



Extremism across the online gaming ecosystem



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Warning

This report contains references to violent extremism, including threats of violence, that readers may find distressing.







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7

Overview

The nexus between violent extremism and online gaming has been a pressing issue among researchers, policy makers and law enforcement agencies for some time. Violent perpetrators like Anders Breivik used well-known video games to prepare for their attacks. Brenton Tarrant live streamed his attack, mirroring the style of first-person shooter games or 'Let's Play' videos.¹ Extremists have also used gaming platforms to disseminate propaganda, radicalise or recruit others, and have created or altered video games to share their ideologies.² The gamification of extremist discourse, including threats of violence, has also allowed extremists to mask or trivialise their violent intentions towards others.³ However, online gaming communities and certain game genres, such as first-person shooter games, have also been disproportionately stigmatised as a result of these events. Given the distinctive and complex radicalisation journey of each individual, it can be difficult to identify drivers of radicalisation that are unique to the online gaming ecosystem - which is itself a highly complex and variable space. Large-scale data-driven studies can help us to better understand how violent extremism manifests within gaming communities and on gaming-related platforms.

This research investigates the prevalence of Extreme Right-Wing (ERW) and incel content in **public spaces** across the online gaming ecosystem. It focuses on key extremist narratives and themes, the role of games and influential voices, as well as recruitment and radicalisation tactics.

This report features qualitative and quantitative analysis of extremist content across gaming spaces on **Discord, 4chan, Gamer Uprising, incels.is** and **Steam**. Consequently, content that is not extremist in nature is outside the scope of the analysis. The research focuses on English language content. An overview of the data sources analysed for each platform can be found in the graph in the next page. For the full methodology, please refer to the appendix at the end of this report.

- Galen Lamphere-Englund and Jessica White, "The Buffalo Attack and the Gamification of Violence", Royal United Services Institute, 16 May 2022; Walter Gibbs, "Norwegian killer used computer wargames to plan attack", Reuters, 19 April 2012; Suraj Lakhani and Susann Wiedlitzka, "Press F to Pay Respects". An Empirical Exploration of the Mechanics of Gamification in Relation to the Christchurch Attack",
 Terrorism and Political Violence, 31 May 2022.
- Will Bedingfield, "The Far Right Are Running Riot on Steam and Discord", WIRED UK, 12 August 2021.
- Petra Regeni, "Accelerationism Meets Gamification: A Look at the Convergence in the Framing of Online Narratives", GNET, 31 May 2023.







↓ Platform	↓ Type	↓ Timeframe	↓ Spaces	↓ Total posts
Discord		1 Jul 2023 - 31 Dec 2023	34 channels across 21 gaming-related servers	24,328,280 posts
Gamer Uprising		1 Jul 2023 - 31 Dec 2023	Entire platform	27,334 posts
Incels.is		1 Jul 2023 - 31 Dec 2023	Gaming-related discourse across two main discussion forums	22,966 posts
4chan	F	1 Jul 2023 - 31 Dec 2023	Six gaming-focused discussion boards	39,589,041 posts
Steam Steam		1 Dec 2023 - 30 Apr 2024	25 discussion forums and groups	Manual viewing and assessment
			Gaming (Gaming-adjacent

This report is part of the project 'Games as a multi-layered security threat' (GEMS), a Horizon Europe-funded project aimed at curbing the spread of extremism within the diverse world of online gaming. The project brings together experts from various sectors, including social impact businesses, law enforcement and academia, with the aim of protecting and empowering citizens. More information about the project can be found on the <u>project website</u>.







Y Table of contents

Secti	Section		
01	Overview	04	
02	Key findings	07	
03	Platform overview	80	
	Discord	08	
	Steam	09	
	Incels.is	10	
	4chan	11	
	Gamer Uprising	12	
04	Extremist narratives and themes	13	
05	Influential voices and groups	17	
06	The role of games	20	
07	Recruitment and radicalisation tactics	23	
08	Conclusion and recommendations	25	
09	Appendix	27	
	Definitions	27	
	Methodology	2 7	
	Phase I: Viability assessment	28	
	Phase II: Identification of relevant spaces for data collection	28	
	Phase III: Data collection	28	
	Phase IV: Data analysis and reporting	2 <u>9</u>	
	Limitations	30	







Key findings

Racist and anti-LGBTQ+ slurs are frequently employed by users to address one another.

Anti-Black racism or anti-LGBTQ+ language featured in:

- **986,867 posts,** or **86%** of all extremist posts on 4chan
- 13,993 posts, or 80% of all extremist posts on Discord
- 1,090 posts, or 61% of all extremist posts on Gamer Uprising.

Criticism of "woke gaming" can act as a gateway into the extremist ecosystem, often evolving into antisemitic conspiracy theories.

Across platforms, user frustration with perceived "woke gaming culture" frequently featured antisemitic sentiment, and was coupled with racist, anti-LGBTQ+ and misogynistic language.

Mainstream gaming personalities involved in controversies are frequently discussed.

Users justified controversies surrounding popular streamers like xQc by claiming that they are targeted by "Jewish elites" for being successful white men.

Coordinated harassment campaigns are used to mobilise the "in-group" and threaten members of the online gaming community that are perceived as "out-groups".

Raids were used by extremist communities to coordinate harassment and intimidation against LGBTQ+ individuals or women for enjoyment or "punishment".

Sandbox games and Mods are often exploited by users to enact violent fantasies and construct alternative realities aligned to their extremist views.

Women and Black people were consistent targets of violent fantasies as a form of entertainment in sandbox games, such as 'GTA' and 'Red Dead Redemption 2'.

Notable events in the gaming world, like the Game Awards or the release of new games such as 'GTA 6', correlate with peaks in extremist discussions and threats of violence in gaming-related spaces.

Following the 2023 Game Awards on 8 December, extremist discourse on 4chan increased by **42%**. Following the release of the 'GTA 6' trailer on 5 December, extremist discourse on incels.is increased by **492%**, with violent threats on 4chan increasing by **81%**.

Extremist communities primarily congregate within pre-existing gaming forums, rather than creating their own bespoke communities.

Extremist ideologies are not the primary link between users in these spaces, but these actors can capitalise on shared gaming interests to share extremist narratives. A wide range of users that may be initially attracted to groups because of their gaming interests are exposed to extremist discourse that is normalised under the guise of gaming or roleplaying.







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Platform overview

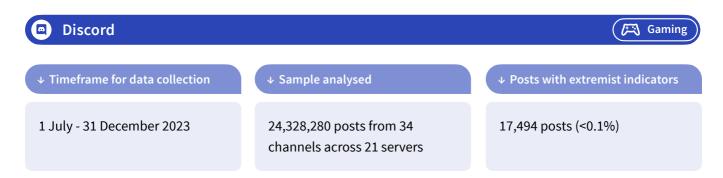
The online gaming ecosystem consists of a wide range of platforms and communities. There are many gaming and gaming-adjacent online platforms where users buy and play video games, discuss gaming, or collaborate on developing new gaming content.

For this project, **gaming platforms** are defined as platforms which primarily supply or host online video games or provide a space for gaming communities to connect and discuss these games and the broader gaming ecosystem (e.g. Steam).

Gaming-adjacent platforms are platforms where gaming communities congregate but which also serve many other online communities (e.g. 4chan).

Moonshot assessed **24** gaming and gaming-adjacent platforms for inclusion in our analysis. Following this assessment, **Steam, Discord, 4chan, Gamer Uprising** and **incels.is** were selected for this project.

This section provides an overview of the five platforms included in this analysis and their role within the online gaming ecosystem.



Discord is a global communication platform launched in 2015. The platform originated as a competitor to services like Skype and gained popularity among online gamers, who use the platform to communicate with one another while playing video games. While a significant proportion of its content focuses on gaming, the platform has since expanded its userbase and hosts a wide range of communities. Across all these communities, Discord has on average, over 1 billion monthly visitors, 150 million monthly active users, and 19 million active servers weekly.⁴

On Discord, users can communicate with each other via text, voice, and video chat on so-called "servers". Servers are often dedicated to an overarching topic, like a specific video game or a hobby. Within each server, a range of different channels are used to discuss relevant sub-topics. Servers can range in size, from small groups to over 1 million members.

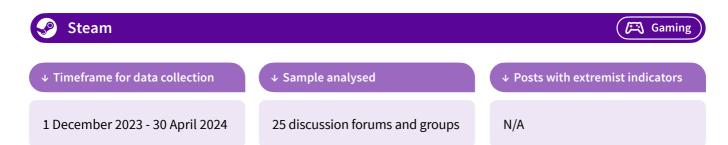
Over the years, a number of Discord servers, including some gaming-focused communities, have been found to harbour violent extremist discussions.⁵ Racism, homophobia, misogyny and antisemitism were prevalent in these communities.

- 4. Similarweb, based on data from November 2023 January 2024; "Newsroom and Press | Discord", Discord, n.d.
- 5. Jakob Guhl, "<u>Discord & Extremism</u>", Institute for Strategic Dialogue, 1 June 2023.









Steam is an e-commerce and social platform for video games and gaming-related content. Created in 2003, it is owned by Valve, a game developer who is known for creating popular gaming series such as 'Counter-Strike', 'Team Fortress 2', and 'Left 4 Dead'. The platform acted as a game store before app stores were common and continues to be central in game purchasing and development. While it was initially designed for Valve to sell its own games and provide users with relevant updates, it now offers games from a wide range of big game developers and smaller independent ones. On average, the site has a total of 153 million visits and 44 million unique visitors each month.⁶

On Steam, users can purchase games, publish gaming content, collaborate on developing custom game features such as mods and skins, and socialise with other gamers via a wide range of discussion pages. Steam owns the largest discussion page on its site, known as 'Steam Discussions', which hosts a wide range of forums such as 'Steam Community', 'Steam for Mac' or the 'Off Topic' forum. Most discussion pages are game-specific and run by the respective game developers. Users can also create public and private groups on Steam, where they can engage with each other via group chats to coordinate gaming together or discuss other topics.

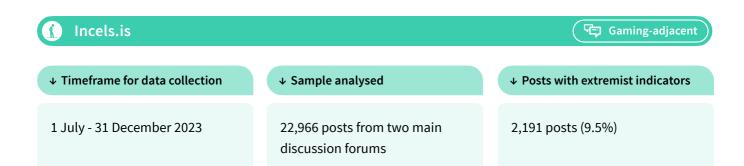
As a social and e-commerce platform, Steam hosts a large variety of gaming communities. However, hateful and violent narratives have also been found on the platform. It has been criticised for selling games such as 'Hatred' and 'Rape Day', which are centred around committing genocide or acts of sexual violence. The former is still available on Steam at the time of reporting and its associated community forums on the platform are known to attract toxic discourse due to the game's violent and nihilistic nature.

- 6. Similarweb, based on data from November 2023 January 2024.
- 7. Mods, short for modifications, are alterations to the structure, syntax, or code of a game. Skins are graphic downloads that change the appearance of the player in a game for aesthetic purposes.
- 8. A game developer is the group who created and developed a game. It may be a large company such as Valve, 2D Games or Rockstar Games, but can also be a small team or individuals.
- 9. "This is Not a Game: How Steam Harbors Extremists", ADL, 29 April 2020; Nathan Grayson, "Valve Removes Nazi Steam Profiles After German Complaints", Kotaku, 11 December 2019.
- Patrick Evans, "Rape Day Game Pulled by Steam Platform After Outcry", BBC News, 7 March 2019.









Incels.is is the largest and most active online forum for self-identified incels. It was created in 2017 following the ban of prominent incel spaces on platforms like Reddit and has since become one of the main online social platforms for the incel community. As of May 2024, the platform contains over 540,000 threads with 12.6 million posts and has over 25,000 members, a significant increase from 17,000 in 2022. On average, it has over 1.6 million monthly site visits and over 400K unique monthly visitors.

Incels.is features a small number of highly active forums, mainly 'The Lounge' and 'Inceldom Discussion', where users can engage with each other via discussion threads. Most threads are "tagged" with specific labels, such as 'cope' or 'gaming', to give users an indication of the thread's theme. The platform primarily contains text-based discussion of incel ideology, lifestyle, and personal experiences, as well as discussions of media reports detailing violence perpetrated towards women. Since the site is hosted and moderated by incels, discourse is more extreme compared to mainstream platforms.

Although modern gaming culture now encompasses a wider demographic, the online gaming space remains dominated by young men.¹³ The prevalence of misogyny and incel-specific jargon in gaming spaces makes it attractive to incels, leading to a significant crossover between incel and gaming communities who are often active across a range of gaming and gaming-adjacent platforms.¹⁴ Video games also provide incels with escapism from their perceived isolation and social rejection in a world they experience as hostile to them. Gaming discourse is prevalent on incels.is, with its second-most popular subforum being described on the site as a place to "Talk about your day, lifestyle, music, gaming, or just chill".

- 11. Incels.is; Zachary Hinds, "True or False Incels: An Analysis of the Incels.is Forum", Knowledge@UChicago, 2022.
- 12. Similarweb, based on data from November 2023 January 2024.
- 13. Amarnath Amarasingam and Linda Schlegel, "Examining the Intersection Between Gaming and Violent Extremism", United Nations Office of Counter-Terrorism, 2022.
- 14. Steven Lee Myers and Kellen Browning, "Extremism Finds Fertile Ground in Chat Rooms for Gamers", The New York Times, 18 May 2023.









4chan



→ Timeframe for data collection

↓ Sample analysed

↓ Posts with extremist indicators

1 July - 31 December 2023

39,589,041 posts from six gaming discussion boards¹⁵

1,150,918 posts (2.9%)

4chan is an anonymous imageboard that was launched in 2003 to provide a space for internet users to discuss Japanese anime and comics. Over the years, the platform has grown to host a wide range of different 'discussion boards'. The platform has an average of 49.3 million monthly site visits and 4.9 million unique monthly visitors who share 26 million new posts each month.¹⁶

The platform has a simple infrastructure, where users can start new threads to which other users can then reply. 4chan does not require users to register for an account before posting, creating a space where they can enjoy anonymity. While this can foster a user's freedom, openness, and creativity, it has also attracted toxic communities and convicted terrorists to the platform, who share hateful and violent extremist content.¹⁷

4chan hosts several boards focused on video games, including multiplayer, strategy, and retro games. The platform plays a prominent role in the online gaming ecosystem, providing gamers and game developers with a community and a space where they can discuss the latest game releases and reviews, general news from the gaming industry, game theories and fandoms. However, like other communities on the platform, 4chan's gaming communities have also been involved in hateful and toxic discourse in the past, with 4chan users being a driving force behind the #GamerGate harassment campaign. 18

^{18.} Casey Johnston, "How 4chan Manufactured the #GamerGate Controversy", WIRED UK, 10 September 2014.



^{15.} The following six 4chan image boards were included in the analysis: /v/ - Video Games, /vg/ - Video Game Generals, /vm/ - Video Games/Multiplayer, /vmg/ - Video Games/Mobile, /vrpg/ - Video Games/RPG, /vst/ - Video Games/Strategy.

^{16.} Similarweb, based on data from November 2023 - January 2024; 4stats.io.

^{17.} Justin Ling, "How 4chan's Toxic Culture Helped Radicalize Buffalo Shooting Suspect", The Guardian, 19 May 2022; Chris Wilson et al., "Christchurch Terrorist Discussed Attacks Online a Year Before Carrying Them Out. New Research Reyeals", The Conversation, 20 February 2024.





Gamer Uprising ◆ Timeframe for data collection ◆ Sample analysed ◆ Posts with extremist indicators 1 July - 31 December 2023 27,334 posts from the entire platform 1,786 posts (6.5%)

Gamer Uprising is a forum for gamers that emerged as a result of the #GamerGate harassment campaign in the mid 2010s. ¹⁹ A part of the gaming community opposed what it perceived to be the increasing influence of women and other minorities on the development of video games in an effort to preserve a "white heterosexual" gaming culture. The gamer uprising "movement" initially started on the subreddit r/GamersRiseUp, but after being removed by Reddit in March 2020 for hateful and violent discourse, it shifted to the Gamer Uprising forum to allow for unmoderated conversation. The forum was founded by American Neo-Nazi Andrew Anglin, who runs the site and is also the editor of the Right-Wing Extremist site 'The Daily Stormer'. The platform has 6.9K unique monthly visitors, 15K monthly site visits and claims to have 1.9K members. ²⁰

Gamer Uprising features a range of forums, such as 'General Discussion', 'Gentlemen's Parlor' (memes and "shitposting") and 'Vidya' (video games), where users can engage with each other via discussion threads. The platform primarily contains text-based discussion of a wide range of issues, including news stories, video games, sports, and music, and features more extreme discourse than mainstream platforms. Many of its users appear to be active across the online gaming ecosystem on a range of gaming and gaming-adjacent platforms.

^{20.} Similarweb, based on data from November 2023 - January 2024; gameruprising to



^{19.} Gamergate was a misogynistic online harassment campaign against Zoe Quinn, a game developer who had been accused by her ex-boyfriend of gaining reviews through a sexual relationship with a reporter. The campaign ran from 2014 to 2015, uniting the alt-right online community, and sought to keep gaming for "gamers", with "gamers" referring to the stereotype of young, white men. See: Caitlin Dewey, "The Only Guide to Gamergate You Will Ever Need to Read", Washington Post, 2 October 2021.



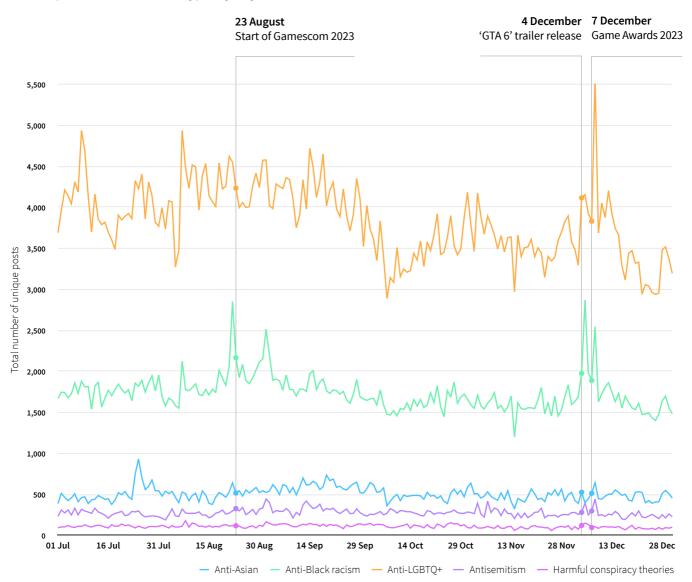


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Extremist narratives and themes

This section provides an overview of the most prevalent or pertinent extremist narratives identified on the monitored platforms, including violent extremist discourse. Users across the online gaming ecosystem express extremist sentiment in their posts through images, videos, text and by sharing external links, including game-related artwork or screenshots. A wide range of types of extremist narratives are shared across platforms, including anti-Black racism, anti-LGBTQ+ sentiment, antisemitism and misogyny. Users express these narratives in gaming-specific and non-gaming related discourse.

▼ Most prevalent extremism type, by day











Increases in extremist discourse occur in response to mainstream events in the gaming community, potentially exposing larger audiences to extremist narratives.

Notable peaks in extremist sentiment were observed on 4chan, Discord and incels.is in connection with events such as the 2023 Game Awards, the release of the 'GTA 6' trailer and the August 2023 Gamescom fair.²¹ In discussions of these events, users primarily expressed outrage over the inclusion of ethnic minorities, women or LGBTQ+ communities. In response to the Game Awards on 8 December 2023, extremist discourse on 4chan increased by **42%** compared to averages recorded in the previous six months. Users employed anti-LGBTQ+ slurs to degrade certain games, such as the winner of the Best Game Award 'Baldur's Gate 3', and to insult each other.²² Similarly, following the release of the 'GTA 6 trailer' on 4 December, users on incels.is condemned the game for featuring a non-white female protagonist. There was a subsequent **492%** increase in extremist sentiment compared to averages recorded in the previous six months. On 4chan, violent discourse peaked on 5 December (**350 posts**), with users primarily celebrating the prospect of committing in-game violence against Black and other minority characters in 'GTA 6'. The announcement or release of new games or prominent award shows attract large volumes of interest across the entire online gaming ecosystem. Extremist communities may exploit mainstream interest in these events to expose larger audiences to extremist narratives in an effort to radicalise them.



Use of racist anti-Black and anti-LGBTQ+ slurs is normalised.

86% of extremist posts across all platforms featured anti-LGBTQ+ or racist anti-Black slurs and narratives. On 4chan, incels.is, Discord and Gamer Uprising, users frequently referred to each other employing terms commonly used to target Black people or members of the LGBTQ+ community. In smaller volumes, these slurs were also directed at other members of the gaming community, such as game developers. The use of such slurs is prevalent across many online gaming communities, in particular massively multiplayer online games (MMOs). Their use reflects a hostile culture within these spaces, where users often play against each other and attain "community status" by degrading or defeating others in game. The use of such derogatory terms therefore may not reflect a user's explicit support for racist anti-Black or anti-LGBTQ+ sentiment. However, it demonstrates how normalised derogatory language is in these spaces, which may desensitise users to more extremist narratives that employ similar terminology.

^{22. &#}x27;Baldur's Gate 3' is a roleplaying game based on the tabletop game 'Dungeons and Dragons'; Tyler Wilde, "Larian founder responds to debate over Baldur's Gate 3 'raising the bar' for RPGs: 'this is videogames, standards just die every day". PCGamer, 10 August 2023.



^{21. &#}x27;Grand Theft Auto' (GTA) is an action-adventure sandbox series based on real cities across America, made by Rockstar games. 'GTA 6' will be set in a place inspired by Miami and Florida.







Antisemitic conspiracies are frequently employed by users in discussions of "woke gaming".

Across platforms, users claimed that "woke changes" in the gaming industry were "orchestrated" by a "Jewish elite" whose aim is to destroy white heterosexual Western culture.²³ While the broader debate about perceived "wokism" in gaming is not extremist in nature, extremist communities frequently "hijack" this debate, employing antisemitic memes and rhetoric to claim that a "globalist Jewish conspiracy" is orchestrating these changes. This discourse also often features anti-LGBTQ+, racist and misogynistic narratives. Users employed antisemitic slurs when discussing new LGBTQ+ storylines or prominent non-white characters in games such as 'Baldur's Gate 3' or 'GTA 6'. Users claimed the games were part of a "Jewish globohomo agenda" to promote "degenerate values" among white male gamers.²⁴ Notably, antisemitic conspiracies were also identified in relation to non-gaming discussion about global events, with users on Gamer Uprising, Steam and 4chan sharing antisemitic discourse in response to the ongoing war in Gaza and Russia's invasion of Ukraine. Some users also shared links to websites featuring Holocaust denial content.



Violent fantasies, harassment and objectification dominate misogynistic discourse across platforms.

Users on 4chan, Discord and incels.is discussed how they would violently attack or sexually assault women for enjoyment in games like 'RimWorld', 'Red Dead Redemption 2' and 'GTA'. Derogatory terms targeting women were also employed by users in response to new game releases that featured women as main characters. Users claimed that women's sole purpose in games was to be attractive non-playable characters. In-game female characters who are perceived to have significant agency, masculine traits or who are non-conventionally attractive were degraded with misogynistic or transphobic slurs. Users on Discord also made violent threats against women associated with prominent gaming streamers, threatening to stalk, doxx or harass them. On incels.is, videos were also shared to show women being harassed in gaming settings for entertainment. The encouragement and enjoyment of harassment, and the enactment of violent fantasies in game, legitimise and trivialise abuse and violence against women. They also represent these users' wider rejection of women in gaming spaces.

^{26.} Non-playable characters are any character in a game not controlled by a player. Their sole purpose is to interact with the playable character or act in the background to create an atmosphere for the game setting.



^{23.} Changes leading to a greater representation of women, ethnic minorities or members of the LGBTQ+ community in gaming are frequently criticised as "woke" by users who disagree with them. Please refer to the appendix at the end of this report for further information on how "woke" was defined within the context of this project.

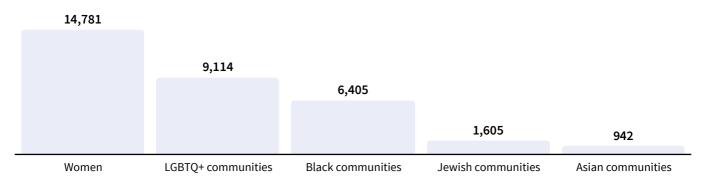
^{24.} The term "globohomo", a blend of globalist and homosexual, is closely linked to the antisemitic conspiracy of "Cultural Marxism". It alleges that "global elites" are prompting a homogenous culture dominated by feminism, multiculturalism, gender fluidity and liberalism in an effort to weaken white heteronormative Western cultures.

^{25.} Rimworld' is a construction simulator where users can manage their own sci-fi colony; 'Red Dead Redemption' is a Western action-adventure sandbox series made by Rockstar games.





▼ Threats of violence by target group: top five



3% (36,315 posts) of all extremist posts identified featured threats of violence. Women were the main target of violent threats across platforms. Platforms do have content moderation practices in place, and so original numbers may have been higher.



Artwork from 'Fallout 4' Community on Steam where the user encourages committing domestic violence against a woman due to her child being Black.



Users on 4chan, incels.is, Gamer Uprising and Discord frequently discuss the assumption that law enforcement agencies are monitoring their posting activity.

Users accused each other of being "glowies" when engaging in disagreements or claimed games were secretly designed by law enforcement if they restricted content.²⁷ Users also shared conspiratorial claims about law enforcement officers infiltrating their communities disguised as "femboys" or attractive women to "seduce" and "indoctrinate" them. In response to this perception, users moderated their own posting behaviour to "protect" themselves in case they were being monitored. Users sharing threats of violence added caveats such as "in video games for the glowies" to demonstrate how their desire for violence could not be treated as a "real" threat. On Gamer Uprising, the site's approach to moderation was driven by the perception that law enforcement agencies are monitoring the site. Moderators stated that discussions of real-world violence and the planning of attacks are prohibited and removed to keep the site online and prevent users from facing legal consequences.

27. "Glowie" is a term used by extremist communities for law enforcement officers who may have infiltrated online communities for monitoring and surveillance purposes.









Influential voices and groups

Across the online gaming ecosystem, individual streamers who publish gaming content to their online channels dominate the "influencer space". Their content primarily features video game playthroughs, reaction content, and more recently lootboxes and online casino games. Across the monitored image- and thread-based platforms (Steam, incels.is, 4chan and Gamer Uprising), influential streamers are discussed but they do not maintain their own accounts. The latter is more common on Discord, where streamers post about their content and have dedicated fan spaces. Next to gaming personalities, current and historic extremist personalities also enjoy popularity among extremist communities in the online gaming ecosystem.



Mainstream gaming personalities involved in controversies are frequently discussed by extremist communities.

Users discussed a wide range of popular streamers and VTubers.²⁹ Across platforms, well-known streamers like xQc attracted considerable volumes of discussion. XQc is one of the most successful gaming streamers globally.³⁰ However, he has also been involved in controversies related to accusations of homophobia and racism.³¹ In discussions of xQc across monitored platforms, some users alleged that he is unfairly targeted by "Jewish elites" or the "New World Order" because he is a "successful white man", while others degraded his fanbase with homophobic slurs and called for him to be killed. Influential personalities accused of sharing misogynistic narratives, such as Twitch streamer N3on, were also discussed among incel communities in particular.³² While some users on incels.is speculated that N3on was a "plant" merely aiming to infiltrate incel communities, others expressed support for him as a "genuine incel".

Next to gaming personalities, musicians such as rapper 'Lil Darkie' were also popular among Discord and 4chan users. The rapper wrote songs such as 'Holocaust' and 'Genocide', which discuss the fear of censorship, trivialise the Holocaust and feature references to QAnon. Users shared YouTube links to their content and discussed listening to the rapper as part of their gaming routine.

^{32.} N3on is a streamer who has been accused of misogyny and making violent threats to underage users online; Shreyan Mukherjee, N3on reportedly banned from Kick after streamer threatened to dox and sexually assault a young fan, Sportskeeda, 14 March 2024.



^{28.} Lootboxes are in-game chance-based mechanisms that allow players to pay with real money or virtual currency to win outfits or weapons for a character. There has been controversy surrounding their nature as they strongly resemble gambling and often attract young users.

^{29.} Vtubers are online influencers that use animated characters or avatars, rather than their real face, for their online content. The avatar is able to move through motion capture in their videos.

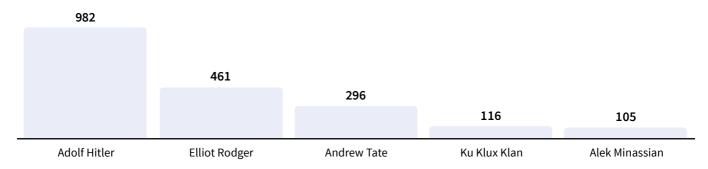
^{30.} xQc started his career as a professional 'Overwatch' player. He is now one of the most watched streamers on Twitch and recently signed a USD 100 million deal with the gaming and live streaming platform Kick. 'Overwatch' is an MMO first-person shooter game developed by Blizzard.

^{31.} Aravind Menon, "We Need More Girls on the Basis That They Are Girls Is Stupid" - xQc Responds on Women Empowerment in Esports Amidst FaZe Rain vs Grace Van Dien Banter, Essentially Sports, 30 May 2023; Overwatch pro player suspended over homophobic slur, BBC, 22 January 2018; Avi Selk, An Esports Star had to be removed from a Landmark Tournament over Accusations of Racism, Washington Post, 12 March 2018.





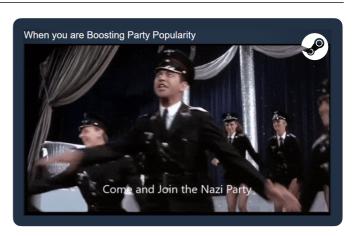
▼ Most mentioned extremist personalities and groups across platforms





Adolf Hitler memes and Nazi regime strategy games function as extremist "dog whistles" among extremist communities in the online gaming ecosystem.

Adolf Hitler was frequently referenced in memes and discussions denying the Holocaust, with users endorsing his actions. This was at times disguised as "historical roleplay", in which users would simulate the Nazi regime in historical strategy games, such as 'Hearts of Iron IV'.³³ While users did not overtly endorse joining current extremist groups, they discussed and emulated Hitler or the Ku Klux Klan. Both are extremely well-known and can be shared in memes and short short form content without the need to provide additional



User artwork shared in 'Hearts of Iron IV' Steam community.

context, as their iconography is easily recognisable in short messages, images and links. Other prominent figures mentioned include Andrew Tate, whose views and actions were supported by users across platforms. However, some users on 4chan also racially abused Tate or shared how they enjoy his alleged status as a "mainstream hate figure".

^{33.} It should be noted that historical war games are not extremist in nature, but they are exploited by extremist communities that want to play and glorify historically revisionist storylines and use them to enact violence against "out-groups". This extends beyond World War II settings and is also seen in games set during the colonial period or the Cursades; 'Hearts of Iron IV' is a strategy wargame focused on World War II developed by Paradox Development Studio.









Extremist communities primarily congregate within pre-existing gaming forums, exposing larger audiences to their extremist narratives.

Rather than creating their own bespoke communities, extremist users tended to congregate in existing gaming spaces linked to specific games or game genres. The "Deus Vult" roleplaying sub-community was identified across both fantasy and medieval-setting games such as 'Crusader Kings'. Extremist users exploit the historical setting of these games to emulate Crusader knights participating in Holy Wars to "erase" Islam and "genocide" Muslims. Within these games' community forums, these users discussed how they took enjoyment from killing Muslims in game and some based their entire Steam profile around a Crusader knight persona. Clans and particular game communities in MMO games were also exploited by extremists. A global community server in the game 'Path of Exile' hosted extremist groups due to its dog whistle server name '1488'. The server was perceived as a "safe space" for users to play the game without LGBTQ+ or non-white players and without being challenged for using extremist slurs. Extremist ideologies are not necessarily the primary link between these users, but these actors can capitalise on shared gaming interests to share extremist narratives. Thus, a wide range of users that may be initially attracted to groups because of their gaming interests are exposed to extremist discourse that is normalised under the guise of gaming or roleplaying. In some of these groups, extremist narratives are dominant and users may feel they have to adjust to them to fit in, especially if they cannot find an alternative community with the same interests.

^{36. &#}x27;Path of Exile' is a free action role-playing game set in a dark fantasy world.



^{34. &}quot;Deus Vult" means "God wills it" and is a Christian reference to divine providence. It became a rallying cry used initially by Catholics during the First Crusade in the 11th century. In a gaming context, Deus Vult "roleplaying" refers to users either playing historical games or adapting in-game characters such as knights in fantasy games to simulate Christian Crusades and murder Muslims. Also, see footnote 33.

^{35.} In video games, clans, guilds or factions are communities of users that compete, connect and collaborate together in online multiplayer games. They offer a sense of camaraderie and belonging for many gamers who share the same gaming interests.







The role of games

Both extremist and non-extremist games are discussed and shared among users across monitored platforms. There is a wide range of genres and types of games that feature in extremist discussions, with many of them serving different purposes. Some games and game developers are attacked by users for their "wokeness", while others are played and celebrated because they enable users to engage in gameplay that fits their extremist worldview. Only a small minority of games are developed by extremists in an effort to share extremist narratives, and can therefore be classed as such in their entirety. The vast majority of games extremist communities engage with can be considered mainstream games whose features are exploited for "extremist gameplay".



Extremist communities present a perceived entitlement to popular game franchises and the online gaming space more broadly.

Mainstream games, including 'AAA' games such as 'Starfield', 'Baldur's Gate 3' or 'Spider-Man 2', are played and widely discussed by extremist communities across platforms.³⁷ However, users frequently attacked these franchises and shared hateful narratives when the games' storylines and characters did not conform with their extremist worldview. This was particularly prevalent when new game releases prominently featured ethnic minority characters or LGBTQ+ themes. Users' outrage about so-called "woke narratives" was largely driven by their belief that characters and storylines within games should exclusively cater to members of their community. This entitlement to games and gaming spaces is driven by their belief that the vast majority of gamers who "fund" the industry are white, male and heterosexual with traditional heteronormative worldviews. Many users expressed the belief that the gaming industry is increasingly used to "propagate woke values" instead of good gameplay, blaming the "New World Order" or "Jewish elites" for allegedly promoting diversity in an effort to "erase" white Western culture. Users shared "go woke, go broke" narratives in response to reports of staff redundancies and other challenges within the industry.

In response to the perceived "woke agenda", some users claimed to have turned to games they perceive to be "safe havens" due to them allegedly catering to extremist narratives or being "apolitical". Users often recommended games for not featuring LGBTQ+ characters or players, or for allowing them to "speak freely" in in-game chats.

^{37. &#}x27;AAA' or 'Triple-A' games are high-profile video games developed with a large budget by prominent game developers, such as 'Grand Theft Auto' or 'Call of Duty'; 'Starfield' is an action role-playing game based on space exploration developed by Bethesda; Marvel's 'Spider-man 2' is an action-adventure game based on the Miles Morales Spiderman comic series, developed by Insomniac games.









Game lore is used to confirm extremist worldviews or adapt stories to feature extremist discourse.38

Users discussed game narratives and storylines across platforms in an effort to confirm extremist worldviews. Quotes from certain characters in game were construed to portray them as "inspirational figures" who allegedly hold views in line with ERW or incel ideology. One user on incels is discussed how the in-game dialogue of a blonde male character from 'Cyberpunk 2077' helped them rationalise their perception of sex workers, namely that they are "merely service providers". They related this experience to their own, demonstrating how it provided them with confidence that they were justified in their dehumanisation of sex workers and could simply "use" these "femoids" to meet their sexual needs, confirming incels' views of the profession. Users also created their own animated video content that included characters from popular games enacting extremist behaviour, such as killing people who identify as transgender.

In discussions of fantasy and sci-fi games, lore was also used to justify and perpetuate racist ideology. These discussions extended beyond legitimate discourse over characters and worldbuilding in fictional games. Employing racist slurs, users discussed how Black characters were "out of place" even if the specific games were set in entirely fantasy-based or sci-fi settings and the character's role had been established as canon by the game developers. Users argued that fantasy games based on European mediaeval contexts, such as 'Baldur's Gate 3', should not feature LGBTQ+ or non-white characters. In Sci-fi games, users stated that Black characters should be excluded from any game setting unless it resembles Africa. Despite developers canonically including non-white and LGBTQ+ characters in their fictionalised worlds, users projected their extremist worldviews on to the games' lore. The manifestation of such narratives in game lore among extremist communities also reflects the wider sentiment regarding the role of ethnic minorities and women in games.

^{39. &#}x27;Cyberpunk 2077' is a futuristic action-adventure game. It was developed by CD Projekt Red.



^{38.} Game lore is the information and facts around "world building" that often refers to the fantasy history of the in-game world. Lore can refer to characters, landscapes and historical events that are canon within the game. Game lore is not exclusively created by developers, but can also be theorised and written about by fans in game Wikipedias and elsewhere.







Game developers are consistently associated with antisemitic and anti-LGBTQ+ conspiracy theories, and targeted with racist rhetoric.

Across platforms, game developers and the gaming industry more broadly were seen as "propagandists" working for the "Jewish World Order". Game developers such as Larian or Bethesda were targeted in particular due to having two of the largest game releases of 2023, 'Baldur's Gate 3' and 'Starfield'. Users accused them of "promoting" homosexuality and mass immigration through the storylines of both games. Users also targeted the accounts of some developers with anti-LGBTQ+ slurs for allegedly implementing "woke" narratives into their games, and Chinese and Japanese developers were targeted with racist anti-Asian slurs.



Sandbox games and Mods offer "extremist escapism" from other games that are not perceived to cater to users' extremist worldview.⁴⁰

Mods are a way for non-extremist games to become more violent or align with extremist narratives and discourse. Platforms like 4chan have dedicated threads to share relevant mods for popular games, with users frequently sharing links to game modding websites such as Nexusmods and Basedmods.⁴¹ Some users saw "modding" as a means to counter perceived "woke diversity" narratives by removing pronouns or non-white characters from a game or to include more in-game violence. Users on incels.is discussed how 'Roblox' mods enable them to kill women or migrants in the game.⁴² Sandbox games offered a similar creative freedom for users. Some users discussed Holocaust servers in 'Minecraft' which allowed users to replicate or ridicule the extermination of Jews at Auschwitz.⁴³ Therefore, while the games they were playing were not extremist, the creative freedom offered through modding and sandboxes allowed users to tailor the game to their extremist worldviews.



'GTA 6' is a dominant topic of discussion across platforms, with the game perceived as a microcosm of current society by extremist communities.

Due to 'GTA' closely depicting real-world settings, users frequently discussed the representation of society within the game, claiming it confirmed their worldview. Users alleged how the 'GTA 6' trailer represented a society full of ethnic minorities and "promiscuous" women, citing the "decline" of the West and "Great Replacement" conspiracies. Users attacked the game and its non-white female protagonist with derogatory slurs. Despite users' frustration with 'GTA 6', like previous GTA releases, its sandbox capabilities also drove excitement among users who wanted to enact in-game violent fantasies targeting women or ethnic minorities.

- 40. Sandbox is a type of game that allows users greater creative control over a player's environment or "game journey" such as 'GTA', 'Minecraft', 'Roblox' or 'Red Dead Redemption 2'.
- 41. Nexus mods and Based mods are modding sites where users can share video game mods they created.
- 42. 'Roblox' is an online game platform where users can programme and play on their own servers.
- 43. 'Minecraft' is a sandbox game where users can create their own worlds and collaborative servers. It is developed by Mojang Studios.









Recruitment and radicalisation tactics

Due to the public nature of the monitored spaces, explicit recruitment efforts among users in the online gaming ecosystem are rare. However, users do expose others to extremist content and discourage them from engaging with mainstream content creators or games. Across platforms, extremist users attempt to establish "safe spaces" for people with similar worldviews to play, share, and interact with each other without the pressure of moderation or backlash. Other users that are exposed to this content are at risk of desensitisation to hateful rhetoric and discussions of violence targeting minorities.



Demonisation of "normies" may pressure users into engaging with extremist themes and games to find acceptance.44

Being a "normie" is seen as an ultimately negative trait among extremist communities. The term is used to refer to gamers who "passively" follow mainstream trends in gaming, supposedly lacking individual agency and high-level gaming skills. Consequently, users in these spaces are often pressured to stop engaging with mainstream games and streamers, instead seeking out more niche content to be validated. On 4chan, users shared links to their Steam profiles in a dedicated thread to seek approval from other community members for the games they played and their in-game achievements, while also attempting to connect to play with like-minded users. In response, other 4chan users would rate their profiles as "normie" or "based". In discussions of games such as 'Call Of Duty' or 'Diablo', users capitalised on existing controversies surrounding the games, claiming that they are overrun by members of the LGBTQ+ community and encouraging others to play other games or older instalments of the franchise. Demonising games and communities perceived as mainstream can separate players from mainstream fan bases and peer pressure users into solely engaging with "niche" game communities, where discourse is unmoderated and extremist content is shared. This tactic may put vulnerable users seeking acceptance and belonging at risk of radicalisation.



"Off-ramping" techniques may be employed to "recruit" users into extremist spaces or expose them to extremist content.

Due to the interconnected nature of the gaming ecosystem, "off-ramping" was common on platforms like Steam, where users shared links to Telegram channels or Discord servers to connect with others. The vast majority of these groups were not extremist in nature, advertising Telegram channels for game giveaways, discussions with game developers, mods or content sharing. However, some users shared links to Discord servers that were advertised as "deliberately unmoderated spaces" or as groups that do not allow members of LGTBQ+ or Black communities. Other users would move from Steam to 4chan to engage in unmoderated discussions or to discuss specific games which only had limited in-game chat functions. Users playing games like

- 44. "Normies" is a term employed in many extremist communities, particularly incels, to refer to "bluepilled" individuals that have not been awakened to the "reality" of society. Normies are seen as "indoctrinated" into mainstream culture and games.
- 45. 'Diablo' is an action role-playing dungeon crawler series set in hell, created by Blizzard; 'Call of Duty' is a military video game series made by Activision; José V. Rossi, "Diablo 4 is Being Review Bombed on Steam". Game Rant, 18 October 2023.
- 46. Giveaways are promotional lotteries done by a developer or user that will offer free games, in-game character skins or weapons for some users that sign up.







Path of Exile', a free fantasy action roleplaying game that has attracted extremist communities in the past, would connect via 4chan instead to offer in-game trades or coordinate harassment campaigns to get users they disagreed with removed from the game. Users' cross-platform presence allows them to move between moderated and unmoderated spaces, adjusting their behaviour accordingly and potentially "off-ramping" other users in an effort to radicalise them.



Coordinated harassment campaigns are used to mobilise the "in-group" and threaten members of the online gaming community that are perceived as "out-groups".

Coordinated harassment found historically in gamergate and community "raids" continues to be identified across the online gaming ecosystem.⁴⁷ Users organised campaigns in unmoderated spaces on 4chan, sharing links to accounts or comments on platforms such as Steam, Roblox, YouTube or Discord which they disagreed with. Users were targeted for self-identifying as members of the LGBTQ+ community or for being women commenting on developments in the gaming industry. Users encouraged others to report, comment and spam their accounts or content to intimidate them or get them removed. In-game, users tried to ban others by exploiting the cheater reporting function.⁴⁸ Raids in particular were seen as entertainment by some users, who perceived this form of collective harassment as benign or funny. Raids can create a sense of collective mobilisation that can strengthen the "in-group" identity, allowing extremist communities to feel powerful and entitled to defend the gaming space against "undesirable out-groups". This sense of collective achievement and mobilisation may attract at-risk users to these extremist communities, seeking a sense of belonging and influence.



Initiation culture based on frequency and "quality" of posts may function as a radicalisation "fast track".

On 4chan, incels.is and Gamer Uprising, users were rewarded for consistent engagement and posting. Some platforms display a user's total posts to establish their seniority, while other spaces would distinguish between new and established users by labelling the former "newfags". On Gamer Uprising, access to the wider platform is restricted to new users, who have to prove their "worth" in the 'Newfag Barn' forum before they are granted posting privileges to the remainder of the platform. This leaves users at the mercy of the platform's admins, who encourage users to post often and share extremist narratives. Users who do not comply with this expectation are belittled and ostracised. Platform admins also employ a "swastika reward system", which awards users by adding swastikas to their profile based on seniority and posting behaviour. Some users attempted to garner respect among the community by sharing violent gameplay videos alongside extremist slurs to establish themselves as skilled and "based" gamers. By constructing an in-group through "veteran members" of the community, there is an expectation for users to earn the respect of the pre-existing members by sharing "quality extremist content", potentially creating a radicalisation "fast track" for users who are desperate to fit in.

- 47. A "raid" is a type of coordinated mobilisation to another channel, often featuring the "spamming" of the channel's chat. This can be used as a positive to boost engagement for lesser-known streamers but can also be used as to engage in targeted harassment.
- 48. In recent years, gaming companies have attempted to combat cheating in games by introducing bans for individuals that give themselves an unfair advantage. Users are able to report others they perceive to be cheating in-game. The system has often been exploited by users as platform verification of user actions appears to be less rigorous.









Conclusion and recommendations

The analysis highlights the complexity of the online gaming ecosystem and how extremist communities exploit these spaces. Users from extremist communities share racist, anti-LGBTQ+, misogynistic and antisemitic content, including violent narratives. The research also showed how extremists abuse mainstream games to "live out" their extremist worldviews in game and capitalise on mainstream discussions to share extremist content with a wider audience. The recommendations below are driven by the findings shared in this report and aim to address some of the key challenges highlighted:



Ensure policies, legislation and law enforcement actions are informed by a thorough understanding of the complexity of the online gaming ecosystem.

In order to effectively counter extremism in gaming, law enforcement and policymakers need to understand the complexity of this ecosystem, and how these spaces, key actors and games function. Experts from a range of different industries and key stakeholders should be closely involved in advising and training relevant bodies in creating policies, legislation or interventions to ensure this complexity is taken into account. This should include a detailed understanding of different online gaming platforms, games, gaming communities and how extremists exploit these spaces. This is vital to design effective solutions to counter extremism in the online gaming ecosystem and avoid the potential stigmatisation of entire games or gaming communities.



Employ automated moderation systems to remove extremist games.

Our analysis identified several extremist games being sold or shared on the monitored platforms. Automated systems can be deployed to detect and moderate this content. In order to promote cross-platform collaboration, it is recommended that a hash database of these games and their associated developers is created to limit their circulation.



Conduct "red-teaming exercises" of games prior to their release.

Our research highlights how sandbox games and mods can be exploited to promote extremist narratives. In order to identify possible ways in which a game can be manipulated, particularly to enact violent fantasies, game developers should run "redteaming exercises" of prospective releases to anticipate options for extremist users to exploit the games for harmful purposes and put relevant safeguards in place where appropriate.







4

Conduct further research into the prevalence of extremist narratives in audio and video content across the online gaming ecosystem.

This research has focused primarily on text and image based content. Audio and video content is also shared within these spaces. It is recommended that more research is carried out to understand the role audio and video content play in disseminating extremist content and to explore platforms' capacity for moderating this content.

5

Introduce mandatory transparency reporting with specific standardised reporting guidelines.

To effectively tackle the issue of extremism in gaming, it is crucial to have a more in-depth understanding of the volume and nature of extremist content that is reported by users or removed by Trust and Safety teams in public and private spaces across gaming and gaming-adjacent platforms. Mandatory transparency reports with standardised methodologies for documenting key data points would enable platforms, policymakers and researchers to understand the key challenges users face on these platforms and assess key trends over time. Furthermore, transparency reports could highlight which measures are currently used by users to report content, providing insights into the uptake and efficiency of content reporting mechanisms.









Appendix

Definitions

Extreme Right-Wing (ERW) ideology is defined as the promotion or advancement of views based on violence, hatred or intolerance that aims to negate or destroy the fundamental rights and freedoms of others or undermine democratic rights.⁴⁹ It includes marginalisation of minority groups, and can feature racism, white supremacy, xenophobia, Islamophobia, antisemitism, harmful conspiracy theories, and anti-LGBTQ+ sentiment among others.

Incel (involuntary celibate) ideology is defined as a belief system held by men who define themselves by their inability to form or access sexual relationships with women. They believe this is the combined result of genetic factors, evolutionarily determined traits in women, and inequitable social structures. This belief system is presented as an objective and scientific truth, and thus regarded as unchangeable. Incel ideology often features conspiracy theories about the role and behaviour of women in society, which form the basis of incels' dehumanising and violent misogynistic beliefs. They portray women as the key perpetrators of incel oppression, and as biologically and evolutionarily incapable of empathy or love towards incels. Violent sentiment towards women is prevalent across incel communities.

Woke is defined as awareness of social justice issues and inequalities, including racism, misogyny or the discrimination of LGBTQ+ communities, among others. ⁵⁰ Within the context of the online gaming ecosystem, it refers to perceived efforts made by certain game developers and gaming communities to increase racial and gender diversity, in particular across the gaming industry. This may be driven by increasing diversity among game developers and designers through in-game characters and game design or the promotion of specific video game streamers.

To access a glossary of terms from the GEMS project featuring key terms and concepts relevant to extremism within the online gaming ecosystem, please visit the <u>project site</u>.

Methodology

For this research, Moonshot used in-house data collection and enrichment capabilities to gather posts shared on relevant online gaming or gaming-adjacent spaces and tag them for ERW and incel indicators. Our research focused on English-language posts in **publicly accessible spaces** only across relevant platforms.

A keyword-tagging approach was used to analyse the extent and nature of ERW and incel discourse within posts collected from monitored spaces on Discord, incels.is, 4chan and Gamer Uprising. On Steam, our analysis was qualitative in nature.

- 49. Department for Levelling Up, Housing and Communities, "Government strengthens approach to counter extremism", 14 March 2024.
- 50. Oxford English Dictionary, "Wokeism (n.)", March 2024.







Phase I: Viability assessment

Moonshot conducted an initial viability assessment to identify the platforms of highest relevance to the research objectives.

The viability assessment was primarily guided by the following questions:

- Does the platform host publicly accessible gaming or gaming-adjacent spaces?
- Can extremist discourse be identified in gaming or gaming-adjacent spaces on the platform?

Moonshot assessed 24 gaming and gaming-adjacent platforms for inclusion in our analysis. Following this assessment, **Discord, 4chan, Gamer Uprising, incels.is** and **Steam** were selected as platforms for this research.

During the viability assessment, negligible volumes of Islamist Extremist (IE) content were identified across all assessed platforms. As a result, ERW and incel content only were selected as the focus for further research. The focus on English language content and publicly accessible spaces only across the platforms included in our viability assessment may have led to the exclusion of some spaces that feature relevant IE content. Therefore, the absence of IE content from this research should not be necessarily regarded as evidence that this content is not present across the online gaming ecosystem.

Phase II: Identification of relevant spaces for data collection

Once the viability assessment was complete, Moonshot worked to identify relevant gaming and gaming-adjacent spaces on each platform where ERW or incel content was being shared.

As a result of this research, we identified the following spaces for analysis, from which data was subsequently collected:

- Discord: 34 channels across 21 gaming-related Discord servers, with over 4 million subscribers in total.
- **4chan: Six** gaming-specific discussion boards.
- Incels.is: Two main forums on the site, 'Inceldom Discussion' and 'The Lounge'.
- Steam: 25 gaming-related forums and groups.
- **Gamer Uprising:** The entire site.

Phase III: Data collection

The methodology for data collection across the platforms selected varied due to different data structures and the varying types of content hosted on each of these online spaces. The timeframe for data collection was **1 July 2023** to **31 December 2023** on Discord, 4chan, incels.is and Gamer Uprising. On Steam, posts between **1 December 2023** and **30 April 2024** were manually analysed. This resulted in the following data samples for analysis:





• **Discord: 24,328,280** posts for analysis.

• **4chan: 39,589,041** posts for analysis.

• **Gamer Uprising: 27,334** posts for analysis.

• Incels.is: 22,966 posts for analysis.

• Steam: Our analysis was qualitative in nature. Relevant posts were viewed and assessed manually.

Once all data was collected, each post was keyword-tagged to identify any references to ERW or incel content and aid with data analysis.

Phase IV: Data analysis and reporting

Once the data had been collected, tagged, and quality assured, analysis was conducted on the resulting datasets to investigate:

- The prevalence and nature of extremist discourse across gaming-relevant spaces and its impact on radicalising users.
- The most prominent extremist narratives across the online gaming ecosystem.
- The prevalence and nature of threats of violence across gaming-relevant spaces.
- The role of certain games within extremist discourse and radicalisation efforts across monitored spaces.





Limitations



Potentially incomplete coverage due to platform moderation

Posts on some of the platforms analysed, particularly more mainstream ones, are regularly removed either by platform moderators or by the authors of the posts themselves. Therefore, it is reasonable to assume that a percentage of extremist posts over the timeframe analysed would have been removed and, therefore, would not have been captured in our dataset. This may have affected posts featuring explicit calls for violence in particular as these posts can face stringent moderation efforts on some of the platforms monitored for this project.



False positives in the sample analysed

Moonshot's thorough quality assurance process has been designed to eliminate as many false positives as possible. Moonshot's keyword database of extremist indicators was thoroughly reviewed so that only ERW or incel discourse would be identified. Once the data collection and keyword tagging processes were complete, the data was checked by internal and external subject matter experts to identify and remove any false positives. However, due to the high volumes of data, it is possible that some false positives were retained in the datasets analysed, as automated tagging processes will still inevitably produce some false positives.



Potentially incomplete coverage due to keyword-based collection

Due to the high volume of posts published on the platforms included in this research over the timeframe analysed, our approach to data collection was keyword-based - meaning that only text-based posts including at least one keyword from our database were collected. Given the nature of online posting behaviour, and the prevalence of videos and images with limited or no captions, any coverage of extremist ecosystems will inevitably be a subset of the content online.

