EXTREMISM IN GAMES

A PRIMER

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Info@TakeThis.Org

www.TakeThis.Org

AUTHORS

RACHEL KOWERT, PHD

ELIZABETH KILMER, PHD

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Executive Summary

- Video games are the most popular form of entertainment media. Today, the gaming industry is larger than the music, movies, and film industries combined.
- Alongside its growth and globalization, have come rising concerns about extremist exploitation of digital games.
- Due to their role as a cultural touchstone as well as their unique social characteristics, games provide opportunities for exploitation above and beyond those of message boards or social media.
- Today, there is growing evidence that digital games are being exploited to radicalize, propagandize, recruit, and mobilize new members to violence.
- More than half of all players report being exposed to a range of extremist ideologies in games, including racism, misogyny, anti LGBTQIA+ hate, White Nationalism.
- The normalization and ubiquity of extremist rhetoric actively cause harm to protected groups and pose a threat to democracy and civil society.
- Real-world impacts of radicalization include the Buffalo shooter, who drafted his manifesto on Discord, a popular game-adjacent space, as well as the Christchurch shooter, who integrated game-like elements into his acts of terror.
- It is important to note that not all game players are at risk for radicalization or mobilization to out-of-game violence. Understanding who is at most risk is critical to effectively identify who is at risk to optimize intervention efforts on the individual or community level.
- While gaming spaces often have terms of service that prohibit hate speech and illegal content, current moderation strategies continue to fall short of preventing or effectively removing hateful or extreme content.
- There are currently several efforts to better understand radicalization and extremism in game and game adjacent spaces, including efforts by game studios, research organizations, and nonprofits.
- Creating safe online gaming communities is a complex task and involves the buy-in from stakeholders across the games industry, the government, and civil society.

Introduction

Concerns about the extremist exploitation of digital games has been increasing in recent years. These worries are centered on both direct (targeted recruitment efforts) and indirect (normalization of extremist sentiment in gaming spaces) radicalization of game players. Given the centrality of digital games in today's entertainment ecosystem, these concerns are warranted: Today, digital games are larger than the television, film, and music industries combined[1] and nearly one-third of the world plays video games.[2]

The sheer size of the ecosystem, combined with the normalization of extreme ideologies in gaming spaces[3] and the successful targeted radicalization of game players[4] continues to bring these discussions to the forefront of public conversation. More recently, policy makers have started to show interest in these topics following the deadly terrorist attacks with gamified elements (such as the Christchurch and Buffalo shootings) and the sharing of government secrets on the game-adjacent platform Discord.[5]

This document was drafted to serve as a resource for facilitating discussions about the nature and scope of extremist exploitation of games. It is important to note it is not an exhaustive overview of this field of study; rather it serves as an introduction to the terms and processes often discussed in this area of research. Our hope is that it will provide a foundation for the development of best practices, intervention, and mitigation strategies tailored to games and gaming cultures. While it remains important to intervene once harm is detected (i.e., reactive moderation) it is also important to understand the systematic environmental conditions and individual vulnerabilities that allow for the exploitation of our digital playgrounds.

Key terms: Extremism, radicalization, and terrorism

Before delving into the extremist exploitation of games specifically, we must first develop a shared language around the key terms that will be used throughout this paper. Specifically, we will be using the following working definitions:

Extremism is the advocacy of extreme views, including the belief that an in-group's success or survival can never be separated from the need for hostile action against an out group.[6]

Under this definition, there are many ideologies that can be considered extreme. Some of the more pervasive ones within gaming spaces, such as misogyny, racism, and white nationalism, can be found in Table 1. Though these are listed as discrete categories, an individual's ideological beliefs often overlap across categories (i.e., ideologies associated with racism and white nationalism can share common sentiments around white supremacy).

Radicalization is the escalation over time of an in-group's or individual's extremist orientation in the form of increasingly negative news about an out-group or the endorsement of increasingly hostile or violent actions against an out-group. Though there is no singular path towards radicalization, this process typically happens through stepwise exposure to more extreme ideas and ideologies.

Radicalization can be a passive (through exposure to more extreme ideologies or individuals who hold extreme viewpoints) or active (through deliberate propagandizing from extremist groups) process. Radicalization processes often lead to the internalization and support for violent beliefs but do not always lead to violent action (i.e., terrorism).

Terrorism is the unlawful use of violence and intimidation to achieve ideological (or political) aims. It is an action or threat designed to influence change to advance a political, religious, or ideological cause.

TABLE 1:

Forms of extremism and their definitions

Form	Definition
Anti-government extremism	Anti-government extremism is a political movement that believes the federal government is tyrannical and traffics conspiracy theories about an illegitimate government of leftist elites seeing a "New World Order". This movement has sometimes been referred to as the "Patriot" movement. In this context, it is referring to the set of right-wing extremist movements and groups that share a conviction that part or all of the U.S. Government has been taken over by a conspiracy and is therefore not legitimate.
Anti LGBTQIA+ agitation	Anti-LGBTQIA+ agitation is the prejudice, discrimination, marginalization and/or oppression of people who identify as and/or are perceived to be outside the cisgender, heterosexual "norm."(i.e., gay, lesbian, bisexual, transgender, two-spirit, demisexual, intersex, asexual, or queer/questioning).
Anti-Semitism	Hostility to, prejudice towards, or discrimination against Jewish people.

Misogyny	Misogyny is a hatred of, contempt for, or prejudice against women. It is a form of sexism that is aimed to keep women at a lower social status than men to maintain the societal roles of patriarchy. Examples of misogyny include violence against women, sexual harassment, and social exclusion.
Racism	Racism is prejudice, discrimination, or antagonism directed against a person (or people) based on their membership to a particular racial or ethnic group.
White Nationalism	The white nationalist movement is a political movement or grouping based in the US whose members reject mainstream conservative politics and espouse beliefs and policies centered on the ideas of maintaining a white racial and national identity.

Extremism **is the advocacy of extreme views.**

Radicalization **is the process of someone's views becoming more extreme (i.e., more aligned with extremist belief and ideology).**

Terrorism **is the use or threatened violence directed against targets for their symbolic or representative value.**

The rise (and problem) of extremism

Normalization and decentralization of extremist ideology

When we hear the term "extremism," many of us picture a designated terrorist group plotting an organized violent attack on innocent civilians. However, as noted from the definition presented above, extremism is simply the advocacy of views that are hostile to an "out-group." While extremist beliefs and rhetoric have become increasingly common and normalized in the United States in recent years (e.g., toxic masculinity, racism, hate speech)[7,8], their frequency – and, in some cases, presence in the mainstream – does not alter their status as extreme ideologies. Extremist beliefs and rhetoric actively cause harm to protected groups and pose a threat to democracy and civil society.[9] Under this definition, ideologies including misogyny, racism, and antisemitism are classified as extreme beliefs as they all refer to the hatred of, contempt for, or prejudice against another group built on the underlying belief that one's own needs cannot be met without hostile action towards that group (for more, see Table 1). For example, misogyny is the hatred of, contempt for, or prejudice against women and the beliefs associated with misogyny have been found to perpetuate harassment and violence against women and girls.[10]

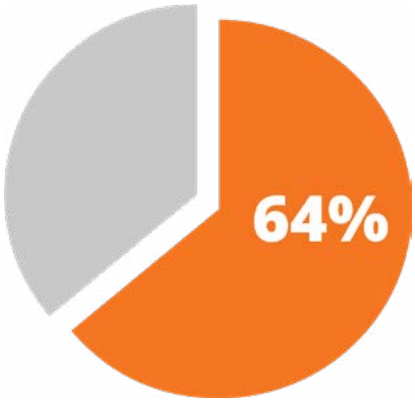
In addition to the normalization of many extreme beliefs in public arenas, we have also seen a significant decentralization of extremist groups over the last few years. Sometimes referred to as "hive terrorism," an individual's radicalization process is no longer dependent on formal membership in a designated group.[11,12] Prior to the internet era, extremist groups were generally constrained by their own physical limitations and radicalization and recruitment efforts were limited within one's own social and geographical circumstances.[13] Groups were largely organized with a central figure or group of figures who would propagandize their specific ideology to follow.[14] However, this is no longer the only way in which extremist groups

organize or extremist ideologies spread. A move towards decentralization of extremist movements started around the advent of the internet, and the continued accessibility and affordability of the internet has made decentralization easier.[15] In addition, the perceived anonymity and privacy of online interactions can make individuals feel more comfortable engaging in risky or antisocial behavior.[16,17] We have seen evidence of this in more recent attacks. For example, the gunman accused of murdering ten people in a Buffalo supermarket (referred to as the "Buffalo shooter") did not belong to or follow a centralized extremist group but rather identified as part of a decentralized, white-supremist online movement.[18]

The combination of the normalization and decentralization of extremism in the United States has led to new challenges in off and online spaces. For example, we are seeing unprecedented exposure to overt racism, misogyny, and other extremist ideology in our lives - from news reports to conversations at work, home, and online spaces. We have not only seen shifts in online cultures broadly, with the integration of extreme beliefs in internet and meme culture,[19,20] but also within gaming spaces specifically.

Extremism and games: Current trends

The internet has a history of being a gateway to communities devoted to extremist movements and spaces.[8] In relation to games specifically, there has been a growing concern that the normalization of hate and harassment in gaming spaces has made them more appealing to extremists and more vulnerable to extremist exploitation. A recent analysis of speech patterns in gaming communities found nearly two out of three game players (64%) have been a direct target of hate speech and more than eight out of ten (82%) have indirectly witnessed hate speech in games' social environment.[21] In a survey of game players in the US and UK, 58% of women and 62% of men reported experiencing direct abuse from other gamers.[22]



64% of players have been a direct target of hate speech.

Exposure to extremist ideologies has also been documented in gaming spaces. In 2022, the Anti-Defamation League (ADL) reported 20% of adult players are exposed to white

supremacist content.[23] In the same study, one-third to nearly one-half of LGBTQ+, African American, and female players reported experiencing identity-based harassment.

In and of itself, exposure to hateful content is problematic. It can lead to both short- and long-term harm, ranging from feelings of discomfort to post-traumatic stress disorder symptomatology.[3,23] However, the exposure to, and normalization of, extreme ideologies in digital games go beyond individual repercussions and have seemingly shifted gaming culture towards a greater acceptance of this language and associated behaviors. A report from Bryter Research noted 20% of game players believe online abuse is "part of online gaming."[22] Perhaps even more disturbing, is that when prompted, most game players report extremist ideologies (racism, misogyny, anti LGBTQIA+ hate, White Nationalism) to be a normalized and culturally justified facet of gaming culture.[24] This subjective recognition of this normalization is supported by more objective measures, including the high rates of exposure to extreme ideologies,[24,25] the use of extremist rhetoric in gaming spaces by game players,[26] and the integration of extremist ideologies within gaming identities.[27]

The normalization of hateful and extremist language is one of the greatest vulnerabilities for the exploitation of gaming spaces. Being embedded in a culture where exposure to these ideologies is commonplace can be (and is) leveraged for more active recruitment efforts through a strategy referred to as a "soft sell."[a]

Because the discourse in gaming communities has normalized sexist, racist, and antisemitic content (even in humor), players have a harder time identifying between "typical" and "extreme" content. As such, it becomes easier for extreme ideologies to seem less out of place at best and normal, or an accepted part of the culture, at worst. For example, players may hear a racist comment and see others in the community laugh, suggesting it is a social norm of the space. Over time, these ideas begin to normalize, as players continue to be embedded in a community where others share these ideologies and them being accepted (or at the very least, not overtly rejected by others) in the space.[b]

[a]The term "soft sell" refers to the use of humor or a pop culture touchstone (like games or music) to connect with a new audience and then gradually introduce them to more extreme ideologies; Hale, 2012, Fisher 2021

[b]While it is not within the scope of this paper to explain why everyday extremism has taken hold in games, it is worth noting that this has happened over time due to a range of factors - the lack of industry diversity, and the historical privilege given to the white male game. If you would like to learn more about this background, For more on this, see Wells, et al (2023)

There is preliminary evidence of this covert normalization of hate speech through meme culture, where individuals are less likely to rate images with hateful content as harmful the more frequently they are exposed to similar images.[20]

As noted with the example of meme culture above, the gravity of extreme and hateful ideologies are often minimized within jokes hidden behind a guise of "just joking." However, forums dedicated to these types of content have been linked with multiple real-world acts of terror.[28] For example, the Christchurch shooter's manifesto (posted to an online forum) was riddled with such memes and jokes, and he encouraged other users to carry on his message through memes and "shitposts." [c,29] Users did as he asked - memes were created and shared, his manifesto was translated into multiple languages, and games were created for people to replicate the deadly shooting online.[30] Some individuals carried on his message through more than memes - individuals calling the shooter a "saint" or a "catalyst" have carried out deadly attacks in California and Texas, as well as attempted attacks in Singapore and Norway.[30–32]

When extreme ideologies are normalized in one space (e.g., gaming spaces), that normalization can - and does - spill over into other spaces.[d] While the full scope of consequences of the normalization of extreme ideologies in gaming spaces is unclear, we do have some insight into how it is changing the way players see and interact with the wider (out-of-game) world. For example, individuals are more likely to be radicalized by, and engage in the same extreme behaviors as, individuals in their close social networks.[33] In relation to games specifically, one study of game players found that the more "normal" participants reported prejudice in gaming spaces to be, the more likely they were to report making prejudiced comments themselves.[34] Participating in toxic behavior in games (such as harassment or hate speech behaviors) has also been linked to being more likely to be persuaded by extremist propaganda.[35]

[c]An intentionally provocative comment posted to upset or distract others.

[d]It is important to understand that this study is not saying that video games cause the adoption of extreme ideologies but rather games are spaces where extremist ideologies are commonly shared and can be normalized.

Extremist exploitation of games: Content and community

The United States has seen a rise in domestic extremism in the past decade, with concerted efforts to normalize extremist rhetoric in public and political discourse.[36] In this way, the presence of extremist rhetoric in games parallels the presence of propaganda and exploitation across the internet. However, as a cultural touchstone, and because they have a unique ability to connect people and build relationships, games provide opportunities for exploitation above and beyond those of message boards or social media.[37]

In the following section, we outline our current understanding of the exploitation of game content and gaming communities. For the sake of clarity, game content and game communities will be discussed as independent entities. However, gaming content and the communities that build around them are often integrated, making it difficult to truly tease apart the independent use and impact of these two facets of a singular whole.

Game Content

Game content (e.g., game imagery, game characters, game storylines, references to games) is a common cultural touchpoint utilized in extremist propaganda.[38] A common way this happens is through pairing a well-known gaming reference with a particular ideology in the hopes of drawing in new members through a shared cultural reference. The goal is to increase the palatability of extremist rhetoric while normalizing the ideology through gaming and meme culture. For example, the easily recognizable design of the popular Grand Theft Auto series (Rockstar Games) has been adapted to "Grand Theft Auschwitz," complete with images of Adolf Hitler, concentration camp victims, Anne Frank, and general Nazi symbolism and imagery (see Figure 1). In addition to the overt visual co-optation of video game content,

the accompanying 4chan post made alongside this image, which simply states "I hate jews [sic]," further demonstrates the ideological beliefs of the individual posting this image.

Figure 1. Grand Theft Auschwitz propaganda taken from 4chan/pol

Many mainstream games have also been leveraged to advance existing extremist worldviews and are found to be referenced in both content and imagery in propaganda efforts (see Figure 2). For example, as described by scholars King and Leonard,[39] "Games such as World of Warcraft (Blizzard Entertainment), Resident Evil (Capcom), Killzone (Guerrilla Games Guerrilla), Grand Theft Auto III (Rockstar Games), Grand Theft Auto Vice City, and various World War II games are ubiquitously cited as both sources of fun and games that allow for the celebration or promotion of white nationalism" (p. 113).

Figure 2. Commentary on Resident Evil taken from 4chan/pol

It's important to note that it is often challenging or impossible to understand the intent behind the creation and sharing of such images. Some individuals may have intentional recruitment goals, while others are creating and sharing images and ideology they find interesting and

in-line with their beliefs. Regardless of intent, the impact is the creation and distribution of extremist rhetoric that leverages popular digital games and cultural references.

Beyond visual propaganda, we have also seen the rise of bespoke games and game modifications to reflect extremist ideologies.[40,41] This trend involves the creation of games for the specific purpose of spreading propaganda or glorifying their ideology. An example of this is the game Ethnic Cleansing, a first-person shooter created by the US white supremacist organization National Alliance in 2002. This first-person shooter game advertised itself as a space where you run through "a ghetto blasting away at various blacks and spics to attempt to gain entrance into a subway system... where jews [sic] have hidden to avoid the carnage. Then you get to blow away jews as they scream 'Oy Vey!'".[42] This game was specifically designed to propagandize ideologies associated with white supremacy and idolize violence against minoritized groups.

Off-the-shelf games can also be used in this way through the creation of "game mods" or modifications of published games, which can include user-generated content such as maps, minigames, or other kinds of adaptations.[41] One example of this would be modifying the off-the-shelf game Civilization VI (Firaxis) to have a Hitler-led Germany, rather than a Germany run by Frederick Barbarossa as designed. User-generated extremist content such as custom maps and games are relatively easy to locate across online gaming platforms.[43–45]

There are many games, gaming platforms, and online game stores developed in recent years that support individual users in creating and distributing original or customized content with other interested gamers. For example, the game Minecraft (Mojang) allows users to host their own servers and create and modify complex worlds. Roblox (Roblox Corporation) is a platform designed for users to create and sell their own games within the platform, with tools to allow users to create games without the need for advanced technical knowledge. Steam (Valve Corporation) is a popular game store that allows developers to publish games and includes forums in which people can build community and discuss games. Games and platforms like these are of particular interest when it comes to discussions around game content. It is important to note that while any game or platform can be leveraged in this way, Roblox, Minecraft, and Steam are often central to these discussions due to their accessibility, customizability, and popularity. In these settings where the in-game world itself has little creative limits, extremist exploitation can take many forms. Documented forms of this have included, but are not limited to: World War 2 simulations where the player is a Nazi whose the goal is the extermination of Jewish people (see Figure 3), recreations of the January

6th attacks on the capitol in Washington, D.C. where politicians and bystanders are murdered, as well as mini-games where the goal is to murder black avatars.[25,46] Though Roblox, Minecraft, Steam and other gaming spaces like them have terms of service that prohibit hate speech and illegal content, the current moderation strategies in these spaces continue to fall short of preventing or effectively removing problematic content.[43,45,47–49]

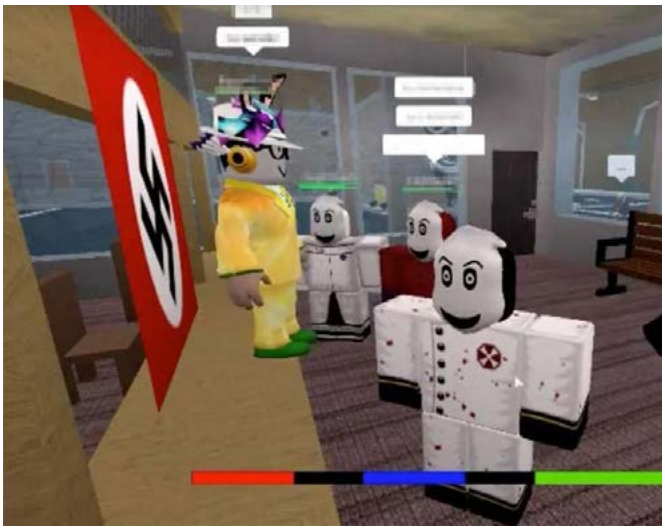


Figure 3. Screenshot from Roblox. Photo credit: The Sun.

The significant public discussion around gaming spaces such Robox, Minecraft, and Steam should not imply that these are the only gaming spaces with challenges addressing extremist exploitation, nor is there evidence that the developers or studios behind these games actively support extremist use of games.

Game Communities

The social communities of games are also being exploited. An opportunity to build community is one of the most positive features of many online games and has been linked to a range of positive outcomes, such as friendship formation, reduced loneliness, and increased self-esteem.[50,51] However, as social platforms,[52] the community-building potential of online gaming cultures can be passively and actively exploited on the path to radicalization. Engaging in shared activities strengthens community group bonds faster than passive consumption of media, and essentially "emotionally jumpstarts" social relationships between players.[53,54] That is, rather than meeting someone and slowly learning if you can trust them over time, as is

done in traditional, face-to-face relationships, players learn to trust each other in-game first and then slowly get to know each other over time. This creates close, tight-knit friendships in a shorter amount of time and may be longer lasting than friendships formed in other online spaces.[53,55,56]

These shared activities are often integral to game play (i.e., progressing through a game) and can be a core facet of the culture of any game space. For example, many multiplayer games rely on or support players self-organizing into groups such as "guilds" or "clans" - not dissimilar to a Scouting troop or sports team. This shared sense of comradery and group identity can help reinforce relationships and a sense of belonging. While this is one of the most attractive aspects of online game play (and while many people choose to play in the first place) it is also one of the most common facets of gaming communities exploited by bad actors. That is, the shared sense of experience, trust, and community can be leveraged by extremist groups to bolster the process of radicalization.[57] While there are various aspects to consider when it comes to the unique social spaces of games in for relationship formation and community building,[37] this focus here is on the how rather than the why.

As noted above, the exploitation of the social community of games can be either passive or active. Passive exploitation can occur when individuals who hold and share extreme beliefs are using games to build social connections and have fun within their communities. In this scenario, other players may engage with these communities by happenstance. Through play and engagement, they can become an active member of an extremist community through the "soft sell" and normalization effects that were discussed in the previous section. Here is an example of what this process looked like for one 15-year-old boy, as discovered by his father:

> "These people became his son's friends. They talked to him about problems he was having at school, and suggested some of his African-American classmates as scapegoats. They also keyed into his interest in history, especially military history, and in Nordic mythology. Above all, they offered him membership in a hierarchy: whites against others.
>
> 'He started to feel like he was in on something. He was now in the in crowd with these guys. It provided some structure and identity that he was searching for at the time.'"[58]

It is important to recognize that many individuals encounter extremist content designed by extremists for individual or group enjoyment, without an explicit goal of recruitment.[59]

The social community of games can be exploited through active efforts of designated terrorist groups to radicalize, propagandize, recruit, and mobilize new members to violence. Recruitment is a social process, and research has found that for up to three quarters of individuals who join extremist organizations social networks play a meaningful part of the radicalization process.[60] While the active radicalization and recruitment of game players through community building has been documented as relatively infrequent in occurrence, it is important to acknowledge that targeted recruitment in gaming and gaming-adjacent spaces have happened and successfully mobilized action to real-world violence.[4,61] Knowing this, it is important to understand what active radicalization online, and in games specifically, looks like. This is discussed in more detail below.

The radicalization pipeline

The radicalization pipeline is a concept that has roots in traditional extremist recruitment and radicalization.[62,63] Below, we present a model whereby these processes have been adapted to fit online spaces and online games. That said, it is important to note that there are several different models of radicalization and for many individuals and ideologies the process of radicalization is not a linear one.[64,65] Figure 2 illustrates a general process of radicalization in digital spaces. This illustration and the descriptions of each step are purposefully generalized for informational purposes and should not be used as a predictive measure groups or individuals.

As seen in Figure 2, there are four components to the radicalization pipeline. With each component, the pipeline narrows, indicating fewer individuals within the pipeline as well as

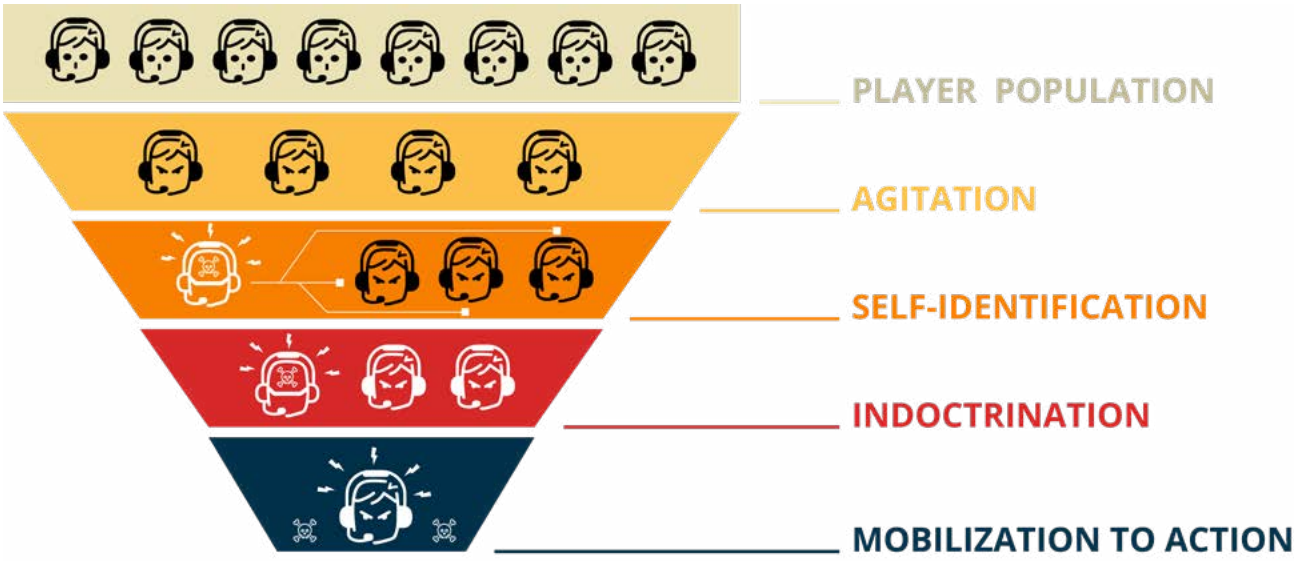


Figure 2. Model of the radicalization pipeline

radicalization becoming more pronounced. Each of these components is discussed in more detail below.

Pre-Radicalization: Agitation

The first stage in the radicalization pipeline is that of agitation - a pre-radicalization stage in which individuals may be vulnerable to radicalization efforts due to personal or societal factors including perceived injustices, lack of resources, and social isolation. For example, in case studies of radicalized youth, a history of peer victimization and parental neglect were identified as experiences that made these youth more vulnerable to radicalization.[4] The youth themselves reported the importance of feeling connected and supported by online "friends" that supported their radicalization.[4] Similar patterns of pre-radicalization have been documented in the life of the founder of 8-chan, an online message board that became a platform for violent memes and white nationalist rhetoric.[66] In an interview with a journalist, he described experiences in his childhood and early adult years that made the veneer of white nationalist and other extremist rhetoric enticing.[66] In particular, he reported feeling isolated and disconnected from others due to his physical disability and his family's lack of resources. The internet was a place he was able to connect with others to build community and to feel powerful in ways he couldn't in the physical world. Some research has found that individuals who feel socially isolated and disconnected from society are more likely to justify the use of violence against others,[67] and that adolescents and young adults may be particularly susceptible to radicalization.[68]

Some research has found that individuals who feel socially isolated and disconnected from society are more likely to justify the use of violence against others,[67] and that adolescents and young adults may be particularly susceptible to radicalization.[68]

During the pre-radicalization stage, individuals can begin to seek out community or attempt to identify others with similar frustrations within digital communities. While not inherently problematic, this is the stage at which players may encounter others with extremist worldviews or those actively seeking to recruit for extremist causes. This can happen intentionally (i.e., active recruitment efforts) or by happenstance

(i.e., being randomly paired in the same game lobby or match). Such happenstance meetings are likely far more prevalent, though not necessarily less powerful. These in-game interactions allow extremists to build relationships with players that could support further radicalization processes.[59] It is important to note that in-game chat is often the first point of connection in the recruitment process.[4]

Self-Identification

The second stage, self-identification, is a stage in which players begin to identify with extremist groups and ideology and build connections with those with similar views. Community building is a key part of this stage of radicalization.[69] This is also the stage at which individuals may seek out or be invited to join game-adjacent platforms such as Discord or 4chan to further connect with identified communities.

Individuals in the self-identification stage are likely to start intentionally seeking out ideologically consistent propaganda and may begin producing or promoting propaganda themselves. Additionally, they may begin expressing acceptance of violence as a necessary means to achieve goals, and stating a belief that nonviolent means will not be effective. They may also have increased belief in and adherence to conspiracy theories that serve to justify violence as necessary for change, and may call for violence against a specific target or group.[69] The propaganda, calls for violence, and belief in conspiracy may be couched in memes, "just joking," or trolling culture, which can make it challenging for an observer to identify the intent behind such behavior.

Games are often still played together to continue to strengthen relationships, but more complex conversation and ideology-sharing typically happens in game-adjacent platforms, such as Discord and Twitch. The use of these adjacent platforms likely supports the self-identification process in several ways. Perhaps most importantly, it moves the individual into a less public space, where there are fewer opportunities for dissenting or contradictory voices.[70] This more private space is also populated with other radicalized users, creating opportunities for the individual to build interpersonal relationships within the extremist network.[49] Further, these third-party platforms allow for greater opportunities for out-of-game coordination, image sharing, and voice and video chat.[57,70] At this stage, individuals may be interacting in these spaces with the intent to build community, coordinate gameplay, or learn more about the ideology.

Indoctrination

During the indoctrination phase, individual's extreme ideological beliefs are further solidified, and there may be more indicators of their beliefs in offline spaces, such as sharing propaganda or violent videos to peers.[4] In addition to sharing propaganda with others, they may become increasingly isolated from family and previous friends as their beliefs become increasingly radicalized.[64] Individuals may also practice or rehearse real-world violence in games without explicit current intent for real-world action.[71] Those part of online groups may seek and gain access to increased power and status within such groups, moving into leadership positions. Some individuals and groups may move their communication to more secure, less monitored platforms.[64] For individuals associated with more formal extremist organizations, they may officially join such organizations, and provide financial support. A further escalation from the previous stage, participants may align with or validate those with similar ideology who have committed violent acts.

While for many the agitation and self-identification processes happen within gaming spaces, explicit indoctrination efforts may be more likely to occur within game-adjacent spaces. Similar to the reasoning discussed in the self-identification phase, many game-adjacent spaces allow for greater ease of sharing ideology and planning and have the capacity to gradually allow individuals access to more sensitive information or display their increased commitment to and role in the group. For example, many far-right Discord servers require a level of ideological knowledge prior to admitting a new user, suggesting that some of these servers are used for connecting people with similar extremist views, as opposed pulling in targets unfamiliar with their ideology to recruit.[49] Furthermore, in one the only formally documented cases of radicalization through games, the transition from in-game chat to Discord was pivotal in the transition from radicalization to mobilization.[4]

...the transition from in-game chat to Discord was pivotal in the transition from radicalization to mobilization.

Mobilization to Action

The end of the pipeline is mobilization to action. It is important to note that due to the nature of the pipeline itself, few people make it through the pipeline to this final stage. This stage occurs after an individual has strong identity ties with an extremist ideology and/or organization and has internalized and integrated much of the ideology within their own world views and self-concepts. This stage can include planning behaviors for targeted (physical or

virtual) terrorist attacks in line with their ideologies, the development of manifestos, and practice or rehearsing violent acts in games with the intent to mobilize these actions into physical spaces.[71]

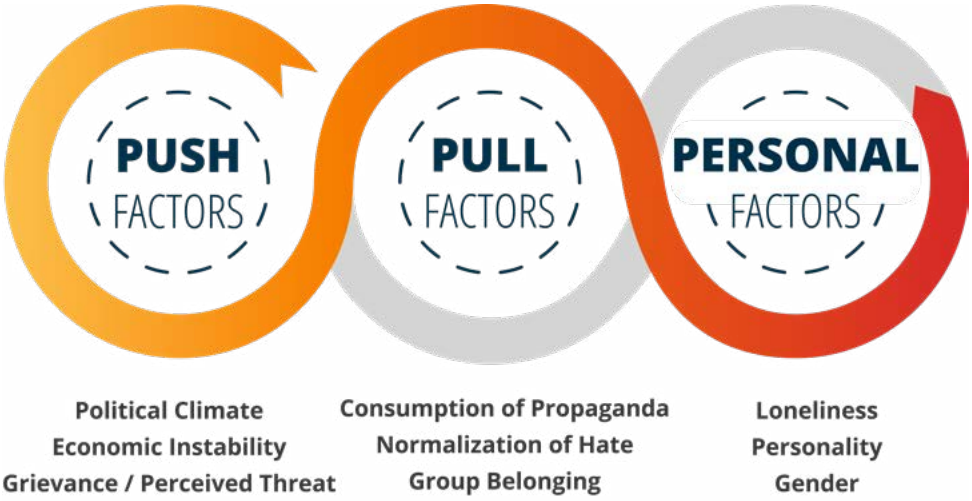
Examples of mobilization to action via games or game adjacent spaces can be seen in the actions of the Buffalo shooter, who drafted his manifesto on Discord, a popular game-adjacent space.[72] Additionally, the Christchurch shooter integrated game-like elements into his acts of terror, including visual aesthetics and live-streaming.[73] In addition to violent acts in the physical world, individuals in this stage may participate in acts designed to threaten, intimidate, or cause real-word harm in virtual spaces, such as through online harassment, doxxing, hate raids, and DDoS attacks. [e,71,74–77] Terrorist actions can be planned and taken with others or conducted alone. However, even when attacks are conducted alone, such as many mass-shootings, they are virtually never true "lone wolves": they emerge from networks of extremists who contributed to their radicalization.[78]

[e]A distributed denial-of-service (DDoS) attack is a type of cyber-attack in which the goal is to make an online resource (such as a webpage) unavailable temporarily or permanently by flooding the source with false requests or visits.

Vulnerabilities to radicalization and recruitment

While the focus here is on the how rather than the why, it is important to contextualize the internal and external vulnerabilities that may make someone more susceptible to radicalization. Not everyone who plays games can or will be radicalized, and there are vulnerabilities for both passive and active radicalization. Understanding who is at most risk is critical to effectively identify who is at risk to optimize intervention efforts on the individual or community level.

Vulnerabilities to radicalization can be both personal and contextual and are often split into the categories of "push," "pull," and "personal," factors.[60] Notably, factors do not always cleanly fit into a single category. Though these vulnerabilities can span across categories, these distinctions can be helpful for general understanding.



Push factors are generally contextual factors that are seen as "pushing" people towards extremism. They are often the factors that are seen as making the individual's current

worldview or environment so uncomfortable or unpleasant, they may be willing to change their beliefs and take action. Push factors can include perceived injustice or marginalization, low levels of education, and unemployment.

Pull factors are environmental or organizational factors that are seen as "pulling" people toward an extremist ideology. Pull factors can include the consumption of propaganda designed to make the extremist group seem exciting or otherwise appealing, the promise of group belonging, sense of power, and identity fusion.

Personal factors include factors at the individual level, and can include high levels of loneliness, rigid thinking styles, low levels of insight, impulsivity, age (younger), and gender (male). It is important to note that many individual/personal factors can be heavily influenced by societal and community factors.[79]

While some combinations of these factors have been associated with a higher vulnerability to radicalization, there are no specific constellations of factors that guarantee an individual will be radicalized.[80]

Resources

While this document was created to serve as a foundation for discussions around extremism in games, it is only one source of information. There are currently several efforts to better understand radicalization and extremism in game and game adjacent spaces, including efforts by game studios, several research organizations, nonprofits (such as the Global Internet Forum to Counter Terrorism , Extremism and Gaming Research Network, International Center for Counter-Terrorism, and ourselves at Take This), and even national and international governing bodies (including the US Congress, Radicalization Awareness Network). Creating safe online gaming communities is a complex task and involves the buy-in from stakeholders across the games industry, the government, and civil society.

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