

# **The Connection Between Twitch.tv Interactive Features and the Development of Parasocial Relationships**

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On my honor as a University Student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments

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## **Introduction**

In recent years, the rise of the internet and social media has changed the way people communicate with each other and share ideas. Social media in particular has created new opportunities to interact with people across the globe, as it provides a virtual platform for people to share details about their personal life for the broader internet to see. For example, on Instagram and Twitter, users can follow people who they can't otherwise talk to such as celebrities to stay updated on their life. A phenomenon that can arise from this virtual, asynchronous sort of communication is that those people may begin to feel close and intimate with those media figures. Those media figures are typically unaware of these connections, and there is typically little or no opportunity for genuine two-way communication, so those feelings of closeness cannot be reciprocated. These one-sided connections are known as parasocial relationships.

Despite the lack of reciprocity, parasocial relationships can have a significant impact on individuals' emotional well-being and social identity. Individuals who develop parasocial relationships often experience a range of positive emotions, such as joy, admiration, and validation. In some cases, these relationships can provide individuals with a sense of belonging and purpose, especially for those who struggle to form real-life relationships. However, parasocial relationships can also have negative consequences, such as feelings of loneliness, anxiety, and depression when the relationship is disrupted or ends. Given the potential effects and consequences of parasocial relationships, understanding this phenomenon would be critical for media scholars, mental health professionals, and anyone interested in the impact of media on our lives.

One media platform that is of interest is the livestreaming platform Twitch.tv. On Twitch, users are consuming a different kind of content around a media figure in the form of live stream video. It provides more direct features for users to interact with their favorite streamer such as a chat box, so it would be interesting to see the effects of these additional features on the development of parasocial relationships. Thus, the research question that this paper seeks to answer is: How do the interactive software tools and features on Twitch affect the development of parasocial relationships between streamers and viewers? Through an analysis of livestreams and existing literature, this paper aims to provide a comprehensive overview of parasocial relationships in the livestreaming world, their development, and their implications for users. By doing so, this paper seeks to contribute to a better understanding of the role that media plays in shaping our social and emotional lives.

## **Background**

Livestreaming refers to broadcasting video content that is occurring in real-time over the internet. Its rise to popularity occurred shortly after online video sharing platforms such as YouTube took off in the early 2000s. Today, one of the most popular streaming platforms in the world is Twitch.tv, which had an estimated average of 2.78 million concurrent viewers in 2021 and over 50 thousand partnered streamers (“Twitch Statistics”, n.d.). Although focused mainly on gaming content, the service also offers a variety of non-gaming content such as traveling, cooking, musical, and other non-game centered activities.

For streamers, livestreaming can be a way of relieving stress and a way to improve self-confidence as it gives people an outlet through which they can express their self as well as

practice articulating their thoughts (Ravarion, 2021). Some people want to provide entertainment and challenge themselves by participating in livestreaming. Others may stream in hopes to become successful on the platform and create a career out of it, as it can be quite lucrative with the top streamers making upwards of millions (Miceli & Tsiaoussidis, 2022).

Viewers, on the other hand, may prefer livestreaming to other forms of online entertainment for a multitude of reasons. One reason is due to the “real-time” aspect of livestreaming. Events playing out in real time means that there tends to be more “unscripted” content, resembling face-to-face interaction, and this results in a higher degree of authenticity than what is found in edited, recorded video (Ang et al., 2018). People like being able to see “behind the curtain” as the content is usually unscripted making it feel more “real and intimate” (Overmyer, 2016). The suspense aspect also helps to motivate people to watch livestreams. During livestreams, there is that element of unpredictability, unlike in prerecorded media where the outcomes are predetermined and might already be known by the viewer. Therefore, watching streamers can sometimes be like watching live sports because in the same way, viewers will root for the streamer to win the game or overcome an obstacle. These feelings of suspense have been shown to enhance media enjoyment (Wulf et al., 2020). In addition, there are tens of thousands of Twitch streams (dubbed channels) airing at any one point resulting in a variety of genres which makes streaming something that appeals to a broad audience (“Twitch Statistics”, n.d.).

For both streamers and viewers, another major appeal of livestreaming is the strong focal point on being a part of a community which is centered around the streamer. And there are plenty of ways that a viewer can participate: There is a chat room which is the primary way that viewers can interact with the streamer, a subscription and donation link for viewers to use to support their

favorite streamers and unlock subscriber emotes and badges, and a clipping feature allowing anyone to extract highlight moments from a stream to share on social media.

## **Literature Review**

Horton and Richard Wohl (1956) are the first to provide a definition for a “para-social interaction” between an audience and popular media figures such as actors. They described such an interaction as “one-sided, nondialectical, controlled by the performer, and not susceptible of mutual development” (p. 215). The performer will speak to an audience as if it was a face-to-face interaction with a similar cadence and tone. This in turn will create the illusion that audience “know[s] such a persona in somewhat the same way they know their chosen friends” (p. 216). These friend-like feelings tend to occur on an intuitive level, meaning that the audience recognizes that the media figure is not actually their friend, but subconsciously they feel that the media figure is one (Hartmann, 2016). This kind of interaction is common on livestreaming platforms such as Twitch where viewers tune in and get to know all about a single personality, while that personality knows very little about their viewers. However, this relationship between streamer and viewer can be seen as one that isn’t completely one-sided like the one in Horton and Richard Wohl where audiences are watching a personality through a TV. Kowert and Daniel (2021) argued that the dynamic between the viewer and performer on Twitch is “one-and-a-half way” rather than one-way as seen in a traditional parasocial relationship (p. 2). The reason for this difference is because there is increased potential for reciprocation from the performer because viewers can interact with the performer through the available online tools such as the chat room, or on third party social media such as Discord. The authors also describe the nature of parasocial relationships (PSRs) with streamers as a “unique mix of wishful identification,

emotional engagement, community affiliation, and fandom” (p. 6). They suggested that the definition of PSRs be updated in the context of livestreams.

On Twitch, there seems to be a stigma attached to the term “parasocial” and streamers and viewers alike associate the word with the obsessive variation, but PSRs aren’t inherently bad and can be a source of community and social connection for individuals much like normal relationships (Hoffner & Bond, 2022). For example, PSRs “can provide social support, and, thus, shield against or diminish the effects of social exclusion and loneliness” (Hartmann, 2016, p.137). The live aspect of Twitch streams contributes to these benefits because it can feel like the streamer is present in the moment and their stream can provide viewers a means of escapism from everyday worries (Kowert & Daniel, 2021). PSRs to streamers also intensify enjoyment of the streams as viewers feel like they’re “watching a close friend playing” (Wulf et al., 2020, p. 339) and will root for the streamer, hoping for positive outcomes and fearing for negative ones, which can positively impact thrill and suspense (Hartmann, 2016).

However, if the parasocial relationship progresses into an obsession and a delusion, this would negatively impact psychological well-being (Hartmann, 2016). Obsession here implies that the viewer neglects traditional relationships in favor of partaking in a parasocial one, and delusion refers to when the viewer actually believes the streamer to be their friend and expects reciprocity. Generally, it is recommended for viewers that these parasocial relationships should complement real-life relationships rather than substitute them (Derrick et al., 2008; Hartmann, 2016) because PSRs do not provide the complete benefits of social interaction.

For the streamer, viewer’s parasocial relationships with them can also strengthen their brand image and popularity because viewers develop a stronger liking to them and will be more likely to subscribe and donate, leading to greater monetary benefits (Wohn et al, 2018).Wohn et

al. (2019) corroborates this claim and argued that viewers will be “more inclined to subscribe if the streamers develop relationships with them” who will stay subscribed based on the “emotional and digital rewards” they receive in return (p. 108). Through their interviews with donators, they concluded that these viewers have developed a parasocial relationship with streamers and that motivates them to watch more and donate money.

There have also been studies that look into the predictors of parasocial relationships in livestreaming much like the research done here. Research suggests that streamer attributes and personality are a major cause of parasocial phenomena and that viewer characteristics play a smaller role (McLaughlin & Wohn, 2021). Specifically, the strongest predictors were interpersonal attractiveness and occurrences of direct interaction between streamer and viewer. This means that viewers tend to develop parasocial relationships with streamers who they find similar to themselves. Specifically, viewers will be more attracted to and empathize with streamers who are similar to their “ideal” self (Derrick et al., 2008). This seems to be related to the fact that viewers see the streamer as a role model in behavior and want to be like or act like them (i.e. wishful identification) which has a positive effect on the intensity of parasocial feelings (Lim et al., 2020). The streamer being perceived as genuine or authentic and disclosing personal information also fosters PSRs (Tukachinsky & Stever, 2019). Additionally, Jodén & Strandell (2022) suggested that if online interaction rituals resembles that of offline interaction rituals, viewer engagement increases, and they develop parasocial attachment. In particular, they described how interaction rituals on Twitch can be similar to offline rituals, such as concerts or sporting events, because they involve users having synchronized reactions or behavior towards a mutual point of focus (the streamer) as well as a shared mood. These components “cause a self-reinforcing feedback-loop of increasingly positive social emotions and sense of belonging” (p.

1972). Current research seems to focus more on how the social aspects of livestreaming (streamer/viewer behavior) affect the development of parasocial relationships, but little research has been done for how the technical aspects of a livestreaming platform play a role.

## **Methods**

To go about answering the research question, a documentary research method as well as a case study approach were utilized. Several stream features were analyzed using these methods. Those elements are the chat box, the subscription/donation system, and the video-on-demand and clipping features. These features were chosen because they are the main methods that viewers use to interact with stream both directly and indirectly. For documentary research, sources containing information on these individual elements and how they shape the user experience and attitudes towards the stream have been collected. To supplement this, observations were made in the stream of the largest English-speaking streamer “xQc”, who had 11.8 million followers and 71,000 subscribers, averaging 58,000 viewers as of April 2023 (“xQc - Streamer Overview”, n.d.). To get a first-hand look of how these features are being utilized by users, xQc’s channel was chosen to be analyzed as the features in question are more frequently used in his channel and can be observed more consistently. In particular, donations were recorded in a 2-hour time period and content analysis was performed to reveal common themes. Lastly, further analysis of these streams will be done using Tukachinsky & Stever’s (2019) model of parasocial relationship development which is adapted from a model for real-life relationship development by Knapp (1978). They listed the stages that a parasocial relationship can go through as well as behavioral predictors for each stage, so this model can be used to see how these features can facilitate parasocial development. The stages are as follows: Initiation, Experimentation, Intensification, and Integration.



Initiation is where the viewer is exposed to the media figure, and they form a first impression of them. This stage is characterized by a higher level of uncertainty and can be relatively brief compared to the following stages.

Experimentation is where the viewer will want to learn more about the media figure. The main goal of this stage is to reduce uncertainty and throughout this stage, people become more engaged with the media figure, experiencing stronger enjoyment when consuming content relating to the figure.

Intensification is where the viewer will start to develop “stronger feelings towards the character, including friend-like or parental feelings” (p. 305). Again, a person will seek additional content relating to the media figure.

Finally, the last stage is integration where “media users’ sense of self becomes more intertwined with the media figure” and being a fan of the media figure becomes a part of their social identity (p. 307). PSR at this stage promotes “more favorable interpretation of the media figure” who are seen as more morally righteous (p. 310).

## **Chat Box**

The chat is an integral component of the Twitch ecosystem, as it is the primary method of communication between viewers and the streamer. The chat is displayed in a vertical panel next to live video and anyone who is logged in to their account can type a message that people can see.

Although the chat provides a way for viewers to directly interact with the streamer, this interaction is an illusion of intimacy. According to Wulf et al. (2021), when the streamer “directly address[es] viewers and pay[s] attention to their feedback through the chat [this]

enhanced feelings of PSI [parasocial interaction]” (p. 651). And from observations made in xQc’s stream, the way the streamer performed this direct addressing was by repeating the viewer’s message aloud to the stream. They do this repetition to draw attention to the message, so the entire stream understands the flow of conversation. Although they do not explicitly mention the viewer’s username like in the Wulf et al. study, viewers often know that they’re being individually addressed due to the fact that it is visually obvious (the viewer’s username and message is displayed on screen as the streamer reads it out) or the message is unique, so the viewer knows it’s their message being read out. Even though Wulf et al. stated that this is a real interaction, the interactions are too few and isolated and are usually viewer initiated. Therefore, they cannot be equated to traditional social interactions.

Another reason that communication leans towards one-sidedness is the lack of nonverbal cues when the streamer reads a viewer’s text-based message. Lieberman & Schroeder (2020) argued that this lack of nonverbal communication cues such as smiling and “modulating the sound of one’s voice to convey emotions (e.g., humor or sarcasm)” has several consequences (p. 16). One consequence is that it can “reduce people’s understanding of others’ thoughts and feelings” which can lead to miscommunication and reduced “feelings of social connection” (p. 17). The other consequence is that “text-based interaction may be dehumanizing” as reading another’s opinions versus hearing them makes the “communicator appear . . . less thoughtful and emotional” (p.17). Lee et al. (2011) also supports these claims stating that internet communication cannot fully convey the “warmth and ‘human-ness’ which are conducive to deeper understanding and development of relationships among the communicating partners” (p. 385). These findings suggest that the streamer would experience a lower level of social connection with their audience, who communicate via text, compared to level of social

connection felt by viewers towards the streamer, and this inherent imbalance or one-sidedness lends to the development of a parasocial relationship.

Twitch's social aspects such as community involvement and social connection are an "immensely important aspect of the consumer experience of streaming" which increase how long viewers watch streams (Sjöblom & Hamari, 2017, p. 993). This combination of social interaction and media content is not a new concept and is related to the notion of "Social TV". Social TV is a form of interactive TV viewing, where people will be using social media platforms such as Twitter to talk about the media content they're currently watching in real time ("What is social TV", 2012). This use of social media can increase enjoyment of the media content due to the feeling of social connectedness to others who are not physically present, termed as social presence (Kim et al., 2021). Findings from Krämer et al. (2015), also support the claim that Social TV usage increases enjoyment and provides additional reasons for why people partake in Social TV: motive to communicate with others, to gather information on others' opinions, and to be entertained.

The chat is one of the ways that Twitch implements the Social TV idea and Wulf et al. (2020) suggests that it does so in a better, more seamless way by having the two components of Social TV (the media content and the outlet for social interaction) be directly adjacent to each other, unlike in traditional Social TV (where the components are on separate media platforms and devices). The fact that these components can be viewed on the same platform and device means the viewer will not be distracted by unrelated content which can decrease enjoyment (Rubenking & Lewis, 2016). This convenience aspect of the chat, where everyone in the stream has direct access to this feature, combined with the enhanced enjoyment benefits from Social TV

encourage more viewers to be a part of the streamer's community and thus engage in parasocial interaction with the streamer.

In facilitating community involvement, the chat also fosters parasocial relationship by stimulating emotional engagement, defined as the desire to share emotions with other viewers and the streamer, as well as the experience of "amity or animosity" towards other's sentiments (Lim et al., 2015). The chat gives a means to see other viewer's opinions and express your own personal opinions, and this emotional engagement has been shown to strengthen the parasocial relationship with the streamer (Lim et al., 2020). Therefore, by motivating more viewers to participate and become a part of the community, the chat can boost emotional engagement and thus parasocial attachment to the streamer.

The way that the chat motivates this community participation and thus emotional engagement is through interaction rituals. Mentioned earlier, Collins (2005) defined interaction rituals as a social phenomenon that occurs when participants in a group develop a mutual focus on the situation/interaction they're partaking in together. Components necessary for a successful ritual to occur are barriers which distinguish the participants of the ritual from those who are not, a mutual focus from all participants on a common object or activity, and a shared mood or emotional experience for the participants. A typical example is watching a sporting event in a packed stadium. There is the stadium which acts as the physical barrier containing the participants, a mutual awareness of the competitors and their actions, and a shared mood of excitement that is established when the home team scores. The outcomes of a successful ritual are a sense of solidarity and belonging to the group, positive emotions such as elation or confidence, and symbols that come to represent the group. In the context of Twitch and livestreaming, there is usually a mutual focus on the content that's being streamed e.g. a



In analyzing the chat feature according to Tukachinsky & Stever's model (2019), we can see that the chat would facilitate development in the experimentation, intensification, and integration stages. During the experimentation stage, a viewer is driven by curiosity to reduce uncertainty about the streamer and their community. Chats on Twitch tend to have their own subculture, consisting of inside jokes and unique speech style (Ford et al., 2017). When a viewer opens a stream for the first time, the chat can be an important source of information that conveys what a particular stream is about, thus reducing uncertainty. The chat would also facilitate development in the intensification and integration stages. In the intensification stage, greater intimacy with the media figure is desired and this can be accomplished when the media figure discloses personal information. The chat does this by allowing users to interact directly and ask questions to the streamer and get to know them more. In the integration stage, "media users' sense of self becomes more intertwined with the media figure" and being a fan of the media figure becomes an "aspect of their personal identity" (p. 307). The chat is seen as the community hangout place for a stream so by participating in it, viewers feel more connected to the community. The authors also mention that parasocial status is recognized in this stage through "socializing with like-minded individuals" (p. 307). An example from xQc's stream is that even after he ends the stream, viewers still use the chat to converse with other viewers. This serves to integrate themselves deeper into the community, and by doing so their parasocial attachment grows.

### **Donation and Subscription System**

Anderson (2017) stated that donations and subscriptions allow viewers to draw more attention to themselves than they would by only using the chat. Anderson as well as Sjöblom et al. (2019) stated that streamers are more encouraged to acknowledge and express gratitude

towards these monetary gifts in order to keep their audience engaged. Like with chat, streamers will directly address the users that sub/donate and induce feelings of PSI (Wulf et al., 2021). However, when donating and subbing there is a higher chance to become individually addressed or “seen” by the streamer, meaning that compared to using chat, subscribing and donating is a more reliable way to interact with the streamer and build parasocial relations.

When it comes to subscriptions, in addition to that initial shoutout from the streamer, users also subscribe to gain digital benefits such as exclusive badges, which appear next to their name in chat, and emotes. Some viewers state that the sub badges help them gain more recognition from the streamer and in the community (Wohn et al., 2019).

In line with Tukachinsky and Stever’s (2019) parasocial development model, subscribing is an action done in the intensification and integration stages. In the intensification stage, people “seek intimacy” and want to “maintain their relationship”, which they can do by regularly subscribing every month as it is a more intimate action compared to just viewing normally (p. 304). In the integration stage, a viewer would identify more closely with the streamer and would “see fandom as an aspect of their personal identity” and this identity is “reinforced socially by being regarded as a fan by others” (p. 307). Therefore, becoming a subscriber would satisfy those identity needs, as doing so gives them a badge to show off and make them feel like they’re an official member of the community.

In many streams, new donations and subscriptions appear on screen as “dynamic notifications . . . commonly accompanied by audio, animation” (Sjöblom et al., 2019). A common example of this is that many streamers allow donators and subscribers to send a message which is then read aloud to the stream by a text-to-speech reader. Through mechanisms like this, viewers do not only passively consume the content but contribute to it as well.

(Anderson, 2017). What this means is that through donating/subscribing, viewers can become the “mutual focus” which helps drive interaction rituals (Collins, 2005). They can facilitate a successful interaction ritual and build positive emotions such as group solidarity, thus driving emotional engagement and higher parasocial attachment to a stream, through donating something as simple as a humorous joke. Indeed, from observations made on donations in xQc’s stream during a 2-hour time period, out of the 47 donations sent, 22 were aimed to get a reaction out of chat by either telling a joke or creating conversation with the stream by introducing a talking point.

### **VOD/Clips**

The VOD (video-on-demand) feature is an archive of past live streams, allowing users to view past broadcasts at their leisure (“Video On Demand, n.d.). The clipping feature allows viewers to create short snippets (up to 60 seconds) of the stream and are meant to be shared on other social media platforms (“How to Use Clips”, n.d.). Because these features are merely video recordings, they lack the real-time interaction capability that the aforementioned features contain. However, they still foster parasocial development through providing exposure to the streamer and their community. According to Tukachinsky & Stever’s model, advancing through the stages of parasocial development depends on this exposure to the media figure (2019). They state the initiation stage deals with “forming a first impression” of the streamer and so at first, there is a high level of uncertainty (p.301). To advance to the next stage and continue parasocial development, a viewer must evaluate the streamer positively based on initial impressions of their morality, similarity to their own self, physical attractiveness, and other factors “that can be gleaned from a brief exposure to the character” (p.301). If only a brief exposure is needed, then



clips, being limited to 60 seconds and are essentially highlights of the stream, are suitable for this task to initiate parasocial development. Clips tend to convey the essence of a stream and are designed to be shared on social media and can go viral. Therefore, they are important in parasocial development as they showcase a streamer's characteristics to a wide array of people who will form first impressions and possibly continue parasocial development past the initiation stage.

Afterwards, there's the experimentation stage of Tukachinsky & Stever's model, where the person wants to know more about the media personality so they'll "seek-out additional encounters with the media figure" (2019, p. 303). Clips are still useful in this stage. In the experimentation stage, a person becomes more curious and so they might continue looking through more clips to get a bigger picture. VODs are also useful for this same purpose. One important factor that promotes experimentation is the accessibility of the media figure. Accessibility here refers to the number of opportunities there are to get to know the streamer. Clips and VODs are important for accessibility because they can be viewed at any time. Without them, viewers would have to rely on catching the live broadcast to learn more about the streamer.

As for the intensification and integration stages, Clips and VODs help in the same way as they did for the previous stages: by providing more exposure to the streamer's personality, allowing a viewer to develop stronger feelings of familiarity towards them.

## **Conclusion**

While the main features have been analyzed here, additional research should analyze newer features that have been released recently such as the "Guest Star" tool which allows a

streamer to have viewers appear on stream with voice and video (“Guest Star”, n.d.). Research here also doesn’t adequately assess the strength of the effects on parasocial relationship development these features have, so further research should also be done in this field.

From examining each interaction feature on Twitch.tv in detail, the effects these features have on parasocial development can be seen. Regarding the chat box and subscription/donation features, viewers utilize these to try to interact with the streamer and receive recognition. Both features were also used in ways to facilitate community and emotional engagement which influenced parasocial attachment. VODs and clips serve to better integrate viewers into the community, allowing viewers to consume more content relating to the streamer outside of regular streaming hours.

Overall, in combination with each other, these features nurture the social nature of Twitch streams, making them more enjoyable to watch. They help facilitate a higher level of interaction among viewers and streamers and convey a greater sense of social presence than that of prerecorded media. Thousands of people across the globe watch Twitch and bond over shared experiences ranging from Twitch sanctioned Pokémon marathons (Brian, 2018), Minecraft playthroughs, to IRL streams in New York City. It is these virtual co-experiences which give Twitch and the livestreaming experience their unique character that is appreciated by many. And while bonds created in this way are not as stable as traditional ones, there is nevertheless a sense of community and culture that emerges which viewers help cultivate by using interactive features like the chat. Future research should consider how to preserve this sense of solidarity as well as discover new ways to satisfy the human desire for social connection in a more “authentic”, fulfilling way on online media platforms such as Twitch.

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