## To Tag or Not To Tag: The Interplay of the Twitch Tag System and LGBTQIA+ Visibility in Live Streaming

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#### **Abstract**

Video Game Live Streaming (VGLS) has become increasingly popular in recent years. Twitch, one of the largest streaming sites, has implemented measures to protect and promote marginalized groups, including the LGBTQIA+ community. One example is the "LGBTQIA+" tag - a tag a streamer can attach to their steam. However, little is known regarding how the Twitch VGLS community actually reacts to this design feature and how such a feature affects LGBTQIA+ streamers' online presence and experiences of visibility. By qualitatively analyzing 381 threads and comments from the Twitch subreddit (r/Twitch), in this paper we identify the impacts of the Twitch Tag system on the VGLS community's perceptions of gender and sexuality in streaming, the streaming community's ability to find LGBTQIA+ streamers, and harassment towards LGBTQIA+ streamers. We not only expand existing knowledge of LGBTQIA+ gamers' unique experiences of online presence and visibility in streaming but also provide potential design recommendations for future live streaming platforms to better support LGBTQIA+ streamers and viewers.

#### 1. Introduction

Different from traditionally televised broadcasting and pre-recorded videos that can be cut and edited, live streaming is simultaneously recorded and broadcast in real-time on media platforms [1]. It combines high-fidelity video presentation with a low-fidelity text-based communication system, which increases engagement by enabling viewers to interact with each other and with the streamer [1]. In recent years, popular live streaming platforms and services such as Twitch.tv, YouTube Live, and Facebook Live have become part of pop culture and attracted millions of viewers and streamers. For example, Twitch.tv, the largest streaming platform [2] that started as a media space for sharing live video content of gameplay, has approximately 15

million daily active users, 7.7 million active channels, and more than 3.8 million broadcasters per month [3]. Various content has also been live streamed, ranging from the coverage of breaking news to discussing television shows and cooking [4, 5, 6, 7].

However, Video Game Live Streaming (VGLS; i.e., video game players sharing their gameplay and communicating with viewers in real time) is still the primary emphasis on particular live streaming platforms such as Twitch. Though any streamer can share gameplay, in this paper we define video game live streamers as those who primarily stream content about gaming. The growing popularity of VGLS has also led to various avenues of research across Human-Computer Interaction, media studies, and game studies, including the rise of esports in live streaming [8, 9, 10, 11], differences in viewers' perceptions between male and female streamers [12], and how streamers manage their audiences [13].

In particular, a nascent area of research concerns the prevalence of identity-based harassment and discrimination in VGLS communities. Such a concern draws upon the overlap between the VGLS community and the much larger gaming community, which is often perceived as young, white, heterosexual, and male [14, 15]. A consequence of this perceived male-dominated community is a defensive attitude toward female and LGBTQIA+ (lesbian, gay, bisexual, transgender, queer/questioning, intersex, asexual, and others [16, 17]) members of the gaming community [18]. The queergaming movement is an effort to refute this perception of gaming as solely heteronormative As a 2017 study reported, nearly half of all massively multiplayer online game players have been victims of cyber harassment, with females and LGBTQIA+ players being more likely to be victimized than other groups [20]. These trends and perceptions persist despite the gaming community consisting of at least 40 percent females [21] and a greater relative proportion of LGBTQIA-identifying individuals than the general US population [22].



Therefore, popular live streaming platforms such as Twitch have acknowledged that marginalized groups (e.g., LGBTQIA+ and BIPOC) disproportionately experience harassment in online spaces, including on their platform [23]. Hate speech in online gaming platforms is one of the biggest concerns for LGBTQIA+ gamers [24]. As an endeavor to support LGBTQIA+ streamers, Twitch introduced the Tag system in late 2018, which enables streamers to assign short descriptions to their streams (e.g., "Cooking"). Twitch independently chose and introduced over 150 tags. The goal of the Tag system was to facilitate the process of finding streams and streamers according to a viewer's preferences. One such tag is "LGBTQIA+", which Twitch created "For streams in which the streamer chooses to identify as a member or ally of the LGBTQIA+ community" [25] (Figure 1). If a user wants to view LGBTQIA+ content, they can use Twitch's search functionality to locate every stream using the "LGBTQIA+" tag. At the time of its introduction, the "LGBTQIA+" tag served as the first and only method for a streamer to publicly display their gender identity and/or sexual orientation with an official Twitch feature.

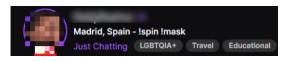


Figure 1. A streamer using multiple tags on Twitch, including LGBTQIA+.

The design of the Tag feature seems to have facilitated the process of finding LGBTQIA+ content on the platform. Additionally, Twitch's inclusion of the "LGBTQIA+" tag signals direct support for LGBTQIA+ members of the streaming community, thereby increasing LGBTQIA+ visibility on the largest streaming platform. However, there is little empirical evidence on how the Twitch VGLS community actually reacts to this design feature and how such a feature affects LGBTQIA+ streamers' online presence and experiences of visibility. To address this limitation, this study explores the following research questions:

**RQ1:** How does the "LGBTQIA+" tag on Twitch affect the VGLS community's perceptions of gender and sexuality in streaming?

**RQ2:** How does the "LGBTQIA+" tag on Twitch affect the streaming community's ability to find LGBTQIA+ streamers?

**RQ3:** How does the "LGBTQIA+" tag on Twitch affect occurrences of harassment towards LGBTQIA+ streamers?

By qualitatively analyzing 40 threads with 341

comments from the Twitch subreddit (r/Twitch), in this paper we identified the recurrent trends present before and after the introduction of the Tag system on Twitch, focusing on those tied to the shifting focus on gender and sexuality within VGLS, the VGLS community's ability to identity and define the LGBTQIA+ Twitch community, and harassment towards the LGBTQIA+ community. Our work contributes to VGLS studies in two ways. First, we provide first hand empirical evidence on LGBTQIA+ gamers' unique experiences of online presence and visibility within the VGLS community, which is a understudied topic. In particular, we focus on how, if at all, the design affordances of live streaming platforms per se may affect such experiences. Second, we provide potential design recommendations for future live streaming platforms to better support LGBTQIA+ streamers and viewers. Therefore, we also contribute to designing more inclusive and diverse online social spaces for underrepresented users such as LGBTQIA+ individuals.

### 2. Related Work

### 2.1. Challenges for LGBTQIA+ Individuals in Streaming

Whereas prior work has investigated harassment and discrimination toward female game streamers [26, 27], little research has explored the acceptance, discrimination, and harassment of LGBTQIA+ individuals within the VGLS community. This is troubling given the tendency for LGBTQIA+ gamers to perceive gaming culture as heteronormative (at best) [28]. As a response, many reject the "gamer" label and instead adopt the term "gaymer", signalling a unique and distinct category for LGBTQIA+ gamers.

Only a small body of recent works has investigated the experiences and perceptions of LGBTQIA+ streamers. For example, Freeman and Wohn interviewed LGBTOIA+ streamers to explore how they present themselves to their audiences [29]. They found that although LGBTQIA-identifying streamers saw their streams as safe spaces for presenting their gender identity and sexual orientation, they were aware that this would subject them to occasional harassment. Some LGBTQIA+ streamers viewed the opportunity to present their gender identity and sexual orientation as a method for crafting a streamer identity unique from other streamers'. Presenting as an LGBTQIA+ streamer gave them further abilities to advocate for LGBTQIA+ rights and provide a safe space for their LGBTQIA+ peers. Uttarapong et al. specifically explored how LGBTQIA+ streamers handle harassment [30]. In this study, LGBTQIA+ streamers reported cases

of homophobia and transphobia in their comments, especially if the stream included LGBTQIA+ content. Reported cases of harassment included hurtful messages (both on and off Twitch's site), doxxing (the streamer's undisclosed personal information being shared in a public space), and attacks on the streamer's appearance. The streamers' responses to the harassment were varied, including "venting" to close friends or relatives, punishing the harasser, taking a break from streaming, and using automated tools for preventing future events.

This small body of research highlights certain challenges faced by LGBTQIA+ streamers, but it is still unclear how, if at all, the design affordances of VGLS platforms *per se* may introduce or mitigate such challenges. The current study seeks to expand this body of literature by focusing on the potential impacts of the Twitch tag system on LGBTQIA+ streamers' online experiences of presenting their gender identity and sexual orientation in VGLS.

### 2.2. LGBTQIA+ Identification and Visibility on Twitch

Self-identification and visibility are two central concepts to LGBTQIA+ individuals' presence and experiences in online social spaces. Self-identification allows an individual to determine which labels they would like to be applied to themselves [31]. Once an individual has chosen to identify as LGBTQIA+, the inability to find peers or role models within the LGBTQIA+ community can lead many to feelings of isolation [32, 33]. Given the consequences of LGBTQIA+ individuals becoming marginalized, there is value in facilitating LGBTQIA+ visibility in online social spaces such as Twitch. Broadly speaking, visibility refers to an individual's agency over their gender and sexuality identities to the outgroup [34, Online spaces provide opportunities for the LGBTOIA+ community to increase their presence in ways not possible in offline spaces [36], especially for LGBTQIA+ youth whose offline environments do not provide safe spaces for identity understanding and confirmation [37, 36]. Prior studies of LGBTQIA+ visibility on social media have found that LGBTQIA+ users selectively present their identities on different social media sites [38, 35], find current visibility affordances insufficient [39], and often find themselves as incidental advocates for the LGBTQIA+ community Collectively, prior work has highlighted the importance of self-identification and visibility for LGBTQIA+ individuals on social networking sites, but there has yet to be an examination of these issues on VGLS platforms (e.g., Twitch).

In general, LGBTQIA+ visibility on Twitch seems to increase over time. Prior to the "LGBTQIA+" tag, there were limited methods for LGBTQIA+ streamers to visibly display their gender identity and sexual orientation on Twitch. One method was to edit the title of a stream to include an LGBTQIA+ related term (e.g., "queer"). Alternatively, one could display image or text supportive of the LGBTQIA+ community on the video feed, thereby introducing LGBTQIA+ content to the stream. In early 2017, Twitch introduced Communities, which allowed users to create a public group united by a single common interest (e.g., "LGBTQ+", "Politics"). Communities gave the users the ability to create and enforce community rules [40]. Starting in 2018, Twitch endeavored to increase LGBTQIA+ visibility by hosting LGBTQIA+ focused events, promoting LGBTQIA+ streamers, and fundraising for LGBTQIA+ charities during Pride Month (June). Later that year, Twitch introduced the Tag feature, including the "LGBTQIA+" tag, which (at the time) was the only direct method for finding LGBTQIA+ streamers on Twitch. Twitch simultaneously decided to retire the Communities feature. In early 2021, Twitch updated their Community Guidelines to explicitly condemn harassment and hateful conduct based on identity (e.g., sex, sexuality, and gender).

Given the number of gradual design endeavors Twitch has made to increase LGBTQIA+ visibility, it is important to empirically explore how new design features such as the "LGBTQIA+" tag may actually affect LGBTQIA+ individuals' presence and experiences, especially in the VGLS community, which leads to the three research questions we presented at the beginning of this paper.

### 3. Methodology

Data Collection. To answer our research questions, we collected threads and comments regarding LGBTQIA+ presence and experiences in VGLS on the Twitch subreddit. Reddit is a public online forum where users can create and/or join subreddits, which are specialized sub-forums dedicated to a shared interest. For example, the Twitch subreddit contains threads with users advertising their streams and discussing streamers. We consider the Twitch subreddit as one of the most suitable data sources for this study, given its archive of online discussion in the Twitch community both before (threads dating back to 2010) and after the "LGBTQIA+" tag was introduced, its community of over a million members, and its active user base numbering in the thousands. Though any Twitch streamer, regardless of their streamed content,

can post on this subreddit, most threads, including those without explicit mention of VGLS, made it clear that Twitch users consider Twitch a primarily VGLS platform. These sentiments thus make this subreddit an appropriate site to study video game live streamers. Other subreddit communities (e.g., r/gaymers) are also dedicated to queer gaming. However, they do not focus on queer issues in VGLS. Furthermore, prior work has successfully relied on r/Twitch to explore the game streaming community's perceptions of female streamers [26]. Therefore, in this study, we especially focus on this subreddit.

To collect data, we used an online Reddit scraping tool [41] to collect threads and posts whose titles and/or initial posts contained the term "LGBT", "LGBTQIA+", "queer", or "pride." After collecting the threads and comments, we then removed those that did not contain any discussions of LGBTQIA+ issues (e.g., threads that promoted an official Twitch event) or lacked enough useful information for qualitative analysis (e.g., a thread without comments). In total, we analyzed 40 threads and 341 comments that were posted between February 2015 (the earliest thread that met our criteria) and April 2021.

**Data Analysis.** We performed a thematic analysis of the selected threads [42]. First, we closely read through the collected data to acquire a sense of the whole picture as to how the Twitch VGLS community perceive and understand the "LGBTQIA+" tag; this allowed us to identify three themes, each one tied to a research question. We then split the collected data into two sets based on the time frame: threads created before the "LGBTQIA+" tag, and those created after the introduction of the tag. Next, we read through each thread and open-coded the comments and initial posts. Open coding seemed suitable given the exploratory nature of our research questions [43]. In total, we identified thirteen sub-themes, with two sub-themes present in both time frames. We then discussed and refined themes and sub-themes in a collaborative and iterative process. The first author extracted example quotes based on themes and sub-themes refined in the last step. He also used the quotes to generate a rich description synthesizing how the "LGBTQIA+" tag may affect LGBTQIA+ visibility and experiences in live streaming.

### 4. Findings

We present our findings in three parts. We first highlight the shifting focus on gender and sexuality in streaming as a result of introducing the "LGBTQIA+" tag (RQ1). We then identify new perspectives on who should belong under the "LGBTQIA+" umbrella due to

increased visibility with the "LGBTQIA+" tag (RQ2). We also point out potential new opportunities and challenges to combat harassment towards LGBTQIA+ streamers when using the "LGBTQIA+" tag on Twitch (RO3).

### 4.1. The Shifting Focus on Gender and Sexuality in VGLS

**Theme 1.** Prior to the Tags feature, online discussions in the Twitch community often focused on the importance and benefits of gender and sexuality labels in VGLS. The introduction of the Tags feature shifted the discourse to debates over the justification and benefits of the "LGBTQIA+" tag, with additional discussions suggesting a desire for more specific gender and sexuality tags.

**4.1.1. Prior to Tags.** Online threads and comments would occasionally ask for assistance with locating LGBTQIA+ streamers to watch. A recurring response was to question why a streamer's gender and/or sexuality are important (**Sub-theme 1**). For example, one Reddit user replied:

"I will probably get downvoted for this but I will say it anyway. Twitch is used to watch gaming. Talk about games. Everything related to games. Why does gender and sexuality need to be in the discussion of viewing someone playing video games? Why does it matter?"

This view of gaming and live streaming presents them as insular areas which should only be used to "talk about games." Interestingly, this commenter acknowledges that this view may not be socially unacceptable, predicting that this post will lead to "downvotes." Downvoting references the ability for users on Reddit to upvote or downvote a comment, with the former suggesting support for the comment and the latter suggesting disagreement.

Questions regarding the importance of LGBTQIA+ identifiers on Twitch were overwhelmingly met with attempts to educate (**Sub-theme 2**). One reply to the above question was:

"You're right. It doesn't. However if for some strange reason someone sitting in the general community IS LGBTQIA+ they are usually subject to very hostile speech about their lifestyles. This isn't so much about having in depth discussions about gender and sexuality. This is more about just being able to watch those video games without having to read slurs, be called horrible names because of their non traditional appearance or watch common speech insult them."

This poster, like others, acknowledges that video

game streaming is separable from gender and sexuality. However, the poster suggests that an LGBTQIA+ Twitch viewer may want to search for a channel where they will be less likely to be victims of harassment. Other commenters agreed with this sentiment, with one adding:

"I feel like a lot of people watch twitch to get away from their real life. And our gay bros who maybe still haven't come out or something like that, needs somebody who is in the same situation or somebody who has already gotten past that point in their life, to help them overcome this hard point in their life."

This comment further points to the tendency for LGBTQIA+ individuals in real-world environments to seek online spaces to explore their gender identity and sexual orientation.

**4.1.2. After Tags Implementation.** Whereas earlier online discussions questioned the purpose of identifiers for gender identity and sexual orientation in live streaming, the introduction of the "LGBTQIA+" tag led commenters to question its legitimacy (**Sub-theme 3**). This was the core discussion for the longest thread in our analysis, with the original poster asking:

"Didn't [Twitch] say tags like "talkative", "positive", "interactive" and such won't be added because tags are supposed to describe the content of the stream, not the streamer...Why does [the "LGBTQIA+"] tag exist then? The streams I've seen so far with that tag were just like any other stream. If it was a stream focused on talking about those people, their issues, etc. I'd understand it."

Comments like the one above imply a belief that Twitch provides preferential treatment to the LGBTQIA+ community. Other commenters provided similar sentiments, asking questions such as: "Why is there no straight pride month? If somebody is born gay why do they get to be proud of it?" This post may be referencing Twitch's promotion of LGBTQIA+ streamers during Pride Month. The above comments reflect a disconnect between the commenters' understanding of the Tag system and Twitch's intent with the Tag system, leading some Twitch users to question if the "LGBTQIA+" tag should even exist.

The above comments are vastly outnumbered by community members that defend the "LGBTQIA+" tag (**Sub-theme 4**). Most replies to such questions were educational. One poster replied:

"The tag is not only important for visibility to gay, non-binary, trans, etc viewers and finding my audience but also so that new viewers can find their safe space whether it's with me or the other streamers under the tag. It builds a community, sort of like how gay clubs are safe spaces for the same audience [in real life]."

Similar to threads posted before the Tag system, publicly displaying one's queer identity (via the "LGBTQIA+" tag) is considered a method for creating a safe space. The unique benefit of a platform-wide feature like the Tag system is increased visibility, allowing any viewer to find all streams using the "LGBTQIA+" tag. The same commenter later added:

"You'd be surprised (or maybe not so surprised) to see how many people use hate speech casually. and that is not what Twitch stands for. They value inclusivity."

Several other commenters in the thread agreed, suggesting a shared belief that Twitch is trying to create an inclusive platform, with the "LGBTQIA+" tag seen as an effort to accomplish this goal (**Sub-theme 5**).

Although a significant portion of the community sees the benefit of the "LGBTQIA+" tag, some users felt that Twitch should introduce more tags into the system to promote inclusivity. More specifically, some users felt that Twitch was being too general by using a single tag to encompass not only the different LGBTQIA+ subcommunities (e.g., lesbian/gay alone), but also LGBTQIA+ allies (**Sub-theme 6**). For instance, one commenter asked:

"What will it take to get a trans tag? There's an LGBTQIA+ tag so its not an issue with identity, obviously. And while that tag is inclusive of trans people, it doesn't help the issue that trans creators are still impossible to find."

A number of other posters expressed similar sentiments, indicating a desire for more granularity in LGBTQIA+ identification. In a similar vein, some users were frustrated that Twitch has not added a trans tag, a request they believe Twitch is deliberately ignoring:

"If twitch is refusing because they think they know what's best for the trans community more than the actual trans community then that's honestly an even worse take than just outright ignoring us."

The two above comments point to three unique needs: the need for increased LGBTQIA+ representation on Twitch; the need to easily find LGBTQIA+ streamers on Twitch; and, the need to feel heard by Twitch. At the moment, the responses suggest that only the first need is being met.

### **4.2.** Identifying and Defining the LGBTQIA+ Twitch Community

**Theme 2.** Earlier threads on r/Twitch were largely focused on identifying and sharing LGBTQIA+ streamers and communities on Twitch, a task many found difficult to perform through Twitch's

site. Although the "LGBTQIA+" tag's introduction facilitated this task, many users debated who should be allowed to use the "LGBTQIA+" tag, leading to discussions over who belongs under the "LGBTQIA+" umbrella.

**4.2.1. Prior to Tags.** Prior to the tags system, numerous threads in r/Twitch were created to find LGBTQIA+ streamers and/or communities (**Sub-theme** 7). For example, one streamer posted:

"I've been streaming to Twitch for about a month now, but I also love watching other streamers, but I've been having trouble finding other streamers who are LGBT (especially T) or just generally Q to connect to."

Interestingly, every thread expressing similar sentiments was posted by users that identified themselves as streamers. This and similar comments convey that even streamers had difficulty finding LGBTQIA+ peers on Twitch.

Most responses to the above query were either streamers sharing their own channels or viewers/streamers sharing LGBTQIA+ communities on Twitch and other platforms. Commenters would preface their recommendations with a short statement of their relation to the LGBTQIA+ community. For instance, one post began with: "most of my friends are LGBT and I am very supportive of the community." It appears that users were acutely aware that the LGBTQIA+ community consists of both LGBTQIA+ individuals and allies; therefore, explicitly stating one's relation to the LGBTQIA+ community was a common practice.

**4.2.2. After Tags Implementation.** The introduction of the "LGBTQIA+" tag effectively ended the trend of streamers commenting that they are struggling to find other LGBTQIA+ streamers. Instead, the earlier issue regarding the generality of the "LGBTQIA+" tag led to numerous discussions regarding who is allowed to stream with the tag. This discourse led to three conflicting perspectives.

The first perspective argues that the "LGBTQIA+" tag is suitable for LGBTQIA+ individuals and allies (**Sub-theme 8**). An LGBTQIA-identifying individual commented: "it is totally appropriate for straight folk to use it to show support to the community. it shows you are an ally and i think it is awesome."

Other users cited the tag's description on Twitch's site, indicating their agreement with its stated use:

"The tag is inclusive rather than exclusive: its actual name is LGBTQIA+, and the description reads "For streams in which the streamer chooses to identify as a member or ally of the LGBTQIA+ community"."

These commenters tend to view the primary purpose of the tag as creating and providing an inclusive safe space for the LGBTQIA+ community. As such, these posters believe that allowing allies to use the tag would help achieve this goal.

The second perspective argues that the tag should only be used by LGBTQIA+ individuals, thereby excluding allies (**Sub-theme 9**). However, this is not because they do not value the importance of having allies included in the LGBTQIA+ community:

"While I agree that LGBT people should be the ones using the tag, most [cisgender heterosexual] people I know that use the tag use it to signal that they are allies and that their stream is a safe place free from bigotry."

Rather, commenters believe that the majority of streamers using the tag are allies, thereby vastly outnumbering the number of LGBTQIA+ individuals using the tag: "[Allies] shouldn't [use the "LGBTQIA+" tag]. It's centering non-LGBT people in LGBT spaces." In contrast to the previous perspective, this perspective views the primary goal of the tag as promoting LGBTQIA+ streamers. Therefore, if allies are allowed to use the tag, then LGBTQIA+ streamers may be more difficult to find.

The third perspective argues that tags should be used to describe the stream's content, not the streamer's identity (**Sub-theme 10**). For example, one post read:

"LGBTQIA+ topics come up once every couple of weeks when we talk about dating or relationships, but rarely inbetween unless it's game specific. It's a good way to indicate this stream MAY contain LGBTQIA+ content for those that are opposed, and that everyone is welcome otherwise."

Comments like this received some agreement, with some LGBTQIA-identifying individuals stating that they do not feel comfortable using the tag if their content does not contain LGBTQIA+ topics. Others believed that this type of use can be exploited for personal gain:

"I'm a gay man, and I avoid people using the tag as much as I can. Because most of the time it is just used as free advertisement and to get good metrics on their stream."

### 4.3. Persistent Harassment towards the LGBTQIA+ Community

Theme 3. Our analysis found neither a thread nor comment created to harass the LGBTQIA+ community. This is likely due to r/Twitch's explicit condemnation of posts and comments containing identity-based harassment. Instead, there were a number of threads discussing first- and third-hand accounts of

harassment towards the LGBTQIA+ community on Twitch, with a significant number of related threads and comments dedicated to sharing preventative and reactive measures. These two types of discussions were consistent throughout the entire time span of the analyzed time frame, but the introduction of the Tags feature led to discussions of possible malicious uses of the "LGBTQIA+" tag.

# **4.3.1. Prior to and After Tags Implementation.** There were a number of threads in which users documented harassment that occurs on Twitch's platform (**Sub-theme 11**). These threads were often created by LGBTQIA+ streamers:

"During my stream last night I was brigaded by a few trolls... when one of my mods banned them, he went straight to their page to report and they were streaming themselves trolling me."

Some LGBTQIA+ streamers were further targeted for their race:

"What I have been noticing in the last couple of weeks, however, is that, as my follower count is slowly growing, I'm starting to get a lot of hate on & off stream that is aimed towards either my sexuality or my skin color, even though these aren't necessarily topics that I discuss through my current gaming streams."

These threads received support from other commenters, many of which shared first-hand accounts of similar harassment. A few streamers added that although they feel unaffected by hurtful comments, they are concerned for their viewers' well-beings, too. In summary, the posters on r/Twitch share stories of marginalized streamers being targeted for harassment on Twitch.

In response to comments of harassment, many replies contained suggestions for managing and preventing harassment (**Sub-theme 12**). The most common techniques relied on tools provided by Twitch, namely the abilities to block and report accounts and customize word filters. To help with this effort, streamers were also suggested to "look into getting some good [moderators]." Moderators are viewers, chosen by a streamer, that have the authority to punish other viewers performing unwanted behaviors. Additional tips were more focused on minimizing the potential impact of receiving harassment. For example, one comment read: "Seeking streamers of similar interests such as LGBT, ethnic or racial attributes could be an immense help to you!"

Other comments were more directed at the streamer, suggesting that "thick skin helps.", suggesting the sentiment that those without a "thick skin" were unfit

for being participants on the internet. The above suggestions have been consistently provided throughout the duration of the subreddit's lifespan.

**4.3.2. After Tags Implementation.** The implementation of the "LGBTQIA+" tag led commenters to become concerned that such a tag would make it easier for LGBTQIA+ streamers to be targeted (**Sub-theme 13**): "[the "LGBTQIA+" tag] offers a way for [harassers] to find this communities easily."

Indeed, some commenters confirmed that using the tag leads to more harassment:

"I mod a channel that uses [the "LGBTQIA+" tag] and it's a magnet for users who seem to get their kicks from saying inappropriate and offensive things to streamers."

Much of these concerns around abusing the tag were raised when other posters suggested the desire to have more granular tags for each "LGBTQIA+" sub-community. For example, a "Trans" tag may make it easier for a would-be harasser to find a trans streamer. Other users suggested that Twitch is well aware of this risk, and therefore avoids implementing more specific tags.

#### 5. Discussion

In regard to our research questions, our findings suggest that the introduction of the "LGBTQIA+" Tag feature on Twitch: 1) led some users to be grateful for the increased LGBTQIA+ visibility in streaming, while others questioned why the LGBTQIA+ community needs their own tag (RQ1); 2) facilitated the process of identifying streams open to LGBTOIA+ individuals, but may have failed to satisfy the need to find LGBTQIA-identifying streamers (RQ2); 3) did not eliminate harassment towards the LGBTQIA+ community in streaming, and may have introduced new ways for LGBTQIA+ streamers to be easily targeted (RQ3). We now discuss the implications of these findings for better understanding LGBTQIA+ gamers' unique experiences of online presence and visibility in VGLS. We also discuss potential design recommendations for future VGLS platforms to better support LGBTQIA+ streamers and viewers.

### 5.1. Twitch Tags as Double-Edged Swords for the LGBTQIA+ Community in VGLS

Based on our findings, one important highlight in our study is that the Tag system acts as a double-edged sword for the LGBTQIA+ community on Twitch. As described earlier in this paper, exploring one's identity is a crucial developmental stage for adults. Early in r/Twitch's history, there was disagreement regarding the importance of sexuality and gender identifiers in VGLS. While some users felt that video game streams should only involve video games, others argued that LGBTQIA+ individuals would appreciate the ability to watch a streamer that shares a common trait. The first perspective is reminiscent of gamers perceiving inclusivity efforts as an attack on gaming [19]. The second perspective seems in accordance with LGBTQIA+ streamers that view gameplay content as secondary to the streamer themselves [29]. Over time this controversy was settled, with most users accepting the significance of gender and sexuality in gaming. However, some community members saw the "LGBTQIA+" tag as an act of Twitch favoring the LGBTQIA+ community. There are historical examples of similar events, where an action meant to help LGBTQIA+ individuals receive equal treatment is instead perceived as 'special' treatment [44].

Prior to the Tags system, LGBTQIA+ streamers and viewers found it difficult to find other LGBTQIA+ users, similar to difficulties with finding peers and role models offline [31, 32]. Marginalized users in online spaces face unique challenges in how they can present their gender and sexuality identities to the public [34, 29]. The "LGBTQIA+" tag made this step easier, allowing viewers to search for any streamers using the tag. However, by creating a tag for LGBTOIA+ individuals and allies, Twitch did not satisfy the need to more easily find LGBTQIA+ streamers. The criticism is that Twitch increased visibility of the LGBTQIA+ movement while potentially decreasing visibility of LGBTQIA+ streamers. This lack of granularity was most criticized by self-identified trans commenters that could not easily find a trans streamer to support.

In accordance with prior research [30, 29], LGBTQIA+ streamers are victims of LGBTQIA-based harassment on Twitch yet continue to stream in hopes of providing a safe space. Twitch releases occasional updates regarding their efforts to employ proactive measures for harassment, including the use of machine learning to prevent the creation of offensive usernames and direct messaging of harmful messages. thread responses indicate that the tools for handling harassment (e.g., recruiting stream moderators, using chat filters) are heavily relied on by LGBTQIA+ streamers. Twitch's public statements also indicate that they are working on providing more power to stream moderators. Providing more tools for the community's use is a viable option, given claims regarding Twitch's mishandling of harassment reports [45].

### 5.2. Designing to Support LGBTQIA+ Streamers and Viewers

Given the above trends, we can provide design suggestions that are applicable to Twitch, but may also extend to other VGLS platforms. If combined with current efforts to bring more queer perspectives to video games [19], our suggestions can promote inclusivity within the gaming community. At the moment Twitch is actively working on multiple methods for preventing and responding to harassment. The community seems to heavily rely on these tools, so Twitch should continue with their efforts. However, the communities' numerous critiques of the Tag system suggest that Twitch can be substantially improved with regard to three aspects.

The first area for improvement is the level of representation and visibility on Twitch. LGBTQIA+ members of r/Twitch explicitly stated their dissatisfaction with there being a single tag that encompasses the entire queer community and allies. Therefore, one way to improve the Tag system would be to incorporate more tags that can account for the different subcommunities that are included within the general "LGBTQIA+" tag. These categories should be incorporated in addition to the current tag. This would not only provide more visibility to LGBTQIA+ streamers, but also satisfy viewers' desire to more easily find LGBTQIA+ streamers. Additionally, Twitch could add an "LGBTQIA+ ally" tag that would allow non-LGBTQIA streamers to indicate that their stream is a safe space for queerfolk. As one trans streamer said in an online article, "It takes literally nothing for Twitch to add a tag, but it means the world to a lot of people to be able to have that and find other people like that" [46].

Second, the intended use for design features to promote diversity must be better communicated to users. There was a significant amount of discussion dedicated to how the "LGBTQIA+" tag should be used. Some commenters understood the tag to reflect streamers while others understood it to reflect stream content. At the moment, Twitch's stance supports the tag's use for the former purpose. However, that does not mean that Twitch cannot expand the current tags to include LGBTQIA+ content. There are already a number of tags for stream content (e.g., "Cooking"). Therefore, providing a tag that suggests LGBTQIA+ topics would provide an option for streamers that are streaming educational content surrounding LGBTQIA+ issues.

Third, users should be given more ability to create and moderate their own communities on Twitch. In the time between the Communities feature's introduction and retirement, the comments on r/Twitch did not suggest that users had any issues with the system. After

all, Communities were driven by the efforts of Twitch's users, not Twitch. After the removal of Communities commenters began stating that they felt ignored by Twitch. Several users expressed their frustrations with submitting feedback to Twitch, receiving a confirmatory message, and not receiving any additional information regarding Twitch's efforts to handle said issues. While we are not suggesting that Twitch resumes the Communities feature, our analysis shows that LGBTQIA+ users became dissatisfied with LGBTQIA+ visibility after Twitch removed LGBTQIA+ users' ability to create and moderate their own communities on the site. Therefore, decisions that impact a marginalized group should consider incorporating feedback from the members of that group.

#### 5.3. Limitations and Future Work

A few limitations of this study should be noted. First, our analysis was focused on a single subreddit (r/Twitch) dedicated to one streaming platform (Twitch). Future work should focus on collecting data from other subreddits (e.g., the r/gaymer subreddit) and sites for LGBTQIA+ gamers and using diverse data collection methods (e.g., interviews and surveys) to provide a more comprehensive image of the interplay between the specific affordances of various live streaming platforms and the gaming streaming community's perceptions and experiences of LGBTQIA+ visibility. Second, we employed purely qualitative methods for this work. Quantitative approaches can answer questions our approach could not, including changes in the frequency of reported harassment caused by the Tag feature. Third, future work should examine the effects of any new features Twitch adds to their platform, or any modifications to current ones. For example, in May 2021 Twitch added new tags, including ones more specific to LGBTQIA+ subgroups (e.g., "Queer", "Ally"). A follow-up study would be valuable to shed light on how the design space of live streaming continues to shape the LGBTQIA+ community's online experiences in new and more complicated ways.

#### 6. Conclusion

As live streaming, especially Video Game Live Streaming, continues to grow in popularity, it is important to explore how these platforms can be designed to better support marginalized groups, including the LGBTQIA+ community. In this paper, we have investigated the impact of one of Twitch's most recent efforts (i.e., the Tag system) on LGBTQIA+ streamers' online presence and experiences of visibility. We found that the streaming community utilized the

Twitch subreddit to describe their grievances and discuss the purpose of Twitch's Tag system, how this system should be used, and how the system could be improved. These grievances and suggestions were all tied to a core desire to be able to easily find other LGBTQIA+individuals and grow as a community. We hope that these insights will not only help design future live streaming platforms to better support LGBTQIA+streamers and viewers but also foster more inclusive and diverse online social spaces for underrepresented users.

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