting community building through communication tools or livestreaming of gaming (Davey 2024). Examples of gaming and gaming-adjacent platforms highlighted in the documents as sites where radicalization material has been shared included Discord, Twitch, Steam, and Telegram. Specific game titles such as Minecraft, Fortnite, Call of Duty, Warcraft, Apex Legends, League of Legends, Madden, and Overwatch were also referenced. For example, news reports referred to Brenton Tarrant's manifesto, which mentions video games such as Fortnite, a popular online battle game. Tarrant used the tagline "Fortnite trained me to be a killer," possibly as a way to keep the video of the attack circulating in online communities for a longer time

(Zeinab-Chachine 2019). This framing technique offers audiences examples of common spaces inhabited by millions of users globally. Yet, in most reports, there was very limited detail and supporting evidence provided beyond the mention of such engagement arenas.

The instant messaging social platform Discord, frequently mentioned in the media reports, is known as a home for gamers and esport communities. It allows users to join text and voice chats, create private groups, or engage in virtual communities called servers. Many users use these as a core social communication platform and verified servers have been used by professional esport teams such as Cloud9 and Team Liquid (Palmer-Wilson 2018). Discord servers were reportedly used by a network of German far-right activists who tried to copy the strategies of memetic warfare (Selim 2019). Furthermore, an investigation by the Institute for Strategic Dialogue (ISD), a British think tank, found 24 extreme right servers on Discord; a further 100 such channels on the livestreaming service DLive; 91 channels on Twitch, a better-known livestreaming service owned by Amazon; and 45 public groups on Steam (Dodds 2022). This highlights how these spaces are reported to have been infiltrated by extremists looking to recruit for terrorist purposes (Dodds 2022). Throughout this frame, we could see information supported by numerical data being communicated to enlighten the reader, as can be seen above with insights related to the number of extremism groups/servers identified across multiple esport and gaming environments.

Commentary that adhered to an informative framing technique also included articles providing reasons for the increased prevalence of gaming and gaming-adjacent platforms as a tool for radicalization. COVID-19 was framed in many articles to have increased online presence and social isolation in ways that contributed to the role of online spaces in fuelling the opportunity for radicalization, which can result in violent extremism. Policy documents (e.g., Council of the European Union 2021) and news articles (Dodds 2022) cited the COVID-19 pandemic and, specifically, the introduction of lockdowns to curb the spread of COVID-19, which resulted in heightened exposure to far-right extremist beliefs online. The identification of COVID-19 as a contributing factor in the proliferation of radicalization on gaming platforms is appropriately supported by key stakeholders, including the UK Counter Terrorism Police (CTP), who described it as a "perfect storm" for young people to become attracted to far-right extremist content (Council of the European Union 2020, p. 22). Other documents utilized the UK CTP's statistic that children under the age of 18 made up 13% of terrorism offences in the year 2020, nearly trebling from 5% as recorded in the previous year to support this identified growth during the pandemic.

The risks of radicalization imposed upon young people addressed above are well supported. Evidence acquired from the Radicalization Awareness Network states that "young people make up the highest percentage of individuals joining violent extremist groups worldwide" (Lowe 2020, p. 1). This is further corroborated by the Australian Security Intelligence Organisation (ASIO), which states that "more than 10% of all people convicted for terrorism offences since 2014 in Australia were under the age of 18 at the time they offended, and a further 25% were aged between 18 and 25 years."

Evidence highlighting the risk of young people being vulnerable to radicalization contributes to informative framing; however, limited evidence supports that esport, gaming, and gaming-adjacent platforms are key contributors. Young people are identified as a large audience on these channels (Lowe 2020). Gaming is also positioned as an important component within youth subcultures, as Dodds (2022) reports: "video games today are fully mainstream, and inescapable among Generation Z" (p. 5). Therefore, it is led to believe that violent extremists with access to gaming and gaming adjacent platforms are exposed to a readily available audience through which radicalization material could be dispersed.

Despite these assertions, limited empirical evidence supports the narrative presented in these documents, that young people's risk of radicalization within gaming and gaming adjacent platforms is increased. Documents utilized anecdotes and comments from experts to reinforce this narrative. For example, Dixon (2020) seeks to highlight the increased risk of young people to radicalization through gaming and gaming adjacent platforms during COVID-19, through support garnered from quotes by the UK Counter-terrorism police and then Education Secretary, Gavin Williamson. Similarly, Evans (2022) supports this narrative by using insights provided by Scotland Yard's Assistant Commissioner. It is important to recognize that the absence of objective evidence does not mean this is untrue. It is difficult to accurately record and quantify the exact pathways through which radicalization can occur. Young people are more at risk; however, the attribution that this is through online gaming stands on limited empirical grounding and can contribute to a provocative framing type, to be discussed below.

An informative narrative identified in articles contributed to the discussion surrounding the use of gaming and gaming-adjacent platforms for radicalization objectives by providing statements supported by evidence. This aimed to inform the reader through validated and accurate commentaries. This aspect of this debate, which adhered to an informative narrative, included articles highlighting specific games and gaming-adjacent platforms contributing to the radicalization process. Examples and data were used to corroborate these narratives highlighting the prevalence of far-right extremist content on these platforms. Other evidence supported restrictions on movement imposed by COVID-19-induced lockdowns as a reason for the increased online population, which could be exploited by violent extremists for the purpose of online radicalization. Young people were accurately identified as those most vulnerable to radicalization, whereby during this time period, evidence sourced from key stakeholders, such the UK CTP, detailed the increased prevalence of radicalization amongst this age group. However, evidence was lacking in accurately linking this risk imposed upon young people to gaming and adjacent gaming platforms, with case studies with anecdotal evidence being favored.

Framing technique 2: provocative. The second framing technique identified during the QDA was provocative in nature. This style of reporting was characterised by information being inflated when presented to audiences. This is not to say that these comments provided in the publications are incorrect, however, it is argued in this framing technique that the primary purpose is to entice the engagement of the reader, as opposed to reporting objective evidence.

Firstly, alongside the limited evidence provided to support claims that young people are more at risk of radicalization on gaming, esport, and gaming-adjacent platforms, further details on the profiles of victims are inflated by narratives that are without support from corroborating evidence. This questionable commentary can harm the spread of (dis)information and steer the formation of audience opinions. Based on the media articles analyzed, newspapers shared that white middle-class males are most prone to the increased risk of online radicalization (e.g., Evans 2022). The assumption that this profile is most at risk is not corroborated by evidence, and it might be argued that this reporting's purpose is to appeal to the readership by generating

improper concern. There are many factors that contribute to the increased risk of online radicalization beyond the physical profile described above, i.e., male, white, and middle class.

Secondly, QDA identified provocative narratives produced through the reporting of the ideologies promoted by violent extremists for the purpose of radicalization. Beliefs that support the far-right movement have been correctly identified as philosophies which motivate the increased prevalence of extremist content on gaming and gaming adjacent platforms. However, there is an imbalance in the reporting of the types of far-right movements present on gaming and gaming adjacent platforms which are leveraged to aid understanding and engagement with the source material through the provision of loosely connected illustrations. For example, Nazism is a common reference point favored in articles, featuring in 43% of the articles. Examples have been appropriately provided to showcase when and where Nazism is present in online gaming and gaming-adjacent platforms. For example, extremists have been found to have recreated interactive Nazi concentration camps on Minecraft and Roblox (Dodds 2022). Nevertheless, grey literature favors the term Racially or Ethnically Motivated Violent Extremism (REMVE) to define the range of beliefs that are encompassed by the far-right movement and fuel radicalization beyond that of Nazism. It can be argued that Nazism is favored by newspapers to appeal to the lay reader, who are familiar with and have an understanding of this historical term used to reflect one component of the far-right movement. This can evoke emotions beyond the realities of extremism in online gaming. For example, Lowe (2020) attempts to identify the risk of young people to radicalization today by relating this to the techniques used by the Nazi Party in the 1920s through Hitler Youth Organizations. Lowe's use of Nazism in this context is ill-informed; it can be argued that it is employed to aid familiarity as opposed to reporting fact. In this instance, there is limited connection between the Hitler Youth and online radicalization through gaming and gaming adjacent platforms. While Nazism is an important component of far-right extremism that we must consider in the radicalization of young people in online gaming, its over-reliant use by newspaper journalists, in particular aims to provoke thoughts and feelings that are not reflective of the overall threat and spread of hate currently demonstrated in these spaces.

Thirdly, the reporting of violent extremism in newspaper articles is often only presented in its most extreme cases and forms. When discussing the prevalence of radicalization of violent extremists on gaming and gaming adjacent platforms, newspaper journalists typically associated this with the actions of notorious terrorists such as Anders Breivik (77 people killed, Utoya, Norway, 2011), Brenton Tarrant (51 people killed, Christchurch, New Zealand, 2019), Dylann Roof (nine people killed, South Carolina, USA, 2015), and Robert Gregory Bowers (11 people, Pittsburg, USA, 2019). Journalists used these attacks to highlight the severity of the threat. We see here a framing of violence being normalized and, in some cases, emphasized by journalists looking to exacerbate the notion of right-wing extremism, despite violence as an outcome of radicalization still being a rare occurrence. These examples attempt to provoke fear by exacerbating the relationship between gaming and gaming-adjacent platforms and the process of online radicalization. Newspapers prescribed to particularly aggressive terminology to present the violent end goals of radicalization using esports and gaming. Extremists were portrayed as individuals who had weaponized esport and online gaming environments to encourage individuals to become mass shooters and terrorists (Nguyen 2019; Shepherd 2020). Reports sought to support these claims by providing comments from experts and reformed extremists (Dodds 2022; Nguyen 2019; Sassoon-Coby 2018; Shepherd 2020), whose positions added credibility to their statements in the absence of contemporary empirical evidence.

The risk is that heightening fear and provoking misplaced judgment on the role of esport and online gaming in the context of far-right extremism is potentially stigmatizing to those who are part of online gaming and esport communities, while also potentially encouraging far-right groups to feed off the fear to meet their aims. We may see here a manifestation of what Eid (2014) has termed "terroredia," that is, the interactive, co-dependent relationship between terrorism and the media in which terrorist acts and their media coverage are exchanged to achieve both parties' objectives.

Provocative framing exists when statements are provided that exaggerate source material in the absence of evidence that can be used to validate claims. It has been utilized to aid familiarity with lay readers and evoke fear of potential risks imposed by radicalization. This has been demonstrated in the use of the term Nazi, increased risk attributed to white, middle-class males, and repeated links made between online gaming and violent atrocities carried out by violent extremists. While each is relevant to the overall discussion, the limited evidence available calls the accuracy of such statements into question. It suggests the intention of their publication to engage as opposed to inform.

Framing technique 3: derogatory versus victim personas. A third framing technique presented paradoxical derogatory and victim narratives, the former was achieved by presenting information that sought to discredit or shame the subject of the violent extremist activity. This was primarily done in relation to gamer identity, the youth subculture that is targeted by extremist influence. Lambasted due to their perceived social isolation, journalists often used belittling language. Victim narratives used terms such as "the lost boys" (Shepherd 2020, p. 96) to describe potential victims, aids perceptions of these individuals as easy prey for extremists attempting to evoke a sense of belonging, with concerns being raised about the direct appeal of propaganda presented in a way that chimes with gamers (Evans 2022). For example:

> Exploitation of young people's online gaming culture to target a large and impressionable audience… Gamers… develop a rapport with other players over time, [helping] far right and extremist groups win the trust of young people whom they seek to influence (Baharudin 2021, p. 145).

The articles' descriptions of the narratives and identities of those involved were often inconsistent and contradictory depending on the source material. Gamers were either framed as perpetrators or victims, highlighting the blurred lines between these two frames and ascribed identities. This was consistent with the aforementioned overarching finding regarding the significant gap in knowledge and reporting on esport in particular, as these ascribed identities did not differentiate between those who competed professionally or recreationally.

The increased risk identified in gaming and gaming-adjacent platforms has highlighted the culture of individuals associating with such online spaces. This identification has provided a gateway for commentaries that lambast their identity, attributing gamers with negative traits that make these individuals increasingly susceptible to the exploits conducted by violent extremists for the purpose of radicalization.

Framing technique 4: human interest reporting versus policy steering. There was a distinct difference in the framing techniques identified through QDA, which was dependent upon the source material. Media publications (newspapers, online blogs)

and grey literature differ in reporting radicalization through gaming and gaming-adjacent platforms. While both provide informative material, QDA revealed alternative framing techniques employed because of the different audiences they were seeking to target through their publications. The difference in techniques for presenting information, i.e., contextually rich storytelling approaches versus data-driven, policy-aligned approaches, demonstrated how case studies and radicalization trends could be manipulated and adapted to attract and cater to specific audiences.

Media articles were much more likely to adhere to human interest framing through provocative and emotive language to appeal to the attention and engagement of a reader who may be ignorant or naïve to the subject. Examples included using the term "supercharge" to refer to the impact of COVID-19 on radicalization on gaming and gaming-adjacent platforms (Dodds, 2022). Extreme acts of violence committed by right-wing extremists were often relied upon to support the narratives being reported. Huggler (2019) implicates gaming and gaming-adjacent platforms in radicalization through reporting on Brenton Tarrant and David Ali Sonboly (nine people killed, Munich, Germany, 2016) by detailing their active profiles on the Steam gaming platform. No other commentary is provided on their platform usage or their connection. Similarly, Dearden (2019 p. 1) states how "Balliet [two casualties, Halle, Germany, 2019] was embedded in online gaming," without providing further commentary on what this connection to gaming and gaming-adjacent platforms involved, and how this influenced his radicalization. This source material also sought to increase familiarity with the subject material by using easy-to-understand language for a readership unfamiliar with the context. Recurrent references to Nazism, while not without merit, do not reflect the overall picture but are cognizant of general public awareness. Consistently, these publications also lacked the reporting of objective evidence to support claims made. Instead, the words of ascribed "experts" were favored to communicate ideas or opinions that warrant trust from the readership in the absence of data (Dodds 2022; Shepherd 2020).

Comparatively, grey literature, typically sourced from US congress meetings and reports, adhered to policy framing, whereby the accuracy and reporting of empirical evidence were prioritized. As an alternative to media publications' use of Nazism as a term to highlight the growing threat of far-right extremism, grey literature tended to use the acronym REMVE to provide a more accurate reflection of the belief system through which radicalization is undertaken. In the instances where specific attention was afforded to the rise of white supremacy in online spaces, this was supported by accurate reporting of evidence. For example, Selim (2019) stated that "2018 data shows a 182% increase of white supremacist propaganda incidents, with 1187 cases reported, compared to 421 in 2017" (p. 1). Moreover, despite the identified growth in the use of gaming and gaming-adjacent platforms for radicalization, the evidence reflected in grey literature still identified a reason for greater concern to be attributed to the exploitation of social media for these purposes. In the grey literature, gaming and gaming-adjacent platforms were consistently mentioned as having secondary importance to social media channels as a radicalization tool.

To increase the relevance of articles to the readership, it is expected that media publications focus on geographically salient topics with a strong human interest. Consequently, newspapers were typically episodic and reactive to domestic issues, seeking to build narratives enticing local and national attention. Comparatively, grey literature favored a global perspective, encompassing a comprehensive overview of events to better inform policy decisions to prevent such events from happening, as opposed to information dissemination.

The following highlights the influence that publication type has on media framing. The QDA revealed that discussions surrounding radicalization on gaming and gaming-adjacent platforms are highly susceptible to manipulation dependent on the different forms of publication. Such disparities are governed by the type of audience the publication is intended for, which influences the prevalence and type of evidence used, the type of language, and the scope of the report. In summary, media articles such as newspapers and online blogs are more likely to use emotive language and apply a human-interest lens with less factual evidence, relying on opinions provided by experts to increase the readership's familiarity and engagement on geographically relevant issues associated with this topic. However, grey literature published by the US Congress demonstrates an adherence to accuracy, using evidence to inform and educate on global issues that encompass the overall landscape of this topic, often with an agenda to steer policy debates or policymaking.

Discussion

Results showcase the diverse ways in which online radicalization within the esport and gaming sphere can be discussed and framed. The use of provocative narratives and the competing personas attached to radicalized individuals can lead to misperceptions about online radicalization, possibility altering public opinion and resulting in prejudice towards individuals and the risks associated with esport, gaming, and gaming-adjacent spaces (Betus et al. 2021). Findings echoed existing research that has identified that extremist organizations leverage the various online platforms and environments inhabited by esport and gaming users (Wells et al. 2023). Interaction, spectatorship, gaming culture, and communication don't occur in a neat online box that can be bounded by a certain game, platform, or esports competition, which creates complexity when this topic is portrayed in the media.

The informative frame exposed the interconnectivity and community building that occurs through these spaces, which resonates with the work of Schlegel (2020), who exposed that while gaming and gamification elements can provide heightened exposure, engagement, and identification with extremist content, it alone does not give rise to radicalization. Yet, there is still limited empirical evidence and insights into how this occurs, which would support readers in comprehending the risk factors. The limited use of educational and factual information within the informative narrative highlights the incomplete understanding of this phenomenon, which significantly impacts social perceptions on the role of esport and gaming in online radicalization.

Current media framing presented in this research broadly concerns online radicalization, focusing on exaggerating information to elicit a response and engagement from the readership. This is likely to provoke fear and aggravate an already complex issue, calling into question the role of the media in the portrayal of such topics, which impact a significant proportion of the public, with viewership of esport alone expected to be 322 million by 2025 (Gough 2024). Finally, the role of publication type has been shown to significantly alter the positionality of the narratives and framing used around online radicalization within esport and gaming. In media publications, human interest framing elicited engagement and attention through emotive and provocative language. In contrast, grey literature and governmental reports prioritized a policy steering focus. Our research indicates that the more factual, comprehensive picture was often framed through the grey literature. This exposes the vulnerability and power of media outlets in their responsibility to inform readers of current news and the methods they use to entice engagement versus accurately educating readers about an

emerging, evolving, and dynamic online environment that violent extremists are exploiting.

Conclusion

The framing of far-right extremism in esports in the media and grey literature indicates the complex ways in which esports, online gaming platforms, and gaming-adjacent spaces are conflated and presented to public audiences. The four framing techniques presented in this paper illustrate the misunderstandings in how esport and online gaming are distinct yet adjacent. The frames also highlight the search for data and evidence in combination with emotive stories and language that evoke sympathy and fear. One key finding of this study is the lack of consistency in language, tone, emotion, objectivity, and level of knowledge and experience of the online space itself. This is potentially problematic as it may lead to the heightened scepticism, fear, and social barriers created between those who participate and compete in online games and esport and those who monitor and are tasked with preventing violent extremism. The esport and online gaming phenomenon, in conjunction with increasing social media repertoires, has enabled online radicalization toward far-right extremism to grow. The problem this research has identified is the lack of awareness or consistent reporting on the subject.

Limitations. Reflecting on the limitations of this study, first and foremost, the focus was to examine how media articles frame the relationship between far-right extremism and esports. Insights were gathered from over 80 articles across ten countries, however, only documents written in the English language were examined, which limits the impact and relevance of these findings to global contexts. This study was exploratory in nature, with the aim of developing an understanding of how the media frames violent extremism related to online gaming and esports environments. Using additional search terms could have enhanced and expanded the study further. Additionally, the search was undertaken across a fixed period of five years. We recognize that valuable insights could be gleaned from examining a more extended period, most notably regarding the evolution in media content and framing of narratives related to violent extremism, esport, and gaming.

A further limitation that needs to be acknowledged relates to the context of news media itself, which is known to have biases, impacting the narrative and language used. The framing of news articles can be affected by the agendas held by the journalist or publishing outlet and can be ideologically, socially, and politically driven. We recognize this, as media articles were our primary data source, and are aware that our findings relate to how public frames have been created to discuss this topic rather than the results shedding insight into the nature of violent extremism itself.

Future research. Findings from this study highlight the multiple frames used across different media forms to discuss esport and gaming in relation to far-right extremism. It would be pertinent for future research to ascertain if the same framing techniques and framing patterns are evident across a wider array of global contexts and media content, identifying patterns of similarity and difference in the media's portrayal of this phenomenon. Moreover, future research would benefit from interviewing journalists and different audiences (i.e., the general public, readership of certain media outlets) to better understand journalists' perspectives on writing about this topic as well as audience receptions of media coverage and how this informs societal discourse and attitudes towards the role of esport in violent extremism.

Data availability

The datasets (media reports and grey literature) analyzed during the current study are available from the corresponding author. Most of the media reports and grey literature analyzed in the study (with hyperlinks) can be found in the References.

Received: 5 February 2024; Accepted: 30 August 2024;
Published online: 13 September 2024

References

Altheide DL, Coyle M, DeVriese K, Schneider C (2008) Emergent qualitative document analysis. In Hesse-Biber SN, Leavy P (eds) Handbook of emergent methods. New York, The Guilford Press, pp 127–152

Anti-Defamation League (2021) Hate is no game: harassment and positive social experiences in online games 2021. Anti-Defamation League. https://www.adl.org/resources/report/hate-no-game-harassment-and-positive-social-experiences-online-games-2021

Anti-Defamation League (2020) This is not a game: how steam harbors extremists. Anti-Defamation League. https://www.adl.org/resources/report/not-game-how-steam-harbors-extremists

Australian Federal Police (2022) Extremist recruitment reaching young Australian gamers. Australian Federal Police. https://www.afp.gov.au/news-centre/media-release/extremist-recruitment-reaching-young-australian-gamers

Baharudin H (2021). ISD watching social media, gaming platforms for terror-related activity; With kids spending more time online, extremist groups may be indoctrinating them there. The Straits Times (Singapore), 18 July. https://www.straitstimes.com/singapore/courts-crime/isd-watching-social-media-gaming-platforms-for-terror-related-activity

Benford R, Snow D (2000) Framing processes and social movements: an overview and assessment. Annu Rev Sociol 26:611–639. https://www.jstor.org/stable/223459

Betus E, Kearns E, Lemieux A (2021) How perpetrator identity (sometimes) influences media framing attacks as "terrorism" or "mental illness". Commun Res 48(8):1133–1156. https://doi.org/10.1177/0093650220971142

Brinson ME, Stohl M (2012) Media framing of terrorism: implications for public opinion, civil liberties, and counterterrorism policies. J Int Intercultural Commun 5(4):270–290. https://doi.org/10.1080/17513057.2012.713973

Brinson ME, Stohl M (2010) From 7/7 to 8/10: media framing of terrorist incidents in the United States and United Kingdom. In D Canter (Ed.), The faces of terrorism: Multidisciplinary perspectives (pp. 227–244). Wiley

Chan G, Huo Y, Kelly S, Leung J, Tisdale C, Gullo M (2022) The impact of eSports and online video gaming on lifestyle behaviours in youth: a systematic review. Comput Hum Behav 126:106974. https://doi.org/10.1016/j.chb.2021.106974

Chadwick A (2007) The hybrid media system: Politics and power (2nd edn). Oxford University Press

Channel 4 (2022) The enemy within: The far right: Dispatches. https://www.channel4.com/programmes/the-enemy-within-the-far-right-dispatches

Chung T, Sum S, Chan M, Lai E, Cheng N (2019) Will esports result in a higher prevalence of problematic gaming? A review of the global situation. J Behav Addict 8(3):384–394. https://doi.org/10.1556/2006.8.2019.46

Council of the European Union (2021) Council Conclusions on the impact of the COVID-19 pandemic on internal security: threats, trends, resilience and lessons learned for EU law enforcement. Council of the European Union. https://data.consilium.europa.eu/doc/document/ST-9546-2021-INIT/en/pdf

Council of the European Union (2020) Joint statement by the EU home affairs ministers on the recent terrorist attacks in Europe. Council of the European Union. https://www.consilium.europa.eu/en/press/press-releases/2020/11/13/joint-statement-by-the-eu-home-affairs-ministers-on-the-recent-terrorist-attacks-in-europe/

Davey J (2024) Extremism on gaming (-adjacent) platforms. In L Schlegel & R Kowert (Eds.), Gaming and extremism: The radicalization of digital playgrounds. Routledge

Dearden L (2019) Germany shooting is part of "global far-right insurgency," experts warn as attacker seeks to inspire others. The Independent. https://www.independent.co.uk/news/world/europe/germany-shooting-attack-synagogue-halle-far-right-neo-nazi-insurgency-terror-a9151331.html

Dixon H (2020) School closures put vulnerable pupils at risk of radicalisation by extremists online. The Sunday Telegraph, p 5. https://www.pressreader.com/uk/the-sunday-telegraph/20200621/281621012591739

Dodds I (2022) A time bomb "supercharged" by the pandemic: how white nationalists are using gaming to recruit for terror. The Independent. https://www.independent.co.uk/news/world/americas/gaming-violence-white-nationalists-online-b2051956.html
Druckman J (2001) On the limits of framing effects: who can frame? J. Politics 63(4):1041–1066. https://doi.org/10.1111/0022-3816.00100
Eid M (Ed.) (2014) Exchanging terrorism oxygen for media airwaves: the age of terroredia. Hershey, Pennsylvania: IGI Global
Esports.net. (2023) Esports vs gaming – key differences between esports and gaming. https://www.esports.net/wiki/esports-vs-gaming/
Evans M (2022, March 17) Well-educated, middle-class children lured into terrorism "through video games". The Telegraph. https://www.telegraph.co.uk/news/2022/03/17/well-educated-middle-class-children-lured-terrorism-video-games/
Federal Bureau of Investigation (2014) Awareness brief on online services and violent extremism. Office of Community Oriented Policing Services, US Department of Justice. https://portal.cops.usdoj.gov/resourcecenter/RIC/Publications/cops-w0740-pub.pdf
Fizek S, Dippel A (2020) Gamification of terror: power games as liminal spaces. In Groen M, Kiel N, Tillmann A, Weßel A (eds) Games and Ethics. New York: Springer, pp 77–94
Fletcher A (2015, August 22). Esports marketing: the birth of a nation. Esport Observer. https://archive.esportsobserver.com/esports-marketing-the-birth-of-a-nation/
Goffman E (1974) Frame analysis: an essay on the organization of experience. New York: Harper & Row
Gough C (2024, May 22) Statista. eSports audience size worldwide from 2020 to 2025, by type of viewers. https://www.statista.com/statistics/490480/global-esports-audience-size-viewer-type/
Hayday E, Collison H (2023) Understanding the potential for esports to support social inclusion agendas. In Tjønndal A (ed) Social issues in esports. London, Routledge
Hayday E, Collison-Randall H, Kelly S (2022) Esports insights. London, Routledge
Holmes DC, Sullivan R (2014) Plenty of oxygen: terrorism, news media and the politics of the Australian security state. In Pisoiu D (ed) Arguing counter-terrorism: new perspectives. London, Routledge, pp 141–159
Huggler J (2019) Authorities fear Germany has more than 12,000 neo-Nazis ready to use violence. The Telegraph. https://www.telegraph.co.uk/news/2019/05/03/authorities-fear-germany-has-12000-neo-nazis-ready-use-violence/
Ingersoll C (2019) Free to Play? Hate, Harassment and Positive Social Experiences in Online Games. Anti-Defamation League
Jackson R (2007) The core commitments of critical terrorism studies. Eur Political Sci 6:244–251
Klein J, Amis JM (2021) The dynamics of framing: image, emotion and the European migration crisis. Acad Manag J 64(5):1324–1354. https://doi.org/10.5465/amj.2017.0510
Koehler D, Fiebig V, Jugl I (2023) From gaming to hating: extreme-right ideological indoctrination and mobilization for violence of children on online gaming platforms. Political Psychol 44(2):419–434. https://doi.org/10.1111/pops.12855
Lakhani S (2024) A is for apple, B is for bullet: The gamification of (violent) extremism. In Schlegel L, Kowert R (eds) Gaming and extremism: The radicalization of digital playgrounds. London, Routledge, pp 149–162
Lakhani S (2021) Video gaming and (violent) extremism: an exploration of the current landscape, trends, and threats. Publications Office of the European Union. https://home-affairs.ec.europa.eu/system/files/2022-02/EUIF%20Technical%20Meeting%20on%20Video%20Gaming%20October%202021%20RAN%20Policy%20Support%20paper_en.pdf
Lakomy M (2019) Let's play a video game: *jihadi* propaganda in the world of electronic Entertainment. Stud Confl Terrorism 42(4):383–406. https://doi.org/10.1080/1057610x.2017.1385903
Lowe P (2020, June 5) Early intervention is key to diverting young people from violent extremism. Strategist. https://www.aspistrategist.org.au/early-intervention-is-key-to-diverting-young-people-from-violent-extremism/
Macey J, Tyrväinen V, Pirkkalainen H, Hamari J (2022) Does esports spectating influence game consumption. Behav Inf Technol 41(1):181–197. https://doi.org/10.1080/0144929X.2020.1797876
Newzoo (2019) Global esports market report. Newzoo. https://newzoo.com/resources/trend-reports/newzoo-global-esports-market-report-2019-light-version
Nguyen K (2019) Accused Christchurch mosque shooter Brenton Tarrant used same radicalisation tactics as Islamic State, expert says. ABC News, 17 March. https://www.abc.net.au/news/2019-03-17/christchurch-shootings-brenton-tarrant-social-media-strategies/10908692
Norris P, Kern M, Just M (2003) Framing terrorism: the news media, the government and the public. London, Routledge
Oreskovic E (2024) More than sports: building resilience against extremism in esports. Global Network for Extremism and Technology, 5 June. https://gnet-research.org/2024/06/05/more-than-sports-building-resilience-against-extremism-in-esports/#:~:text=A%202021%20report%20to%20the%20European%20Commission%20found,of%20hooliganism%2C%20which%20is%20analogous%20to%20trolling%20online
Palmer-Wilson B (2018) Discord partners with esports organizations to become their official chat app. The Esports Observer, 23 February. https://archive.esportsobserver.com/discord-esports-teams-partnership/
Prinz M (2024) Extremist games and modifications: the "metapolitics" of anti-democratic forces. In Schlegel L, Kowert R (eds) Gaming and extremism: the radicalization of digital playgrounds. London, Routledge, pp 57–71
Robinson N, Whittaker J (2021) Playing for hate? extremism, terrorism, and videogames. Studies in Conflict & Terrorism, pp. 1–36. https://doi.org/10.1080/1057610x.2020.1866740
Sassoon-Coby A (2018) 'GAMER DANGER Reformed Neo-Nazi reveals how White Supremacists use FORTNITE to radicalise kids. https://www.thesun.co.uk/tech/6677074/reformed-neo-nazi-reveals-how-white-supremacists-use-fortnite-to-radicalise-kids/
Schlegel L (2020) Jumanji extremism? How games and gamification could facilitate radicalization processes. J Deradicalization 23:1–44. https://journals.sfu.ca/jd/index.php/jd/article/view/359#:~:text=The%20potential%20influence%20of%20video,regarding%20violence%2C%20and%20the%20direct
Schlegel L, Kowert R (Eds.) (2024) Gaming and extremism: the radicalization of digital playgrounds. London, Routledge
Schnell F, Callaghan K (2005) Terrorism, media frames, and framing effects: a macro-and microlevel analysis. In K Callaghan & F Schnell (Eds.), Framing American politics (pp. 123–147). University of Pittsburgh Press
Selim G (2019) Countering domestic terrorism: examining the evolving threat. Testimony to the Senate Homeland Security and Governmental Affairs Committee. U.S. Government Printing Office
Sharpe A (2022) Neo-Nazis enticed boy, 13, via YouTube memes - now he's leading "Zoomer nationalist." The Mirror, 7 May. https://www.mirror.co.uk/news/uk-news/neo-nazis-lured-boy-13-26902351
Shepherd T (2020) Hope versus hate. The Advertiser, 29 February
Wells G, Romhanyi A, Reitman JG, Gardner R, Squire K, Steinkuehler C (2023) Right-wing extremism in mainstream games: a review of the literature. Games and Culture. https://doi.org/10.1177/15554120231167214
Whittaker J (2022) Online radicalisation. What do we know? Publications Office of the European Union. https://home-affairs.ec.europa.eu/system/files/2023-11/RAN-online-radicalisation_en.pdf
Zeinab-Chachine AR (2019) Offline violence and online extremism. Daily Star, 20 March. https://www.thefreelibrary.com/Offline+violence+and+online+extremism.-a0579186317

Author contributions

Author 1 (conceptualization, data curation, formal analysis, writing—original draft, review, and editing), Author 2 (conceptualization, formal analysis, writing—original draft, review, and editing), Author 3 (conceptualization, data curation, formal analysis, writing—review and editing), Author 4 (conceptualization, data curation, formal analysis, writing—review and editing).

Competing interests

The authors declare no competing interests.

Ethical approval

This article does not contain any studies with human participants performed by any of the authors.

Informed consent

This article does not contain any studies with human participants performed by any of the authors.

Additional information

Correspondence and requests for materials should be addressed to Holly Collison-Randall.