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Why can't we be friends (with streamers)

Content creators and streamers' perception of parasocial relationships and audience management

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Abstract

Parasocial relationships (PSR) have been viewed and defined as one-sided relationships between a viewer and a media figure. However, recent literature has suggested that advances in computer mediated communication on social media and live-streaming sites have complicated the traditional definition. This manuscript investigates not only the complexity of how PSR have evolved in the area of live-streaming, but also how streamers categorize and handle the relationships within their community. Using in-depth semi-structured interviews with Twitch affiliate and partnered streamers, this manuscript argues that streamers have found that their communities have PSR with them during live-streams and on social media. Streamers cited PSR but also issues such as privacy concerns, audience disclosure of personal mental health concerns, and toxicity within their streams. This manuscript is not only able to investigate PSR from the side of the streamer, but also to further understand PSR and the evolution of the definition.

Keywords

Live-streaming, parasocial relationships, influencers, mental health

Introduction

The live-streaming platform Twitch has been described as an intimate platform, one that can make streamers seem more like friends than personas on a screen (Browning & Hill, 2022). Broadcast platforms such as Twitch and YouTube allow for a greater chance at presence due to the ability for viewers to communicate with streamers synchronously. The nature of the synchronous platform, combined with the variety of content, 24/7 availability of viewable content, and tight-knit communities on social media platforms like Discord spun up from channels have all made live-streaming extremely popular. *The Business of Apps* reports that Twitch generated approximately 3 billion USD in revenue in 2023, a 7.4% increase over the previous year (Iqbal, 2024).

Live-streaming as a cultural phenomenon is important to understand, as it continues to reshape the way people communicate with technology and with each other. Computer Mediated Communication (CMC) has seen drastic changes in people's communication patterns. It has produced new alleyways in communication between friends and family, but also between strangers and celebrities (McLaughlin & Wohn, 2021). Parasocial interactions (PSI) and parasocial relationships (PSR) have been a subject that has caught the attention of content creators, professionals, and academics alike. While PSR is a ubiquitous phenomenon amongst any person consuming media, the ethical considerations have become more prominent as streamers have spoken out over some of the dangers they have experienced with some of their viewers and community members. Interest among academics (Wulf et al., 2021; Lee et al, 2024), journalists, (Matter, 2021; Browning & Hill, 2022), and streamers has grown since the pandemic. For example, a video game content creator called Ludwig uploaded a video called "I am not your friend", in which the streamer attempts to create distance between himself as his community members. Vtuber (a streamer with a digital avatar) Rima Evenstar created a video discussing the "curse of parasocial relationships", highlighting numerous instances of fans crossing boundaries with their favorite content creators. Mentions of toxicity, voyeurism, stalking, and invasion of privacy have been concerns brought up by streamers when speaking of the potential negative effects of PSR and their viewers.

Academic research has explored the ubiquity of PSR in relation to viewers' attachment, identification, and engagement with a streamer (Leith, 2020; Blight et al., 2017; Lim et al., 2020). However, most studies conducted explore the viewer's perceptions of PSR and rarely address the content creator's perception of their community's PSR with them or how the streamers manage their communities. Moreover, as news articles reveal issues between streamers and their communities, the prospect of understanding streamers' attitudes toward audience communication and disclosure has become increasingly important. This manuscript aims to address several prominent issues: 1) understanding PSR from a streamer's perspective, 2) understanding how streamers manage and view their communities, and 3) identifying what issues streamers experience on and off the platform. In-depth interviews have been conducted with streamers who are either part-

nered (1,000 followers, 25 hours broadcasted, 12 unique broadcasts, and 75 concurrent viewers on average in the past 30 days) or affiliated (50 followers, 7 unique broadcasts, 3 concurrent viewers, and 500 minutes broadcasted in the past 30 days) with Twitch.tv by investigating the following questions:

RQ1: How do live-streamers perceive PSR with their communities?
RQ2: How do streamers' relationships with their communities form community culture?

Theoretical framework and literature review

The concept of parasocial interaction first originated with Horton and Wohl (1956). They described parasocial interaction as a simulated back-and-forth between media figure and viewer that gives the impression that the experience is two-sided when it is, in fact, not. Early perceptions of parasocial interaction were contextualized within the realm of television news and talk shows, describing the ways viewers felt while watching media personae speaking directly to them.

Later researchers attempted to disentangle the concept of parasocial interaction – a one-time interaction – from a parasocial relationship, or a one-sided relationship developed over repeated exposures (Dibble et al., 2016; Giles, 2002). While parasocial relationships can occur between a person and a fictional character, relationships between viewers and media figures who are real figures add a degree of reciprocity not possible for fictional characters.

Social media has fundamentally changed how people interact with media figures. Not only can fans send mail or encounter a celebrity at a convention (Daniel, 2020), but they can also reach out on social media platforms, receive a response, or even receive interaction in real-time on streaming sites (e.g., Twitch).

Live-streaming and PSR potential

Twitch.tv is a live-streaming platform that allows individuals to stream a variety of different content to their audiences. These streams can include actual play (i.e., playing tabletop role-playing games online), chatting, or perhaps, most popularly, live playthroughs of video games.

While Twitch is not the only available live-streaming platform, Twitch is highly influential in the video game industry. For example, Johnson and colleagues (2018) argue that Twitch was responsible for the meteoric rise in popularity of Rocket League, a video game combining car racing and football/soccer. The authors suggest that Twitch – and live-streaming in general – has had a material impact on the video game industry, positioning Twitch streamers as influencers and opinion leaders among their communities. Twitch has also played a pivotal role in accelerating the growth and popularity of the global

esports industry, making spectating live competitive gaming events more accessible to users around the world (Orme, 2021). Because of the way that Twitch approaches monetization of content, offering streamers direct revenue in exchange for their labor, streamers have flocked to the platform to build audiences and form careers (Sjöblom et al., 2019). Uniquely, Twitch encourages users to monetarily support streamers by implementing "social revenue" affordances, such as top-donor lists, pop-up notifications, subscription links, and donation links (Sjöblom et al., 2019). These social revenue affordances encourage the user to directly support streamers through social cues, and the streamers are thus encouraged to build community with their fans (Woodcock & Johnson, 2019).

Twitch has been a fertile area for researchers to explore given its large number of users, unique affordances (see Sjöblom & Hamari, 2017; Sjöblom et al., 2019), and culture (see Gandolfi, 2016). While some researchers focus on macro-level variables, such as the way in which Twitch influences the games industry, others zoom in to examine the ecosystems of individual streams, examining features like co-presence among audience members (see Diwanji et al., 2020).

In the context of the present study, Twitch streams offer the chance to examine a unique type of parasocial relationship. While traditional views of PSR create a firm argument that communication must be one way – from the audience to the media persona – the advent of influencer culture and streaming has changed the way some researchers approach the study of PSR. Kowert and Daniel (2021) argue that the ability for a streamer to reciprocate contact with a viewer does not necessarily deem the relationship social. They therefore characterize the type of relationship seen between streamers and their audiences as a "one-and-a-half sided parasocial relationship" (Kowert & Daniel, 2021). This conceptualization aligns with Stever (2024), who argues that relationships exist on a continuum from truly parasocial (i.e., a relationship with zero reciprocity) to social (a fully reciprocal relationship). The relationship between viewers and streamers, therefore, is not as parasocial as, say, someone watching their favorite fictional character, but it is certainly more parasocial in nature than two friends.

However, even if there exists the possibility that a media figure can respond to a fan, the relationship is still unequal. The viewer is likely to know – or feel that they know – a great deal about the media persona, while the media persona knows very little – if anything – about the specific fan in question. Furthermore, research suggests that PSR exist specifically within an online stream (Lim et al. 2020). More specifically, Wohn and Freeman (2020) argue that there is a sort of authenticity that exists between streamer and audience. There is an enhanced feeling of PSR in relation to feeling like a community (Blight et al., 2017; Sherrick et al., 2023). The community aspect does not just occur during live-streams, but on social media sites and community driven sites like Discord. The conversation not only continues from streamer to audience during the live-stream but continues constant communication between streams as well. This continued interaction potentially allows better opportunities for PSR.

This continued interaction does allow for streamers to potentially reciprocate communication with their communities. Kowert and Daniel (2021) make the argument that while social interactions can exist with streamers and their audience, the streamers may still have PSR with their communities. For example, a streamer's community member can exist only by a screen name and be completely unknown to the streamer themself. Additionally, an audience member can "lurk" by being present in the community but not participating in the chat. In this example, both streamer and moderators alike may not know a community member unless they meet them in person.

Computer-mediated self-disclosure

Audiences of live-streamers seeking to connect with other audience members or the live-streamer may disclose personal information about themselves (not unlike the streamers do to build connections with their communities). Some breaches of what a streamer might view as appropriate communication from an audience member result from the community member oversharing sensitive information – especially around mental health. Indeed, there seems to be an uptick in self-focused disclosure in areas such as loneliness (Hommadova Lu & Mejova, 2024), liking (Walther et al., 2016), and intimacy (Bol & Antheunis, 2022). Additionally, Twitch audiences have been looking to broadcasters to help them cope with mental health issues. (Powell, 2022). The prevalence of this behavior might be explained by research on self-disclosure in computer-mediated contexts.

Of course, streamers will also have varying degrees of anonymity on their channel, as it is fairly common to reference privacy management linked to CMC with things like dissociation from inputs or identity (McLeod, 1997), non-disclosure in social media posts (Petronio, 2002), to any level of surveillance of family, friends, publics, and so on. Streamers can find themselves worried about how much identity and personal space they communicate with their communities, but also purposely do not disclose specific information because of status or employment. It is very common for a streamer to only go by their stream name, use post office boxes for mail associated with the stream, or communicate vaguely about employment or location. This is not only to avoid extreme measures like stalking (Dodgson, 2020) and voyeurism (Gillette & Super, 2015; Nabi et al., 2003), but also to convey a sense of porous authenticity that conveys a sense of authenticity on the front stage of streaming and social media, while relegating "real life" to the backstage (Abidin, 2018). Interestingly, the "front stage" dynamic is not just about disclosing positivity, but also things like depression, burnout, and troubles with loved ones (Taylor, 2018). In turn, this kind of disclosure increases the presence between persona and audience member. Therefore, it makes sense that online communities would have PSR with streamers.

CMC disclosure is the verbal behavior (which includes typed communication) about information, feelings, or thoughts about oneself (Derlega et al., 1993). CMC has been an area of study that has been rooted in hyperpersonal communication research (Rains et al., 2019). This means that as people engage in CMC, they disclose information at reliably

higher rates than they would in face-to-face contexts (Nguyen et al., 2012). Anonymity is a key component to this disclosure, as people feel less restrained to reveal personal information (Antheunis et al., 2012). Moreover, other arguments indicate that text chat specifically contained more disclosure than face-to-face communication (Jiang et al., 2011). More recent research indicates that the sender seeing their own chat, along with persistent messaging leads to increased liking and closeness towards other users (Walther et al., 2022). Since higher levels of disclosure yields higher social presence, streamers and their community members might experience the feeling of "being with one another" (Biocca et al., 2003, p. 456). This may be part of the allure of live-streaming for viewers – not only the desire for presence, but the feeling that the relationship over time feels real.

On the other side of the relationship, there is the question of how viewers respond to the self-disclosure of the streamer. When is a viewer response appropriate, and when is it considered transgressive? According to Jodén and Strandell (2022), streamers enact a ritual space in which they promote engagement by promoting community norms. Behavior is considered transgressive when it goes against the ritualized norms. Further, increased reciprocity – in the form of responding in the chat – influences feelings of parasocial interaction. This increased PSI can positively influence a viewer's willingness to adhere to social norms within the live-stream space (Wulf et al., 2021). However, strong relationships with media personae like streamers can result in maladaptive interactions, including verbal abuse and mistreatment (Sanderson et al., 2020).

PSR from the streamer's perspective

Much of the research into PSR has focused heavily on the viewer's perspective. This focus makes sense, as PSR are necessarily one-sided. However, with increased reciprocity now possible, the other side of the "one-sided" relationship is relatively under-studied. Researchers have examined how influencers foster PSR (see Ferchaud et al., 2018; Yuan & Lou, 2020), but the streamer's perspective is somewhat more unclear.

Carter and Hoy (2024) used the concept of transparasocial interaction – defined by Lou as a relationship that is "collectively reciprocal, (a)synchronously interactive, and co-created" (2022, p. 11) – to examine how streamers perceive the relationship between themselves and their viewers. The authors found that streamers used their relationships mainly for two reasons: friendship development and monetization. Streamers seem to look to the relationship between themselves and their audience as a way to seek socialization. That said, despite the reciprocity allowed on Twitch and other live-streaming sites, the relationship is still largely one-sided. While a streamer may be able to build a relationship with a few of their viewers, there are simply too many to hold a relationship with all of them. Thus, the relationship is still largely parasocial, despite the possibility for social relationships on a smaller level.

Methods

Participants

For this study, we recruited participants who are live-streamers on Twitch for a study on managing live-stream communities. The sample consisted of 23 streamers, ranging in age from 19 to 45 years old. All of the participants held Twitch Affiliate or Partner status, which allows the streamers to have subscribers and receive donations, among other perks that allow streamers to grow their communities. Participants were recruited through social media outlets (e.g., Twitter, Discord) during Penny Arcade Exhibition (PAX) Conventions, both online and in-person. Our goal was to recruit streamers that had experienced toxicity, privacy issues, PSR, and community engagement and management. 19 participants were Twitch affiliates and 4 were Twitch partnered. In some cases, participants were Twitch affiliates, but also acted as moderators for other Twitch streamers' channels.

Procedure

For this study, we conducted 23 in-depth, semi-structured interviews to best understand streamers' experiences with community management. Semi-structured interviews served our purpose well, as they provide overall objectives for the interview script but allow flexibility to go "off-script" when a participant shares something interesting and relevant (Singleton & Straits, 2009). The interview script contained questions about demographics, building community, interactions with audience members, PSR, privacy, toxicity, managing communities, and advice for future streamers for how to navigate these issues. While some areas were included on the interview script, streamers provided some other issues organically, which we asked additional follow-up questions about for clarity. For example, streamers indicated there were issues with audiences disclosing mental health concerns on the live-stream; interviewers then asked follow-up questions. Moreover, interviewers did approach this example several times, but only after it was discussed organically.

Interviews were conducted in-person at the 2018 and 2019 PAX East and PAX West gaming conventions in designated private areas and also with Zoom meeting software. All raw interviews were transcribed using transcription assistance software. All identifying information (including actual names and usernames) was removed from the transcription and pseudonyms were assigned to all participants and statements published in this manuscript.

Results

The semi-structured interviews yielded several notable findings about PSR from the perspectives of live-streamers. All of the streamers in the sample were Twitch affiliate or partnered streamers, which means they have streamed multiple times during the week, have an minimum average audience attendance of their streams, and have followers who are notified every time the streamer goes live. These indicators are significant to PSR

because they give the audience more opportunities to view content and more people to talk to about a live-stream. Community members can also "subscribe" to a streamer's channel by contributing financially to a stream per month. While most streams typically cost 5.99 USD per month for a subscription, many streamers have multiple tiers and rewards for greater financial contributions. The Twitch platform and sites like YouTube Live also have a live chat function that the streamer can see in real-time. While moderators can delete comments before the streamer sees them, there are instances where comments will appear on live-stream, and thus a streamer can react to it as they see fit on their broadcast. Streamers, mods, and community members can assess if a community member has crossed a line in their discourse. All of the major themes related to what streamers vocalized as a sort of "line-crossing", in which audience members perceived their PSR with a streamer as something more. Specifically, streamers identified four areas in which this seemed to manifest: 1) PSR as a whole; 2) privacy; 3) mental health; and 4) toxic behaviors. PSR, privacy, and toxic behavior were outlined specifically in the interview script and were mentioned in recruitment of the participants. However, as privacy issues were discussed more in-depth, the aspect of viewers becoming "too comfortable" became more prevalent. Streamers began to express recurring problems with their chat disclosing mental health concerns. Therefore, mental health became another area that needed to be included in the analysis. We discuss each of these in turn below.

Parasocial relationships

An interesting theme that emerged from our conversations with participants was community members' sometimes skewed perceptions of relationships with streamers despite having social interactions. The access that audience members have to streamers, combined with the streamers' interactions with their communities, can certainly make viewers feel like they have deep, meaningful connections with a streamer – even in cases where the viewer might be more of a "lurker" (someone who watches the stream but does not participate in chat). One streamer, Celeste, acknowledged how powerful these parasocial relationships can be:

> There's a level of friendship … like, you sit with these people like every week, you know, for hours … the fact that they want to spend three or four hours, you know, in my stream a day is like, holy crap. They could be doing literally anything else. And that's what they're spending their time on. So again, this is a special relationship.

The relationship between viewer and streamer is a complicated one. Given that many streamers are not traditional celebrities, many have their personal friends or acquaintances in the chat. Additionally, while PSR are one-sided in the sense of a lack of traditional reciprocity, these relationships are still meaningful to many streamers beyond a business strategy. Influencers and content creators depend on their geniality with their audiences to maintain PSR (Daniel et al., 2018). This is exemplified through a live-stream,

as a streamer needs to be able to interact and react to their chat in real time. Streamers have reciprocity when it comes to interaction, and in some cases, there are friendships and strong bonds with their community. For example, when asked about whether they view their audience members as "fans", Ash explained that the term "fan" was too impersonal for their liking:

> I hesitate to call the people who communicate or who engage the community fans. Like, for me, that almost creates a sort of a mental separation, because I want each and every single one of them to be very close to me.

This closeness that streamers have and want with their audiences increases their ethos with viewers. Additionally, if a streamer wanted audience members to feel like friends without knowing them, it is very possible that streamer could have PSR with their audience, although that was not discussed in the interviews.

Most conversations with streamers indicated that community engagement was largely comfortable and self-aware. Many members knew that they wouldn't call themselves friends with the streamer and understood where they stood in the relationship. These kinds of feelings nurtured the community and brought positivity to the PSR. Thus, the majority of the sample didn't use the word "fan" but insisted that their viewers were a community.

In some cases, however, viewers might interpret the connection they feel with a streamer as "something more" than it is – perceiving a much more "real" friendship, or even romantic relationship, with a streamer. While many streamers we spoke to embraced their communities' PSR with them, there were many who expressed having mixed feelings. Mara stated:

> Many of them have said they feel like I am their friend and they feel like they know me and they feel close to me or like I changed their life. They have changed mine too, but I feel not in the same way.

Mara's comment resonates with the one-sided nature of PSR – in this case, her community members may feel like they know Mara deeply and benefit from her presence, while she is unable to do the same because of the affordances of the platform. For many streamers, this creates an imbalance of possible communication and connection, with streamers being susceptible to having aspects of their private life on public display.

For a few streamers, like Alex, there is a clear separation between his real-world friends and his community. He stated: "Fans are the people who I talk to when the stream is live. Friends are people I talk to when it isn't". Even Alex's use of the term fan – which Ash stated feels too impersonal – seems to create an intentional wall between Alex's personal life and his professional life as a streamer.

Holistically, the interviews reviewed an interesting tension between avoiding creating too much distance between them and their communities (e.g., dislike of the term "fans") and also needing to maintain some distance to guarantee boundaries. Skye explained:

> I'm really careful about the people that I let through to the other side … If you are my friend, I will do basically anything for you. But I would not do anything for any member of my community, because you can't do everything for everyone. And so I think that's as much for my own mental health as it is to create a line in the sand.

Alex and Skye were not alone in this opinion, as multiple streamers explained their procedure of speaking with a community member and that the level of friendship was not mutual. Particularly in face-to-face settings, the phrases "enjoy your PAX" or "I am going to catch up with some old friends" were mentioned to indicate that the interaction was over between the streamer and the audience member. Once again, rules were established quickly and early to create mutual understanding concerning what crosses the line when it comes to PSR.

Yet for some streamers, like Elle, "It's super difficult to draw that line and say, 'here and no farther'". This tension reflects the realities of working in entertainment industries where audiences can develop parasocial connections with a media personality – albeit with heightened potential for PSR due to the CMC element of the Twitch platform. Professional streamers, reliant on donations and channel subscriptions from viewers for income, might find themselves needing to lean into the affordances that cultivate PSR, as suggested by Russell (2020).

The one-and-one-half PSR refers to the reciprocity that might occur with social interaction, but not having a social relationship (Kowert & Daniel, 2021). In many instances in the interviews, it was clear that streamers did feel like they were friendly with their audiences but were not friends with them. Moreover, many streamers used the term "parasocial relationships" to describe an audience member's relationship with them, despite there being communication during the live-stream. But at the same time, audiences may interpret a streamers' openness and seemingly authentic self as an invitation for prolonged engagement, probing for personal details, or other unwelcomed behavior.

Privacy

One of the most discussed topics in interviews was that of streamers' privacy, and how community members' PSR with the streamer often led to privacy concerns for the streamer. Streamers figuratively, but also somewhat literally, invite viewers into their homes, sometimes displaying their bedrooms, family members, pets, and other aspects of their personal life. Much of this is done for the sake of creating a genuine or "authentic" self to present to viewers, which can help cultivate relationships with the community members. However, sometimes viewers misinterpret that sharing as an invitation to

unfettered access to streamers' personal lives, ranging from asking invasive personal questions to using personal information about a streamer to get closer to them.

Most of our participants discussed setting clear boundaries around sharing personal details. It was standard to not share addresses, the city they live in, information about family members or significant others, or their actual names (most streamers are known by their Twitch usernames or sometimes just a first name). For example, one streamer, Tommy, who resides in a small town in Massachusetts, explained that he identifies himself simply as "Tommy from Boston", with Boston being the nearest largest city to his actual location.

However, many streamers acknowledged that it would not be hard for viewers to find out personal information about them online. As one streamer, Josh, explained:

> While I stream, I don't talk about too much what I do for work stuff. It sucks, because my gamertag name is connected to my Twitter. And my full name. I ran for office once ages ago, so my full address is out there … I don't bring it up, but someone can easily find my home address. I mention what state I'm in, in what job profession, but I don't tell them where I work, or what town or anything that could, like, help them find out the actual location. I haven't even updated my LinkedIn in like four years.

Many streamers have become increasingly aware of PSR with their audience, and they take a precautionary approach towards their community. Streamers often only disclose things they are comfortable with sharing, while withholding information they want to keep private. Moreover, streamers want their community to respect their decision to make certain details private. In Tommy's case, it was about his profession, but other streamers will only share their gamertag name or will open a post office box that is not attached to their home address. Personal aspects of streamers' offline worlds can infiltrate their online presence, leading to uncomfortable situations for streamers – even if not done with malintent. Ash described an incident when a viewer who they knew personally accidentally referenced Ash's town of residence in the chat – a personal detail Ash likes to keep private. Afterwards, Ash used Twitch's "banned words" tool – commonly used to prevent slurs and offensive language from being typed into chat – to ban the name of their town, their employer, and other words that could expose personal details about them. Streamers are able to control PSR issues by use of clearly established rules with their community and even the use of chat functions to control the privacy of their stream. Streamers also speak to their moderators about potential words that may be considered triggering to the streamer and/or the community. The focus on the stream is that the personality is in control of their channel, both on- and offline. As PSR focuses on both on- and off-screen relationships, it's important that the streamer is the one that establishes clear rules for their community as soon as possible, so there is no room for misinterpretation.

In general, our participants stated that audience members in the chat tend to respect these boundaries. Where privacy issues *did* arise was outside of the live-stream – either through streamers' social media channels (e.g., Discord) or at in-person events. It was fairly common for streamers to receive what they felt were invasive personal questions through direct messages on social media. One streamer, Jess, explained:

> There are some people who have crossed the line, sending me messages asking questions that don't need to be asked. And whenever that happens, I do kind of put up that, "Hey, look … I'm not going to answer that question". And for the most part, people are pretty respectful of that. They might act wounded a little bit at first, generally, like, "Oh, I'm so sorry … I didn't mean to insult". No, it's just, I have to draw a line somewhere.

Another streamer, Ally, recounted a community member using backchannels to try to get her address to send her a gift:

> This person was like, "Oh, I want to buy you a gift. Can I have your address? I don't think I had PO box, and if I did I didn't know it off the top of my head … They asked a moderator, and some mod was like, uh this isn't ok. I don't feel good about it". And so I just sent [the community member] a Twitter [direct message]. I was like, hey … once I can confirm what my PO box is, I'll send it to you. By the way don't ask other people for my address". They flipped on me. They were like, "How long have I supported you?!" … Granted they were giving me like 2 bucks a month on Patreon and they were a Twitch sub. So for that sum total of 7 dollars they really felt that there was something there.

There are some instances where a line of PSR is crossed with the streamer. With that said, when asked about this phenomenon, streamers were adamant that they don't give into the pressure if they don't feel comfortable. They often mentioned they were not afraid to ban someone if they were becoming too aggressive and invasive, regardless of monetary contribution.

For streamers like Jess, who attend conventions or meetups where they might come face-to-face with community members, there can be reservations. She explained:

> There are definitely some people who are very over-eager online. And meeting those people in person can be scary because you just don't know how that overeagerness is going to translate in the person … Is it just that they want to feel a connection with someone on Twitter? Is it just that they really like my content? Is it just that they think I'm pretty? You just don't know.

Comments like Jess's highlight what many streamers perceive as an imbalance between what they share as public media figures, as opposed to their anonymous community members. Another streamer, Haley, spoke to this when she said,

> I had a community member who knew me in real life, but I did not know who they were, and they kept mentioning personal details without disclosing who they were. That was probably the most uncomfortable I have been on stream.

Since celebrities have been able to interact with their fans online, the lines of PSR and the perception of PSR have been blurred (Kowert & Daniel, 2021). However, the examples concerning face-to-face meetings parallel the notion that relationships are one-sided. Streamers referenced that a follower would greet them like an old friend, while the streamer might have been oblivious to the community member's identity. In some cases, a community member would state their screen name with a streamer still none the wiser to their identity or their interactions. It was clear that streamers with larger communities are more likely to have this particular problem, with PSR becoming a useful framework for understanding why these apparent violations of streamers' privacy might be commonplace. In an effort to build a rapport with community members, streamers share certain aspects of their personal lives to represent their authentic selves on stream (whether or not it is in fact their authentic self). For some community members who become emotionally – and perhaps financially – invested in a particular streamer, that relationship might start to feel "real", and those individuals might cross personal boundaries that would typically be reserved for close relationships.

Establishing individual parameters on comfort is important, as well as setting the expectations of boundaries within the community. Streamers indicated that communities will mostly respect boundaries if rules are clear and enforced. Tools can be used on the Twitch live-streamer page, Discord, and social media, including using bots to ban words that might reveal information that is not meant to be shared. Moreover, streamers have customized their own privacy through things like usernames and avatars and creating post office boxes separate from their address. All said, the more streamers are prepared, the smoother the process can be. However, there are always areas of conversations that streamers are not prepared for.

Mental health

Another topic streamers discussed, with surprising frequency, was that of mental health. A shocking number of the streamers we interviewed mentioned – unprompted – that community members often divulge personal information about their mental health in the channel's chat or social media outlets. While Twitch as a whole has become something of a space for advocating for openness about mental health, many streamers indicated that audience members sometimes overshare sensitive mental health information. Moreover, and more concerningly, they expressed the feeling that audience members expected streamers to help them with their mental health concerns.

One streamer, Cam, discussed how boundary-setting around mental health discussions can be tough. They stated: "I'm a really sympathetic, empathetic person and I feel really bad. Like, I know you have things going on and I feel for you and I know you like the

[community] but also you are messaging me too much". Cam discussed how they provide their communities with links to mental health resources:

> I have a [message] that comes up, maybe like every 20 or 30 minutes in my chat, that is a whole big thing that's all about why mental health is really important. It's important to talk about. Like, we're here for you. But I'm not a therapist … Like, here's a bunch of resources if you need help.

The phrase "I'm not a therapist" was frequently invoked by our participants. While they all expressed that they encourage healthy discourse around mental health topics, they also stressed the importance of being very transparent about their lack of expertise in treating mental health concerns, as well as the stress that often creates for them. Many spoke of the emotional toll that this takes on them, especially when they are in no position to offer real support to community members. Streamer Mischa voiced concerns:

> I've had people seem like they might be suicidal, come into the chat and then then they're upset that you're not doing something about it, you know? And I'm sitting here, just like thinking about it. Like, I don't understand how you can even do that to somebody, like put that kind of pressure on somebody. And me, I have incredible anxiety, you know, and … the rest of the day, I'm going to be thinking about whether or not this person's going to be okay. And it's not even my job in the first place to fix that. You know, I'm not a professional. I'm telling you to call somebody, talk to your family or your friends or a therapist or suicide hotline. Like, you don't come into a live Twitch channel.

On the one hand, community members feeling comfortable to publicly ask for help combating mental health issues speaks to the relationships that streamers are able to foster with their audiences. This is likely due to the perceived authenticity and feeling of "realness" that viewers sense from the streamer, creating strong PSR, as well as the influence of CMC, allowing relative anonymity. However, there are many risks that may arise from the average streamer, untrained as a mental health professional, providing mental health advice or treatment recommendations. Twitch does provide mental health support information, with methods to address a potential crisis in chat, but also numbers to contact both domestically and worldwide. Twitch even addresses the nature of the severity of the crisis, suggesting that if a member in a chat is contemplating suicide to call a suicide hotline immediately. This is an available resource, but members in our study spoke of their own resources separate from Twitch.

Streamers did feel like they bore responsibility for the well-being of their community. Many participants indicated that either they or their mods felt an obligation to at least address these troubling conversations. Many streamers provide resources to help their communities. Streaming "teams" – formed when multiple streamers create a formalized community – manage their communities by use of bots, timing out chats and having them speak with moderators, and generally keeping conversation light and upbeat. One

streamer even references a "crisis plan" for mods to address in case a community member was disclosing that they were suicidal, prompting them to provide resources that can better help the community member. This is another instance where streamers have felt like a PSR boundary had been crossed.

Toxicity

Toxicity has been a considerable point of concern amongst Twitch users and has been subject to a number of research articles. Toxicity can occur in short bursts or endure for long spans of time, on- and offline (Scott, 2020). Short- and long-term abuse can result in issues with cyberbullying, stalking, and even physical violence (Reinhard, 2018). Indeed, concerns of racist, sexist, and anti-LGBTQ+ rhetoric, trolling, and hate raids (i.e., when another stream send viewers to another channel after the stream to spam toxic speech) have been a major concern within live-stream social communities.

The nature of short-term abuse complicates the interpretation of toxicity. Much of the conversations with streamers in this study discussed mainly toxic behavior in the moment of PSI, rather than long-term toxicity when the subject was brought up in interviews. The aspect of "trolling" (i.e., a person in the chat writes something toxic specifically to get attention from others in the community) was most prevalent when discussing toxicity. Streamers often identified many long-term toxic behaviors (e.g., invasion of privacy), but when the subject of toxicity was addressed in the interviews, the majority of streamers focused on toxicity during a live-stream.

Examples of toxic behavior ranged from fairly benign behaviors, such as spamming text during a chat and causing slight disruptions, to more sinister acts like hate speech. What was interesting about these conversations was how streamers indicated they were generally less concerned with toxicity, which they felt had clear-cut solutions: time-outs, bans, and other "straight-forward" rules. These types of moderation tools are described by Seering and colleagues (2017) as reactive and are found to be effective in discouraging several types of behaviors consistent with the original behavior that earned the ban. However, this is not the only type of moderation; proactive strategies are those that are taken prior to the behavior the moderator wishes to discourage, such as different chat modes that allow or disallow certain comments (Seering et al., 2017).

For instance, Jules reported having two tiers of moderators for her stream: one that is responsible for "creating harmony in the community" and "one that is just focused on blocking hateful stuff". While a channel's individual criteria for what constitutes inappropriate or toxic behavior varies, so long as the moderators know what to block or ban, they more or less follow a procedure.

Where streamers felt less certain was the grayer areas of community moderation – for example, how to handle a well-meaning community member who might be acting inappropriately. Mischa pointed out that not all disruptive audience members are intention-

ally creating problems. She highlighted neurodiverse individuals who might struggle with social cues:

> That's been one of the biggest problems for me … because how do you handle it, right? Like, if somebody is being disruptive, but they don't understand why they're being disruptive. It's really difficult. So just ban them, right? I don't want to like, you know, treat somebody badly, because they don't understand.

Mischa's comment highlights how nuanced and challenging navigating these relationships can be for streamers and their moderators. The streamers we spoke with were all hyper-aware of the impacts they can have on their viewers and generally wanted to be perceived as kind and supportive of all of their viewers. The trick, of course, is in balancing that service with their own needs for privacy, safety, and the ability to run their broadcasts without unnecessary interference.

Discussion

With regards to RQ1 about how live-streamers perceive PSR with their communities, generally speaking, streamers regarded their fans/communities in a very positive light. The viewers that watched the stream were largely respectful, understood their role as a viewer, and did not overstep their boundaries. If the streamers regarded them as friends, the communities interacted appropriately during the live-stream and on Discord between streams. PSR were not always seen negatively, and almost all participants regarded their communities as "the best".

That said, PSR appear to be problematic for streamers for a few reasons. First, growth in a streamer's audience size seems to be where more issues arise. More issues of invasion of privacy, para-kin relationships, and entitlement (i.e., a viewer wants to be prioritized because of financial contributions) came up when there are more people in the live chat and on Discord. The term para-kin relationships originated in China and it refers to the strong attachment and entitlement that viewers have with mediated personas (Yan & Yang, 2024). However, unlike PSR, the community members have more say in the creative process and can feel like they "made" a streamer popular. Fans can act in such a way that they feel the streamer owes them something because of monetary contributions or time spent watching a stream. Para-kin relationship research would support this finding, as those that have this type of relationship often feel a false sense of attachment (Zhang, 2023). Streamers understand this relationship and try to nurture their bonds politely, but every streamer admitted there was a limit to their patience. Moreover, streamers protected themselves against any potential PSR that seemed problematic. Despite attachment or contribution, streamers had no issue with banning those who overstepped their bounds.

Additionally, there is a difference between face-to-face and CMC communication. While PSI typically exists within the stream, there are instances of face-to-face meetings that a streamer must navigate appropriately. Streamers often felt that viewers' relationships did not match their own perceptions, and so boundaries were set in person. Previous research has found that viewers have felt different PSR with characters than they did with the actors (Daniel, 2020). When a fan meets the character, there is a degree of expectancy violation with the fan and the celebrity. This study looked at this concept from the on-screen talent perspective. To the streamer, making sure they keep their normal persona was important to them, and they wanted to keep a positive relationship and experience with their communities. However, boundaries were important as well, as the times designated with their community were the times to interact, and not before or after. Streamers are quite aware of the concept of PSR and often put their guard up as well as establish rules. Even in person, streamers don't want to be seen as jerks. They want to keep the relationship positive, but they were also insistent that their time was their own, and community members needed to respect their space.

Lastly, there was a great deal of learning from streamers in terms of understanding PSR and setting boundaries. Many participants indicated that they "had no idea what they were doing" when they first started streaming. So, when their own expectations were violated in the discourse, they and their mods had to act. This included small exchanges that seem normal, but had to be handled with more care. For example, saying "Love you, chat" at the end of the stream was considered normal discourse, but to their community, it may have meant more to them as PSR would have increased. Streamers had to be careful of that discourse because it may have set a precedent that feelings were not as strong as appeared.

The next question, RQ2, about how streamers' relationships with their communities form community culture, was an extension of the previously mentioned rules. The precedents set by the streamers contributed to the culture of the community. Twitch communities have been found to form based on things like shared interest (Hamilton et al., 2014). Our study found that there were a variety of streams involving Table Top Role-Playing Games (TTRPGs), first person shooter gameplay, mental health just chatting, speedrunning, and political discourse. Many community members joined to participate in a shared interest. That said, as the community grows over time, the culture did not just include the type of stream. Previous studies have indicated that over time, more information is shared, which creates greater community (Blight et al., 2017). Sherrick et al. (2023) argued that viewers who experience parasocial phenomena with a streamer have an increased sense of community.

Over time, emotional connections occur with the streamer, and so too with the culture they have intended to establish and what made community members feel comfortable. With regards to the previously mentioned toxicity, privacy, and discussions of mental health, communities had to have a mutual understanding concerning the culture

that the streamer wanted to establish. Live-streamers can set the tone through their own actions, and they are expected to do so (Sherrick et al., 2023). For example, some streamers set very strict standards with their relationships and communities. People who entered the stream were met with the rules before they could chat and would be timed out if they exhibited any behavior that would make the chat uncomfortable. The control that the streamer has with rule enforcement plays a key role with longevity. Since PSR revolve around multiple interactions over time and between interactions, the sense of community is all the more important between streams. The community leader is responsible for the experience.

Still, the culture is not a precedent set by the streamer exclusively. Community members can suggest their own issues that disrupt the culture, and thus discussions occur over the subsequent procedures. The conversations about the group enhance the relationship that viewers have with streamers because they feel like they are more involved. As those similarities between community members arise, so do relationships within communities. Friendships often form within the Discord servers and live chat between members, making the culture more enriched. While streamers are often on guard concerning the severity of the relationships, they also encourage friendships within communities.

Future directions

Kowert and Daniel (2021) called for research concerning the other side of PSR research by understanding the non-viewer side. The interviews conducted for the present study not only address this unique perspective of PSR, but also how to manage communities in real time during positive and negative discourse. First and foremost, the nature of PSR through social media continues to evolve through the means of live-streaming. Additional confirmatory research needs to investigate the reciprocity that exists in social interactions between streamer and live audience. However, if there is reciprocity in communication, but an incongruity in the perception of their relationship, how are PSR defined? In our interviews, most streamers indicate that these types of relationships exist regardless of the size of their audience. Therefore, additional research needs to be conducted concerning the amount of reciprocity that can exist in PSR.

Next, moderators are seen as streamers and close confidants, both during live-streams and between sessions. Further in-depth interviews could discuss the intermediary role that mods play during stream, for example, gatekeeping messages, blocking and banning users using toxic language, and providing information to streamers about their community. It is worth noting that mods would also walk around with their streamers during conventions as a way to help a streamer remember their community members.

The streamer side of PSR needs to be further evaluated. Cross-sectionally analyzing partnered and affiliate streamers may yield differing results of perceived PSR, as bigger streamers cannot keep track of all their audience members during a live-stream. Percep-

tion of fandom versus community might also differ from the two types of streamers, as the connection with viewers might be more distant depending on the size of the audience

Lastly, additional para-kin relationship studies should be conducted with relation to the familial role that an audience member might have with the streamer. Consistent with Zhang's (2023) findings, our interviews also indicated that audience members can feel like they were the ones responsible for a streamer's popularity and success. Implementing social identity in-group versus out-group in relation to time and financial contributions to a streamer's success should be investigated as well.

Conclusion

It is important to emphasize that many streamers speak positively about their communities as fun and active. Many streamers expressed their joy and humility towards their community and love how excited they can be when they meet in person. There are many positive conclusions to take from the streamer-audience relationship. That said, it's also important for streamers to implement best practices to protect themselves and others from harm should a threatening discourse occur during a live-stream.

The term "parasocial relationship" has indeed become common vernacular amongst content creators, streamers, and influencers alike. Most streamers will indicate that while they enjoy their communities, there is often a mismatch in the perception of the relationship. The difference in relationships have become a great issue, not only with regards to the literature of PSR but the best practices and safety of streamers and community members alike.

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