CULTURAL MOTIVATIONS AND EFFECTS OF LIVE GAME STREAMING

by

Gordon David Littleford

Presented in Partial Fulfillment

of the Requirements for the Degree

PhD Communications

Liberty University

2024

CULTURAL MOTIVATIONS AND EFFECTS OF LIVE GAME STREAMING

by

Gordon David Littleford

Presented in Partial Fulfillment

of the Requirements for the Degree

PhD Communications

Liberty University

2024

APPROVED BY:

Wesley Hartley, Ph.D., Committee Chair

Marie Mallory, Ph.D., Committee Member

Robert Mott, Ph.D., Online Chair

ABSTRACT

Live game streaming combines many of the social mechanisms and cultural impacts of social media with the entertainment and social impacts of traditional media. Live game streaming (LGS) is growing in audience size and engagement. Further, the financial impact of LGS is rising to the level of Hollywood films and the music industry. As such this study focused on how the communicative environment of live game streaming impacts the live game streaming culture at large, as well as the effects on both the individual streamers and their communities during live game streams. The emergent design of this qualitative digital ethnography leveraged the theoretical perspectives of parasocial relationship theory, social presence theory, and identity management theory to explore the LGS communicative environment. This approach allowed for the culture found within the LGS to be understood from the perspective of the communication environment's impact on both the content creators and the audience members. Two overarching concepts emerged from this study. First, relationships trump gaming. While the game may coalesce and homogenize the audience, the primary driving force behind the growth of the culture and communities seems to be relationships and social connectivity, not necessarily the games that were being played. The second discovery was that the three communication theories worked in tandem with each other to bolster their effects on each other. Parasocial relationships enhanced the sense of social presence which was also impacted by identity management. Then the sense of presence and closeness within the group could then impact how they wanted to present their identities and would heighten the depth of the parasocial experiences. This study provides future research with a solid foundation from which to build.

Dedication

I would like to dedicate this dissertation to my father, Gordon. Without whom I would not have had the time and persistence to finish this lengthy journey. He has been exceptionally supportive and has been a core component of the person I have become. I would also like to include my mother, Carma. She instilled both parental love and my interest in intellectual pursuits into my life. Both parents always believed in allowing me to find my path in life. They encouraged me to seek a career path that was more than just a survival tool. Most importantly, they both loved God and would express that love to others. I was able to observe and learn from how they served others as a source of worship and gratitude.

Acknowledgments

I would like to acknowledge my family, friends, colleagues, students, Liberty Communication faculty, and dissertation committee members. It's been a long journey but thanks to their support and prayers I was able to reach the finish line. Of course, I have to give a special thanks to my dissertation chair Dr. Wes Hartley. I am not sure I would have succeeded in this venture without him. He gave consistent and meaningful advice, treated me like an equal, and got to know the way I think in order to really bring out the best in me. He helped planted the seeds of my research and pruned the wild twigs when they got unruly. I can unequivocally say that I enjoyed all of our meetings and I learned an exceptional amount about what it means to be a scholar (and just a good dude) from him. I also need to say thank you to the other members of my dissertation board, Dr. Robert Mott, Marie Mallory, and Dr. Carol Hepburn. They too provided invaluable insight and suggestions towards my study that really helped shape the direction it was headed and the theories that I chose. I can genuinely say that my proposal defense and dissertation defense were enjoyable experiences where I was given more avenues to learn about my topic, focus my studies, and present my results.

TABLE OF CONTENTS

List of Figures

List of Abbreviations

LGS – Live Game Streaming

UGC – User Generate Content

MIND – Media, Interface, and Network Design

NES – Nintendo Entertainment System

PC – Personal Computer

KeSPA – Korean Esports Association

IRL – In Real Life

FPS – First Person Shooter

COD – Call of Duty (game)

MMO – Massively Multiplayer Online Game

CHAPTER ONE: INTRODUCTION

The topic of social media and how it impacts society has been at the forefront of the news in the past five years, with Facebook, Twitter, and YouTube being scrutinized for their content curation and censorship practices and most recently, the acquisition of Twitter by Elon Musk (Dumas, 2022; The Editorial Board, 2019; Barone, 2021; Prager, 2021). However, another similar avenue of communication leverages technology and the ability of humans to communicate with each other through the internet, which also impacts the psychology and social cues experienced by the users. That avenue is live streaming and video game streaming. Since live streaming combines the influence of traditional media with the communicative impact and emotional connection of social media (Tammy-Lin et al., 2019), it is ripe for research into how it socially impacts those engaging in its culture.

As this research focuses on the lived experiences of active members in the live-streaming community, a qualitative content analysis case study with an emergent design was chosen as the format that best suits exploring the culture developed through this particular communication environment (Polkinghorne, 1995). The decision to use an emergent content analysis process as the foundation keeps a proper focus on the topic of the case study while allowing the subjects to act freely and the researcher to expound and delve deeper into the topic than the initial observations may allow (Creswell & Poth, 2016). The combination of case study design and emergent content analysis allowed for flexibility in topics and assessment, which was vital for a current and evolving topic like live game streaming (LGS). This process evoked an honest and clear analysis of how the theories of identity management, social presence, and parasocial interaction relationships manifested through the streamers, their communities, and the cultures that developed around those communities (Pailthorpe, 2017; Elo & Kyngäs, 2008; Flyvbjerg, 2011). Finally, a thematic approach was applied to the content analysis so that the events

involving these individuals and how they experience the culture of the LGS environment through a communication environment can be placed within a theoretical framework for accurate data analysis and descriptive presentation (Anderson, 2007, Vaismoradi et al., 2013).

COVID-19 caused an uptick in online content consumption and creation during its height when people were staying home more (Muralidharan, 2021; Forrester, 2021). This same uptick was also applied to the world of live streaming (Clement, 2021). Many people under the age of 49 use live streams as a primary source of entertainment (Daily time…, 2020). Live streaming presents an environment where viewers have direct communicative access to the content creators while the content is being actively created and presented. This process can be seen on any recorded live stream from Twitch. For instance, Plyrocknation's stream on the 16th of August, 2022 (Plyrocknation, 2022). This kind of communication exists on all the live streaming platforms. However, some of the platforms do not record the chat that is created live, and for that experience, the viewer must watch the channel when the stream is live and in real-time. This communication avenue results from the viewers being able to type their comments into a chat box and those comments are then posted in a chat stream on the screen, which both the other viewers and the content creator can read in real-time. Research, which will be covered in later chapters, shows that social media impacts the emotions of both the viewer and the content creator (Kurtin et al, 2018; Yuksal & Larbreque, 2016; Chen, 2016; Chung & Cho, 2017; Redd, 2012; Tolbert & Drogos, 2019). This process could cause a cyclical social environment or culture where the creators and their "communities" impact and change one another.

Overview

Within the broader entertainment and social media category of live streaming, there is a major subsect focused on video gaming which can be seen on websites such as Twitch,

YouTube, and Facebook Gaming. To give a fundamental construct of what live video game streaming (LGS) is, it is a content creator (streamer) playing a game (usually a video game) and streaming the gameplay live to an online audience in real-time. A webcam is most often used to show the streamer's face and emotional reactions to both the game and the text chat from the viewers. The viewers can type in a chat box and directly communicate with the streamer while they are performing on live streaming video while also playing video games (Wang, 2019). To summarize, this LGS experience is the equivalent of an audience watching a traditional TV show but being able to communicate with the actors while they are performing and then having the performers communicate back in real-time.

Live streaming has been growing in popularity for years to the point that it is now competing with traditional media (Wise, 2022; Yanev, 2020; Restream Team, 2022). Even with the past COVID-19 measures keeping more people inside of their homes than before the pandemic (Mervosh, Lu, & Swales, 2020; Household Pulse Survey, 2022; Parker, Horowitz, & Minkin, 2022), traditional television viewership by 18 to 34-year-olds was already dropping by15.3% and 8.7% among 35-year-olds to 49-year-olds from Q1 2019 to Q1 2020 (61 Streaming Stats…, 2020). Then, after COVID-19 was registered as a pandemic in 2020 through early 2022, the losses in viewership continued (Gursky, 2022).

In comparison, Twitch, the current largest game live streaming service, "grew 56% in hours watched from Q1 to Q2 of 2020, passing five billion hours watched" (61 Streaming Stats…, 2020), and in the first half of 2022, 71-million hours of content is viewed every day with 140 million monthly active users (Wise 2022). Part of this can be explained by the fulfillment of social integrative needs, which live streaming provides but traditional TV does not (Leith & Gheen, 2022). These facts suggest that online live streaming and online content are growing

compared to traditional entertainment content. This growth could be related to increasing online

social engagement compared to in-person social engagement (Kemp, 2022). Video game live

streaming has seen a similar increase over the last three years, with 3.7 billion hours streamed in

2019 and 8.8 billion hours streamed in Q1 of 2021 (Brooks, 2022). That is over a double increase

in hours watched in just three years. To further drive this point home, online content, mobile

content, and social media all have higher daily usage percentages than linear TV viewership in

2014-2018 (Bayindir & Paisley, 2019)

Background

Currently, the three largest game live streaming platforms in just the first quarter of 2021

alone are Twitch with 8.8 billion hours watched, YouTube Gaming is next with 1.4 billion hours

watched, and Facebook Gaming with 1.1 billion hours watched, all during the same period (Q1

2021 Live Game Streaming Trends, 2021). The hours streamed vary slightly from the hours

watched but Twitch still dominates the other two platforms which switch second and third place

(May, 2022). YouTube is commonly known as a video hosting platform. For instance, if a

person were to discuss a YouTube video, what would most people imagine that video to be? For

the vast majority of people that is a recorded video. So, these substantial streaming numbers are

strictly for the YouTube Gaming portion of their platform and are a separate statistic from their

traditional viewership numbers. YouTube has two billion monthly logged-in users; 74% of U.S.

adults use YouTube, making it the largest online platform in the U.S. (Shearer & Mitchell,

2021). This number suggests significant room for live streaming growth from the video hosting

platform. There are significantly more users on the overall website than are watching live

streams. If YouTube has two billion users, then the number of 1.4 billion hours watched on the

streaming side of their platform would be a small portion of those users' time during a fiscal

quarter. This data suggests a significant social impact coming from "new media," specifically

live streaming. The potential for growth in the live-streaming side of these companies is

exceptionally high, as suggested by the previous article focused on viewer numbers per platform.

That same article showed an 80% growth year over year from 2019-2021. More growth means

more people watching their live gaming streams and more of a socio-psychological impact on

society created by live game streaming every year.

Looking at the average viewer's age also gives a strong impression of how this medium is

currently impacting and will be impacting the future of society. The percentage of Twitch users

watching content is as follows: 16-24 years old 41%, 25-34 years old 32%, 35-44 years old 17%,

44-54 years old 7%, 55+ years old 3% (Clement, 2021). Teens, young adults, and even early

middle-aged adults make up the largest portion of viewers of streaming content, and this

portends a future built on online entertainment in this format. Twitch has a rather large user

base, and it is still just one of a few options for this form of entertainment. For instance, in 2020,

Twitch had 140 million monthly unique viewers, 15 million daily unique viewers, and 3 million

monthly creators (streamers) (Twitch stats facts and news [TSFN], 2020).

The financial impact of these platforms is another factor that can't be overlooked in their

rise to cultural relevance and possible dominance. Twitch generated $1.54 billion in revenue,

which outgained YouTube at $1.46 billion (2020 Year in review, 2021). The surprising factor

here is that this revenue included both YouTube's video and streaming services, meaning that

YouTube has a much larger user base than Twitch, yet Twitch out-earned it. This earnings

disparity, despite inverse user base numbers, would suggest that the type of content created in

gaming streams evokes a greater financial engagement from the audience. If the overall user

base is smaller, but the streaming viewers are larger, and the revenue is higher for the service

that streams more (Twitch), then this would suggest that the users of a strictly live streaming

service like Twitch spend more than the users of a video hosting service which also offers live streaming like YouTube. This simply means that live streaming is a significant economic factor as well as a social factor.

This growth in audience for live streaming, combined with its immediate communication channel, has caused video game streaming to be a focus in social debates like gender influence in entertainment. With female streamers growing in number in a streaming landscape that was once considered male-dominated, issues connected to gender differences have arisen (Zhang & Hjorth, 2019). The debate as to whether women have to fight more stigma because of bias (Cullen, 2019) or if they have to do less to gain popularity because they can use their physical appearance to attract viewers rather than gameplay or personality (Ruberg, Cullen, & Brewster, 2019). The topic is also pushing forward the debate on cyberbullying, cultural cue absorption among teenagers, social motivations, and online sexual predatory activities (Cabeza-Ramírez et al., 2021; Li, et al., 2020). What was once entirely a male-dominated entertainment avenue has since been populated with a growing female presence (Kharif, 2021; Zulkiflee, 2022), and with that growth comes the above-mentioned cultural issues.

The online nature and communicative connectedness of streaming content enhance growth and can lead to a more viral growth pattern. Streaming content viewers are 39% more likely to share the content they are watching compared to traditional entertainment, and they watch live videos 10-20 minutes longer per session than traditional and even on-demand content (Cabeza-Ramerez, et al., 2021; Live streaming statistics, n.d.). Combine that stat with the fact that gaming video content (GVC) reached 1.2 billion users in 2020 ("Games and interactive media earnings," 2021). Basically, streaming is growing ever larger and is taking a larger portion of the entertainment market share. As such, it is also having a more significant impact

on society. With more and more people choosing LGS for their entertainment and social

engagements, it could be impacting society in a similar way that books, movies, plays, songs,

and other forms of communicative art and entertainment have impacted cultures in the past when

they were the most popular entertainment based communicative avenues.

Introduction to the Problem

Live game streaming is still a relatively newer entertainment and communication avenue

compared to traditional media like TV, movies, books, and recorded music. As such, research

into exactly how this new medium impacts the users, both viewers and producers, is rarer than

with other entertainment and communication mediums. There is also a unique culture that has

developed in these socially communicative environments which needs further exploration.

Concepts like how social presence theory applies to the subject, how the communication

immediacy of the medium impacts parasocial relationships from the viewers, and how these first

two theories impact the identity management of the content creators and their communities, are

areas rife for exploration. Though similarities are found in social media platforms, video hosting

sites like YouTube (traditional online video hosting), and even traditional media, the exact

application of these theories to live streaming, most specifically a video game live streaming

environment, requires further study.

As mentioned before, the three main theories applied in this paper are parasocial

relationships, social presence, and identity management. These theories have been applied to

traditional media as well as social media, and even video hosting websites; however, the

approach usually focuses on the viewer or receiver of the content (Sokolova & Kefi, 2020;

Savage & Spence, 2014; Stever & Lawson, 2013; Erin et al., 2021; Thurlow, 2018; Liu, 2015;

Hollenbaugh & Ferris, 2014). To fully understand the problem being broached by this study, the

three theories at play should be more intricately understood and then possibly applied when appropriate to the content of live game streaming. Parasocial theory can provide insight into the connected feelings and motivations that drive user behavior, while identity management can help provide clarity as to how the participants perceive each other in order to develop parasocial bonds as well as very real and normal social bonds. Then social presence theory can be used to explain the feeling of community and some of the reasons for the depth of the parasocial bonds. The combination and weaving of these theories in conjunction with each other is performed to provide a more enriched understanding of the unique social culture that has developed in the communication environment present within the live game streaming space.

Parasocial Relationships Theory

Parasocial relationships theory will apply most heavily to the viewers of the streams, as the immediacy of real-time communication could create a stronger perceived bond between the viewer towards the content creator. This perceived bond could impact the sense of social presence, and that sense of presence could be a large part of what makes the culture of LGS so unique compared to other entertainment mediums. Jayson Dibble (2016) describes parasocial relationships as "parasocial interaction referred to a media user's reaction to a media performer such that the media user perceives the performer as an intimate conversational partner" (p. 21). Dibble also warns against conflating parasocial relationships with parasocial interactions, but that is what will be done in this paper. For the purpose of this study, a precise differentiation is not needed. By combining the ideas under a more extensive "parasocial" concept which will be called parasocial interaction relationships, the conversation can remove unneeded clutter from the discussion, as both concepts apply to what is experienced within the live streaming format.

Within this paper, when parasocial interactions are described, it will simply refer to a relationship where the viewer has an inflated idea of the closeness of the relationship compared to how the streamer perceives it or how it exists in reality. Within this study a simplified description of the theory will be used as follows: it is when someone (a viewer) develops a one-sided emotional connection with a persona (the streamer) that exists in a public arena. A way to think of this theory could be to see it within the bounds of traditional entertainment media. It is as if a fan of Tom Cruise sees him on the street, walks up to him, and is like, "Hey Tom! How's the love life?" The fan has seen so much of the public personality that they believe they know the famous person more intimately than they do. To Tom Cruise, this fan is a total stranger with whom he is probably not very open to sharing love life details. There is a disconnect in their perceived levels of relationship closeness.

Regarding how this theory might apply to more communicative social media and online entertainment avenues, YouTube could be an excellent example to bridge the difference between traditional media and live-streaming communication channels. Since YouTube videos provide a comment section for people to enter their thoughts while watching a video for the creator to read later, it can serve as a solid bridge between traditional media and live streaming (Kurtin, 2018). The communications for YouTube videos aren't as immediate as live streaming but are more direct and immediate than traditional media. Add to this concept that often, YouTube video creators will post videos reacting to and responding to the comments (Report of the Week, 2018), this communication portal could provide an added level of intimacy to the relationship compared to traditional entertainment. With parasocial relationships burgeoning within the delayed communication pathway present in video comments (Wattenhofer et al., 2012; Sokolova & Kefi, 2020), it does not take much of a leap to understand how a communication pathway that occurs directly and in real-time can heighten this psychological effect even more in live

streaming environments. There will be more examples of communities exhibiting substantial parasocial activities in later chapters.

Identity Management Theory

Identity management theory will be used in instances where the streamer or the audience is presenting a version of themselves to the community which could be different than the real person behind the screen name. This theory can add context to how parasocial relationships and social presence theory interact with each other to produce the previously mentioned unique culture. Identity Management Theory, or IMT, was developed in the 1990s (Communication Theory, 2014). It proposes that individuals perceive their identities differently at different points across time and space (Imahori & Cupach, 2005). William R. Cupach and Tadasu Todd Imahori are credited with developing the theory, while the inspiration for their theory came from Erving Goffman (1967) via his writings in *Interaction Ritual: Essays on Face-to-Face Behavior.* "Depending on how the individual changes and perceives himself according to the social context. Cupach and Imahori say that the ability to communicate requires the individual to 'successfully negotiate the mutually acceptable identities in interaction" (Communication Theory, 2014, para. 2).

The negotiation between different personalities is a concept that most people already understand simply by living in a society, but they just don't know that this concept is a titled communication theory. Summarized to a common understanding, the theory posits: people adjust their personalities based on how they want others to perceive themselves, and according to the environment they find themselves. Studies of identity management often find a home in the business world. For instance, people in an international multicultural corporation pursue their individual and social identities as a function of their beliefs about the nature of the underlying intergroup relations related to status, legitimacy, and temporality (Raskovic & Takacs-Haynes,

2020). Entrepreneurs often have to navigate two personas, one focused on social impact and one

focused on economic success (Cesinger, Vallaster, & Muller, 2022). This is a concept that many

in the workforce understand; it is the difference between presenting a personality that makes

people like you, and a persona that makes a profit. In other words, switching between social and

work mode.

This study suggests that identity management relates to LGS culture exceptionally well as

a sense-making tool. As has already been discussed, there is direct communication between the

audience and the content creator through streaming. The data of recorded streams found in

chapter four will possibly give examples of whether this communication environment causes the

streamers and their communities to navigate how much of their genuine personality they present

on-air, and how much of a false online personality they present. For instance, there are streamers

such as YouTuber Dr. Disrespect (Dr. Disrespect, 2022) who present entirely made-up characters

they act out as if they were traditional actors. There are also audience members who will make

screen names to use in the chat which have no bearing towards any real-life connections.

Whereas some streamers present almost entirely their normal selves, simply live streaming as

they play games or talk to others online (TimTheTatman, 2022). Since streamers are also

entrepreneurs building their individual brands (Gjestang, 2020; Koch, et al., 2020), there is

additionally an off-air business persona that must be navigated and presented in business

environments while making deals with major companies for sponsorship and advertising

(Murray, 2021; Brown, 2022; Fingas, 2021).

There have already been studies examining how well online communications, especially

social media sites, simulate in-person communication and how the medium impacts identity

management. To give an example, Michael Santucci (2021) discusses the topic in terms of

"collocation, synchronicity and the ability to convey and interpret facial expressions, body

language, and speech, to variations in the cognitive effort, communication ambiguity, and

physiological arousal" (p. 355). To summarize, the closer a medium gets to replicating

communication cues found in face-to-face engagements, the more the identity management of

participants replicates face-to-face encounters. For instance, a Zoom call will create a more

authentic reaction from participants rather than an Instagram post. People are more likely to

exaggerate their personas the more distanced from in-personal communication the platform and

medium become. Since streaming creates a one-way visual connection with a near-instant two-

way linguistic communication through audio and text, a strange communication environment

exists that allows the streamer to decide how authentic the relationships are. This is where the

para-social interaction relationships and social presence theory connect with identity

management theory to help explain the culture developed within the LGS communication

environment. This communication will be discussed further in the literature review and live

video recording analysis.

Social Presence Theory

The final theory used for context and understanding during this research is social

presence theory. This theory will be used to gauge how these types of environments simulate in-

person connectivity and how that impacts cultural cues and social engagements within the LGS

culture. Social presence theory has a range of uses and definitions. Lowenthal (2010) argued that

there is a continuum along which social presence is applied. On one end it can be defined as

people's perceptions of a person's being real or being actively present. This definition of the

theory focuses on how people project themselves into an environment and whether others can

perceive them. However, on the opposite end of the continuum, the focus shifts to whether there

is positive interpersonal and emotional connection between communicators (Lowenthal, 2010).

Social presence theory began to adapt to the needs of this research in 1976, as that is when this

theory moved into the realm of telecommunications and focused on how the medium itself can impact the sense of immediacy affected by elements such as physical distance, eye contact, smiling, and personal topics (Short et al, 1976).

Later in the mid to late 1990s Charlotte N. Gunawardena & Frank J. Zittle took the theory further and introduced online interaction, specifically online education, to the mix (Cui, Lockee, & Meng, 2013). Gunawardena (1995) presented the idea that although online and video courses were presumed to be low in social context cues, they could still be experienced as interactive, active, interesting, and stimulating by students. She posited that the medium wasn't solely responsible for the sense of presence, but that moderators were essential to there being a sense of community being felt by the students. Gunawardena and Zittle (1997) further argued that social presence can be cultured among teleconference participants and is a factor of both the medium and people's perceptions in their subsequent interactions. They concluded that the people involved had a large impact on whether social community was experienced rather than just the medium of communication alone. Biocca et al. (2003) later added to the idea that social presence exists along a continuum. They argued that a simple here-or-not-here definition was unable to explain the mediated social communication phenomenon. A basic definition and understanding of social presence theory could be stated that: there seems to be a mixture of the medium's impact and the perceptions of people who are interacting with that medium, especially with the presence of a moderator of chat and an engaging content creator, which combine to comprise a sense of actual social presence.

The concept of social presence in live game streaming offers an extremely valuable perspective to this research. It seems that the various communication technologies employed in LGS events could foster an increased sense of social presence for all participants. For example, a

typical live game streaming event would include one camera focused on the streamer (most often) and another portion of the screen that shows their actions in-game, while there is also a live chat in which the community can interact with each other and the streamer. This live chat is streamed and updated in real-time and can be seen beneath or beside the video portion of the stream on the screen. There are a few other methods of interaction that could also impact the sense of immediacy, like sound clips and visual stickers that the audience can send to the streamer.

So, further study into how the three primary theories of parasocial theory, identity management, and social presence balance with each other to create an unique communication environment and a unique social culture seems to be a justified path forward. It is hoped that this balance will be found through the study of the content creators, their moderators, the audience, and the medium's technological composition to develop an impact on how present the participants feel in that online space, how their identity management impacts the sense of presence, as well as how that possible sense of presence impacts the parasocial interaction relationships developed between all the parties involved.

Problem Statement

Scholars don't yet know precisely how the emergent communication of live game streaming impacts the culture of the community of users that has developed around it. They also don't know exactly how the theories of identity management, social presence, parasocial interaction relationships relate to each other within this environment to explain these cultural developments.

Purpose Statement

The purpose of this study is to investigate the communicative environment of LGS in order to gain a deeper understanding of the observable relational interactions between the content creators and their audiences. There could be possible context provided to these interactions by parasocial relationships theory, social presence theory, and identity management theory. This study attempts to provide some insight into the emotional, social, and cultural effects created through a burgeoning entertainment avenue that provides real-time communication between the audience and the content creators. The three theories of parasocial relationships, social presence, and identity management help tie together the data to show a communication environment where the streamers present an on-air personality in order to entertain and please viewers so that they will continue to watch the content, socially interact with both the content creator and fellow community members, and financially support the streamer. This study will use these theories to help make sense of the data showing how the communicative environment, which exists within the live streaming community, impacts the social culture found specifically in LGS communities.

Significance of Study

This research will help bring an understanding of how the uniqueness of the communication environment creates an equally unique culture within LGS communities. It brings some new clarity to the topic of the impact of communication environments on this unique culture found specifically within LGS, as it applies to both the content creators and their communities. This research leads to a significant amount of future study opportunities on the subject and a deeper understanding of a newer entertainment platform. This study helps to fill a significant gap in the literature about the impact of communication practices and environments on the culture found in LGS communities.

Research Questions

Central research question (RQ): What cultural and communication themes emerge from the observation of live game streams?

RQ1: What observed interactions indicate parasocial relationships between the live game streamer and the audience?

 RQ2: What role does social presence seem to play in the live game stream communicative environment?

RQ3: What observed interactions indicate how streamers and their audience navigate identity management within the live game streaming environment?

Definitions

Esports - Video games that are played in a highly organized competitive environment (Leroux-Parra, 2020).

Live Stream - "to broadcast (an event) over the Internet for live viewing" (Merriam-Webster 1, n.d.).

Live chat (or just "chat") - Viewers are typically writing short messages while responding to in-stream events, often with incorrect grammar and many repeated tokens (Ringer, Nicolaou, & Walker, 2020).

Social integrative needs - the human need to socialize with friends or family (Leith & Gheen, 2020).

Streamer - "One that streams digital data" (Merriam-Webster 2, n.d.). In the case of this study, it will primarily refer to individuals who live stream rather than organizations or individuals who stream recorded content as a service like Netflix or Spotify.

Twitch.Tv - The largest and most influential live game streaming platform in the U.S. and

Europe (Wise, 2022)

Video Game Live Stream - The same definition as Live Stream only with the "event" being the

playing of a video game.

Summary

Video game live streaming is a major entertainment avenue that is growing at a rapid pace. Thus,

its social and psychological influence is also increasing and that influence is most impactfully

experienced within the culture that has developed specifically because of the communication

environment. The effects of communication on the LGS culture, and then the effects of the LGS

culture on the participants are more adequately understood through the prism of parasocial

relationship theory, social presence theory, and identity management theory. These theories help

to describe why this form of entertainment is so unique. There seems to be a connection between

the communication immediacy present in the medium and the social cues and culture that have

developed around these online communities.

This study views the communication process through the lens of the sociocultural

tradition using the aforementioned communication theories as sense-making tools. This

combination of theories allows the social and cultural influences affecting both the audience and

content creators to be assessed with some accuracy. What this study presumes to evaluate is how

certain aspects of a communication culture, which exists within the live streaming environment,

could impact users of LGS websites so that they might alter their personalities, engage in the

online community, strive for a sense of presence within that online community and develop

emotional connections to that community, both real and imagined. These users were assessed as

to whether they took these actions in order to garner a social response they deemed personally

favorable and satisfying. This adjustment of identities can sometimes combine with the

communication environment to have a significant impact on the perceived presence of

participants within the LGS community and culture. That perceived variance in presence could

then impact people's motivation to adapt their identities to achieve a desired level of parasocial

intimacy. Finally, this study fills in a gap in the literature that focuses on the impact of

communication environmental factors on the LGS culture.

CHAPTER 2: LITERATURE REVIEW

Overview

This section will again briefly review the overall topic and its relevance to communications before moving on to the meat of the literature review. Social media is understood to have a genuine impact on society, and that is why the major platforms have been scrutinized for their censorship practices and their honesty (Dumas, 2022; The Editorial Board, 2019; Barone, 2021; Prager, 2021). There is a similar communication platform, that combines the one-way production-to-user influence of traditional media with the back-and-forth communicative impact and emotional connection of social media (Tammy-Lin et al., 2019), which must also be studied to understand its impact on users. This platform is live streaming, and more specifically, to this study, live game streaming. There is a reason to believe that live game streaming will significantly impact society similarly to traditional media and social media because of the rate of growth and engagement it is receiving. For instance, many people under the age of 49 use live streams as a primary source of entertainment (Daily time, 2020).

Popularity and Growth

The popularity and growth of this communication and entertainment medium are nothing new. Live stream viewership has been growing for years, to the point where it is currently competing with traditional media platforms for viewership (Wise, 2022; Yanev, 2020; Restream Team, 2022). As was stated in the first chapter, even with the past COVID-19 measures keeping more people inside of their homes than before the pandemic (Mervosh, Lu, & Swales, 2020; Household Pulse Survey, 2022; Parker, Horowitz, & Minkin, 2022), traditional television viewership by 18 to 34-year-olds was already dropping by15.3% and 8.7% among 35-year-olds to 49-year-olds from Q1 2019 to Q1 2020 (61 Streaming Stats…, 2020). Then, after COVID-19 was registered as a pandemic in 2020 through early 2022, the losses in viewership continued

(Gursky, 2022). This drop in audience isn't peculiar to television alone. Megan Brenan even titled her 2022 article for Gallup "Movie Theatre Attendance Far Below Historical Norms." In her article, Brenan shows that the mean movie theatre attendance in 2007 was 4.8 per adult, compared to only 1.4 per adult in 2021.

Live streaming, on the other hand, has seen tremendous growth recently. For example, Twitch, the current largest game live streaming service for Western audiences, "grew 56% in hours watched from Q1 to Q2 of 2020, passing five billion hours watched" (61 Streaming Stats…, 2020), and in the first half of 2022, 71-million hours of content is viewed every day with 140 million monthly active users (Wise, 2022). Video game live streaming, a significant subset of the overall live streaming category, has seen a similar increase over the last three years, with 3.7 billion hours streamed in 2019 and 8.8. billion hours streamed in Q1 of 2022 (Brooks, 2022). At the time of this writing, the three largest live game streaming platforms in just the first quarter of 2021 alone are Twitch with 8.8 billion hours watched, YouTube is next with 1.4 billion hours watched during the same period, and Facebook Gaming with 1.1 billion hours watched, also during the same period (Q1 2021 Live Game Streaming Trends, 2021).

Financial Impact

The impact that live game streaming has on society isn't only compiled of viewership and camaraderie but also in fiscal impact. Twitch generated $1.54 billion in revenue, while YouTube Gaming generated $1.46 billion (2020 Year in review, 2021). Facebook Gaming is difficult to parse out what revenue is from live game streaming and what is from mobile game spending because both are housed under the Facebook Gaming brand, so available financial data includes both streaming and video game revenue combined (Geyser, 2021). However, "primarily driven by the surging popularity of e-sports and video games, the total global Live Streaming Market is

estimated to reach USD 4290 Million by 2028" (Vantage Marketing, 2022, para. 1). So, within the larger context Facebook Gaming, YouTube Gaming, and Twitch (with a few much smaller streaming platforms that barely register on the charts as of September 2022) are making a large impact on the entertainment fiscal market share.

Cultural Impact

Furthermore, streaming has been able to highlight cultural and social issues. Topics like gender influence in entertainment, the sexualization of entertainers, and gender-based career success are being approached in the LGS environment. LGS was once a very heavily male-dominated social space, but recently there has been a growth of female streamers (Kharif, 2021; Zulkiflee, 2022), and this growth has led to multiple discussions, both positive and negative (Zhang & Hjorth, 2019). For instance, within the LGS industry, it is questioned whether women have to fight more stigma because of patriarchal bias (Cullen, 2019) or whether they actually have to do less work and give less effort to gain popularity (and thus money) because they can use their physical appearance to attract viewers rather than gameplay or personality (Ruberg, Cullen, & Brewster, 2019).

Other topics being approached within the streaming space are cyberbullying, cultural cue absorption among teenagers, social motivations, and online sexual predatory activities (Cabeza-Ramírez et al., 2021; Li, et al., 2020). While these topics will not be the focus of this study, they do serve to show that the LGS environment has a significant social impact and is worthy of study through a communication lens. To conclude, the sources provided so far seemingly present the concept that traditional media is shrinking in audience size and thus in social impact, while live streaming has been growing in those same arenas. If this is the case, further scholarship into live streaming and live video game streaming would be warranted.

Situation to Communication Tradition

To be able to express how live game streaming fits within the communication tradition, Robert Craig's (1999) seven traditions of communication theory will be used foundationally, with the socio-cultural tradition being the primary chosen aspect of focus. Using Craig's seven traditions is needed to add precision because the word "communicate" is such a common verb that a definition of " communication " can be hard to pin down in a larger sense. There are various definitions for communication available from academic, industry, and popular sources (Luhmann, 1992; Lamport, 1986; Rosengren, 2000; Bavelas et al., 1990), so a full understanding as to what exactly is being studied can be confusing without clarification. This is where communication theory and Craig come in.

The core question being answered by communication theory is, "How have scholars from various traditions and perspectives described and explained this universal experience we call communication" (Littlejohn & Foss, 2010, p. 3)? One solution proposed by Silvio Waisbord (2019) proposes a taxonomy of six conceptualizations of communication to serve as a road map connection dialogue, expression, information, persuasion, and symbolic interaction. Waisbords's solution was to create categorization. However, that solution creates a new conundrum that must be solved before researchers can further delve into Craig. The conundrum is realizing that the definition of communication may vary depending on the context in which the term is used. However, this variation, through providing multiple ways to define communication, allows for the flexibility of understanding needed on a global scale. Depending on the goal of the study, the scholars' intent and internal biases, the culture in which the communication occurs, and many other similar factors, the definition of communication will vary as it must (Dance, 1970; Schement, 2017; Vercic et al., 2012; Podgorecki, 2004). Thus, we can adjust communication to fit the topic of this study and to tie into Craig's traditions.

Craig's seven traditions of communication are an excellent set of definitions from which to pull a guiding principle for this study. Since there can be any number of definitions according to Waisbord. 2019), the seven traditions provide the foundational direction for this study to build upon. Craig's seven traditions are semiotic, phenomenological, cybernetic, socio-psychological, socio-cultural, critical, and rhetorical (Craig, 1999). "Thus, each of these traditions captures a different aspect or specialized area of communication, and knowing each one gives new and sometimes conflicting viewpoints on why we relate and comprehend the information we absorb on a daily basis" (Apuke, 2017, p.34). That final phrase is an important one, communication, as will be defined for this study, is the process through which we relate and comprehend the information we absorb daily.

Sociocultural Tradition

The sociocultural tradition provides the best lens to clearly view the topic of communication's impact on the social and cultural environment occurring within live game streaming. Sociocultural tradition explores the way culture is produced and reproduced through communication. "Sociocultural theories see reality not as an objective set of external arrangements but as socially constructed through interaction in groups and communities" (Littlejohn et al., 2021, p.36). Societies communicate information about the world they live in, and this information then guides people's development of reality. This sociocultural communication process can even extend to people's identities and their sense of self. "The most fundamental concept of sociocultural theory is that the human mind is mediated" (Lantolf, 2000, p. 1). Lantolf also explains that sociocultural tradition uses the concept of artifacts to express how humans interact with the world around them. Artifacts are concepts such as numbers, math, music, art, language, etc. These artifacts help the mind mediate, and they evolve and change as they are passed from generation to generation. As far as communication is concerned, a

significant component of sociocultural tradition is that thinking and speaking are not the same thing, yet they are not entirely separate activities (Lantolf, 2000).

Early Sociocultural Theories. It is accepted that sociocultural theory finds its roots in the writings of Russian psychologist Lev S. Vygotsky (1984) in 1931-34. While much of the framework for sociocultural theory was put forth by Lev Vygotsky, extensions, elaborations, and refinements of sociocultural theory can be found in the writings of other scholars. There are writings regarding activity theory by Leontiev (1981) as well as Chaiklin (1993) and Lave (1993). While cultural-historical activity theory was put forth by Engestrom & Cole in 1994 and then Cole again with Wertsch in 1996. "In the case of a child and caregiver, Vygotsky was not only interested in what more knowledgeable others brought to the interaction, but also in what the child himself or herself brought to the interaction, as well as how the broader cultural and historical setting shaped the interaction" (Scott & Palinscar, 2013, p1).

Sociocultural Identity and Language Theories. Stella Ting-Toomey's (1991; 2018) identity negotiation theory is an example of a theory within the sociocultural tradition that could also connect with the identity management theory chosen for this study. Identity negation is focused on studying "how individuals manage the tension between personal and cultural selves" (Littlejohn et al., 2021, p. 36). Basically, the idea of identity negotiation is that people form their sense of identity from how they internally compare themselves to the society and culture they are a part of. Instead of a sense of self being totally separated from society and culture and then manifested within a society, identity negation believes that society and culture are intrinsic to the process of identity construction. This concept could adequately be applied to the communities that form within and around the LGS environment. Another theory found within the sociocultural tradition is the theory of language and uses set forth by J.L. Austin (1975). Austin presents a focus on language as action. Austin's theory "can gather from its pages on the locutionary, the

illocutionary and the perlocutionary act how these acts are identified and distinguished from one another, and whether and why they are taken to be actions" (Garvey, 2014, p. 13).

Sociocultural Conclusion. Sociocultural tradition provides a solid foundation for study into the LGS environment as it places more emphasis on how the whole culture impacts the individual rather than just on the internal psychology of the individuals involved and how the communication environment, instead of the culture, influences those psychological tendencies. These sociocultural factors found within the communication environment of LGS are the focus of this study and thus why the sociocultural tradition was chosen as the primary tradition. For instance, a single viewer could develop a para-social relationship with the streamer because of the impact of the culture surrounding that streamer's channel and the feeling they get from being a part of that community. A streamer could be making content and communication choices on how they use the medium so as to encourage a specific culture within their audience community. The social and cultural factors innate in the sociocultural tradition simply fit the theories at play and the concepts being researched in this particular study better. However, the sociopsychological tradition will be kept in mind throughout the study, especially in the future research section in hopes that more refined research can be conducted later.

Sociopsychological Tradition

Even though sociocultural was chosen as the primary tradition for this study, that does not mean there are not some other traditions that make interesting pairings with this topic. One such tradition is sociopsychological. More strictly defined in the socio-psychological tradition, "communication is theorized as expression, interaction, and influence. Cause-and-effect relationships can be discovered through careful, systematic observation" (Maguire, 2006, p.89). A similar definition provides more insight into exactly how this tradition will fit the topic of this

paper. "Its researchers who believe that detailed and systematic observation makes it possible to discover the truth of communicative phenomena" (Apuke, 2017, p.21). That is precisely the aim of this research, to discover the truth of communicative phenomena affecting live streamers and live stream viewers.

Sociopsychological as a communication tradition deals with expression, interaction, and influence (Craig, 1999). Craig states that the problems approached in this tradition are "situations requiring manipulation of causes of behavior to achieve specified outcomes" (p. 133). Craig further explains that it is a tradition that uses phrases like behavior, variable, effect, personality, emotion, perception, cognition, attitude, and interaction to describe and assess those problems. Craig also says the sociopsychological tradition is applicable when topics such as communication reflect people's personalities, when their beliefs and feelings could create bias judgments, or when people in groups have an effect on one another. So basically, the socio-psychological tradition is best used in situations where personalities influence communication, biases will impact judgment, and people within a group will influence each other. As the name suggests, it is when the "socio" impacts the psychological and vice versa. This description depicts the LGS communication environment quite accurately as the personas of the streamers impact the audience in psychological ways through communication, but also the audience and their interaction with the streamer impact the streamer's psychological condition as well.

There has been a fairly broad variance in how the socio-psychological tradition has been applied to research in the communication field. For instance, a study looked at how communicating corporation values, and employee appreciation impacted corporate loyalty among employees within the Ukraine and how socio-psychological factors impacted their decisions (Trofimov, et al., 2019). There is another study that focuses on the role of

communications and sociopsychological factors in the coordination efforts of maintenance crews (Foushee, 1982). Another study by Angie Williams and Howard Giles (2008) looked into how sociopsychological factors impacted perceptions of communications based on the age of the speaker and how the voice of the speaker sounded. Chandramouli (2011) conducted a study on how social media is being used to hack vulnerable users who are not prepared for such attacks and the sociopsychological impact the communication format of social media has on this process. Moving even closer towards the topic of this study is research into the sociopsychological factors present in electronic networking (Bosher, 1990). The study by Bosher shows the early stages of electronic networking as a communication platform which is the basis and the foundation of how live game streaming works as a communication platform as well. It provides somewhat of an origination point for the concept of sociopsychological impacts to affect users through online communication.

Much like this dissertation, there is more modern scholastic work being done on the topic of social media influence and sociopsychological tradition (Osei-Frimpong, et al., 2022). However, that study also includes uses and gratification theory to explain user behaviors within an online social communicative environment. Also, similar to this dissertation, there is a study that looks at how the sociopsychological tradition impacts entertainment in the form of reality TV viewing (Hammes, 2016). The point is that there are ample examples of communication research using the socio-psychological tradition, especially those in the entertainment and social media spheres. Thus, using this tradition as a secondary and purely supplemental lens to help bolster the primary tradition of sociocultural examination of live game streaming (LGS) and the people who engage in it appears to be wholly justifiable.

Cybernetic Tradition

The cybernetic tradition includes complex and interconnecting systems like physical, biological, social, and behavioral processes. Within these systems, the various elements influence one another (Krippendorf, 2009). Cybernetics focuses on how a system, whether digital, mechanical, or biological, processes information, responds to it, and changes the system for better processing, including control and communication (Novikov, 2015). The systems consist of interacting components which, combined together, will form a result that involves more than the sum of the parts (Bahg, 1990). Any discussion of how digital communication impacts users would, by its nature, have to include some aspect of the cybernetic tradition.

Cybernetic Beginnings. The history of Cybernetics is interesting in that it was developed by a series of conferences sponsored by Josiah Macy Jr. Foundation after WWII, 1946-1953, with the chair of the conferences being Warren McCullough from MIT (Umpleby, 2008). Norvikov (2015) noted that Norbert Weiner was a major contributor to cybernetics since he coined the more simplified and modern interpretation of the term cybernetics as "The scientific study of control and communication in the animal and the machine" (p.2). The Soviet Russians, who at first saw cybernetics as a pseudoscience, adapted the studies presented in the West and added a heavier computing focus which would later be called computer science in the West (Glushkov, 1966). Cybernetics has since seen many evolutions and adaptations, to the point where there is now considered to be cybernetics 1.0 (first order) and cybernetics 2.0 (second order) (Froese, 2010). A simplified summation of this difference is cybernetics 1.0 ideas are basically a feedback loop for machine data, whereas cybernetics 2.0 can be understood as an external feedback loop for control information accessible to a human (Katsko & Kremyanskaya, 2020)

Social Cybernetics. Cybernetics has a strong representation in social media studies. For instance, Lovink (2012) looked at how cybernetics and algorithms influence information sharing on social media. The study concluded that people would become anti-social and lonely by drowning in "cages" of social media platforms. Basically, people would become lonely while constantly talking to others online, because online interaction is not the same as in-person interaction when it comes to human psychological needs. Another study using cybernetics delves into how programming systems within social media websites impact millennials' desire to share and engage in environmental causes for the sake of attention seeking with similarly dire conclusions (Luqman, 2021). Luke Stark (2016) wrote a cybernetic piece on how social media can read the anxiousness and other emotions on users' faces in digital photos. The point is that there is a significant and pretty obvious connection between the cybernetic tradition and online communication which can validate its inclusion as another supplementary lens through which to view the data.

Conclusion. This connection between cybernetics and online communication also applies to this study's topic as algorithms, notification systems, and other programming factors could impact user engagement in a live stream. It takes little imagination to see how alerting potential audience members through various communication channels could impact a live-streaming environment for both the audience and the streamer. This tradition will also be taken into consideration and kept available for tertiary use within this study. However, it was not chosen as the primary communication tradition because the intent of this study is to understand the human motivations and cultural impacts within LGS communication environments have on users (both audience and content creators) rather than what caused those users to enter the environment or how algorithms impact their psychology. This study looks more into how a communication

environment, an online society of humans, and the culture that develops within that society impact the choices of participants rather than computer programming languages.

Critical Tradition

The critical tradition comes from an ethnographic background that focuses on an advocacy approach (Maddison 2011). This approach has been developed to deal with modern society where groups are marginalized because of their race, class, or sexuality. It should be argued that the classification should go one step further and include political affiliation, culture, and moral standards as viable classifications for marginalization. "The critical ethnography is a type of ethnographic research in which the authors advocate for the emancipation of groups marginalized in society" (Thomas, 1993). A critical tradition researcher tends to be politically minded, and they use their research to speak out against domination over marginalized groups. In general, a critical researcher will study issues of power, empowerment, inequality, inequity, dominance, repression, hegemony, and victimization (Cresswell & Poth, 2018). A critical communications scholar will simply apply those principles to communication studies.

Critical tradition should be chosen if the researcher is trying to describe how a cultural group works and to explore the beliefs, language, behaviors, and issues facing the group, such as power, resistance, and dominance (Cresswell & Poth, 2018). The next step is to identify the culture group the researcher desires to study. Since culture groups can often be closed off to outsiders, contact with a gatekeeper will have to be established first. The next step is to decide on a theme for the study. Themes can be topical concepts like enculturation, socialization, learning, cognition, domination, inequality, or child and adult development (LeCompte et al., 1992). Once that step is decided, the researcher must collect the information within the context and setting where the group being studied works or lives (Wolcott, 2008). An example would be if a

researcher needed to study inner-city youth, they wouldn't gather information in the suburbs. This information must then be analyzed to generate a cultural interpretation of the group. Finally, these findings must be presented in a written or performance format (Cresswell & Poth, 2018).

As with any tradition, critical studies have challenges associated with their use. "The investigator needs to set aside, as much as possible, theoretical ideas or notions so that the analytic, substantive theory can emerge" (Cresswell & Poth, 2018, p. 87). This is a difficult challenge to overcome as many researchers come across their ideas because they are inspired by events that they have observed and have had their curiosity piqued. The first challenge of ethnography (which critical theory falls within) is that the researcher must hold an understanding of cultural anthropology before even starting (Cresswell & Poth, 2018). This could cause complications as it limits this type of researcher to studying their own cultural group, which often leads to biased results. But that isn't why critical tradition is being relegated to "future study" status.

Just like the previous traditions, critical theory doesn't fit the focus of this study comfortably. The focus on cultural cues, communication influence, and identity factors doesn't draw from the need for a larger systemic intent found in critical theory. Where critical theory could apply to the LGS topic is looking at whether or not streamers change the content of their streams to avoid retribution from the platforms they stream on. For instance, if it is well known that a streaming platform's upper management has particular political or social values, would streamers curate their own on-air conversations in order to escape possible punishment from the company? Is there a system of power in place amongst the biggest streaming service providers that unfairly influences communication patterns? A current real-world example would be how streamers Nick Mercs, Tim The Tatman, and Dr. Disrespect have adjusted their streaming

content because they have a disagreement with Activision over political and moral grounds (Del Rosario, 2023). If the critical tradition were to be applied, this would be a more fitting line of questioning than parasocial theory, social presence theory, and identity management theory found within this study.

To be fair, every one of Craig's seven traditions could be applied to the topic of live game streaming (LGS) as approached in this study. The above traditions were simply provided because they were seriously considered for this particular study, but the semiotic, phenomenological, and rhetorical traditions could also fit this study if the study were focused differently. However, the sociocultural tradition simply fits the topic of this study best with its emphasis on how communications affect the social and cultural experiences of the subjects.

Beyond the Traditions

The Four Dimensions

With communication defined, or rather there being a comfortable understanding of the variations of definition, perhaps a definition of theory within the context of this communication study is required. Theories usually consist of four dimensions. These four dimensions are: (1) philosophical assumptions, which are basic beliefs that underlie the theory; (2) concepts that amount to the building blocks of a theory; (3) explanations, also known as the reasons why things happen, and (4) the guiding principles that amount to the guidelines for actions suggested by the theory (Littlejohn & Foss, 2021). Philosophical assumptions are the starting point for any theory as it determines the direction the researcher will take with the study (Coats, 2021; Monette, 1979; Garrick, 1999). Philosophical assumptions are separated into three major types: Epistemology (questions of knowledge), ontology (questions of existence), and axiology (questions of value) (Littlejohn & Foss, 2021; Aliyu et al., 2015). Some people include

methodological as a fourth philosophical assumption, but that has more to do with the practice after the philosophical assumptions have been established (Killiam, 2013).

Cresswell and Poth (2018) explain that epistemology focuses on questioning what is knowledge. The epistemological process plays out as subjective evidence being obtained from participants as the researcher tries to become more knowledgeable of the subject. Creswell and Poth continue on to state that ontology examines reality and tries to figure out how people live in different realities. For instance, a topic about how people perceive reality differently based on the information they are given. If one person knows the whole story, while another only knows a part, it is very likely that those two people will view an event differently and perceive reality differently. Axiology deals with the inherent values present in a researcher.

The beauty of qualitative research is that it often admits these values and presents them at the forefront of the study. For instance, a study of inner-city youth's grades and how the schools affect them will probably come with plenty of inherent values already built into the study, and the researcher will already have those values influencing how they approach the research (Cresswell & Poth, 2018). In reality, all researchers have pre-existing values and beliefs, and those beliefs will affect how they perceive research results. In summation of the above literature about the four dimensions of communication theory, epistemology, ontology, and axiology delve into the question of whether scholarship should intentionally try to evoke change or if the researcher should try to be as bias free as possible. It's one thing to admit initial values while still trying to focus on presenting unbiased information, but it is another process entirely to intentionally gear research with the intent to match already established biases. This dissertation will attempt to engage with the former type of research rather than the latter.

Explanations

To finalize the foundation of how conclusions and explanations will be applied by this study, the realm of explanations will need to be established. There are two main types of explanations, causal and practical. In a 2005 book titled *Making Things Happen; A theory of causal explanation*, James Woodward explains the difference between the two terms, but instead of using the term "practical," he uses the term explanation as if practical is the default type for explanations, and causal as a second definition.

Woodward (2005) begins by explaining that all humans have a vested interest in causation and explanation. If a person wonders why corn grows well in one field but not another or why a friend has different emotional states from day to day, they are engaging in investigating causation and explanation. He then presents the idea that causal explanations look to present the factors that lead to a result, whereas practical explanations look to express the motivations that end up resulting in a conclusion. For Woodward causal explanations use a series of empirical facts as the explanation force. For instance, the laws of physics caused a ball to bounce. Causal explanations look at the forces that "cause" results. Whereas practical explanations add the factor of motivations.

So, Woodward chooses to solve this muddied and sometimes over-complicated set of definitions by redefining causal explanations as descriptions, and practical explanations being termed the word explanations. In Woodward's mind if the only thing being described is the forces that allow or lead to results, then that statement is a description. However, if motivations are included then the statement gets altered into the category of explanation. This study will attempt to blend these two types of explanations, or as Woodward would classify it, to go beyond

just the description and provide a meaningful explanation of how live game streaming (LGS) impacts the humans who engage with that particular communication avenue.

Principles

The final dimension of a theory is principles. A principle is "a precept or guideline that enables someone to interpret and evaluate an event and decide how to act" (Littlejohn, Foss, & Oetzel, 2021, p. 14). It can be thought of as a similar concept to when people speak of a person's guiding principle. This is the factor that guides actions and, in this case, academic inquiry. For instance, Kottow (2005) discusses the principles of bioethical research and how the concept of vulnerability plays into how medical research is conducted. In other words, in his case understanding how the participants are vulnerable is a guiding principle as to how medical research should be conducted. Another example could be as famous as Einstein's principle of equivalence which eventually led his scientific research to result in the theory of relativity (Norton, 1985).

Principle manifests by identifying a situation or event that needs to be studied, providing the values that will be limiters in the research, and finally giving value to the findings (Littlejohn, Foss, & Oetzel, 2021). For instance, one person's principles may cause them to see an event as research worthy, while another person's principles will make that same event seem unimportant. Those same principles will find values within the research and cause researchers to either draw connections within the provided information or to find connective value elsewhere. Throughout this whole process, it is important to remember that communication is a process; it isn't a singular action but a flow of information (Lunenburg, 2010). This means that a researcher's principles could cause data to vary in importance throughout the study and the flow of communication ebbs and flows in different directions.

John Powers (1995) understood the principle of how communication was a process and developed an approach to organizing theories that would be more understandable to people outside of academia and viewed results in a more fluid format with tiers rather than the rigid scientific modeled approaches of Burrell-Morgan and Deetz (Deetz, 1996; Callaghan, 2017), with their quadrants and graph lines. According to Powers (1995) the first tier is the message. This is the foundation of communication. It is what is trying to be presented. The second tier is the communicator. This is the entity who is sending the message. So, now the question involves how the message is connected to the presenter. Powers answers this question by presenting the third tier as the level, also referred to by other sources as the sphere (Baynes, 1994; Bruggeman, 2010; McGuigan, 2012), i.e., interpersonal, group, and public. Powers presents the final tier as the situation. This is where context comes into play and adds depth that often lines and graphs miss. So, this tier looks into what kind of context the message is presented through. (Powers, 1995). When these four tiers are combined, a valid theory can be put forward that is understandable and relatable, or a theory can be assessed as valid and applicable by checking them against the tiers presented by Powers as well. Since this study makes use of three communication theories, making sure the principles apply to the subject matter is an important step in the overall research process.

The next step in developing the context for this study is to understand how the theories presented in this study (parasocial relationships, social presence, & identity management, which will be discussed in more detail later) fit within the sociocultural tradition presented by Craig (1999). The connection between culture, society, technology, and communication is inseparable. "Today, most scholars in language and social psychology consider intercultural encounters to be at the heart of their field" (Brabant et al., 2007, p.55). As this quote highlights, it is almost impossible to discuss the effects of communication on the participants and how that

communication fits within different cultures without including social psychology to some degree, and that is why there are secondary and tertiary traditions as well as the primary. This is especially true with the topic for this study being a look at how the social and cultural factors found in the LGS communication environment impact both the streamers and the viewers. Also, since live streaming is an online communication method, there is a mixture of many cultures involved in the process (Sripanidkulchai et al., 2004; Woodcock & Johnson, 2021; Yu, 2018; Zhang & Hjorth, 2019). This could result in significant variance of motivations, causes, identities, and sense of presence felt by the participants.

Theoretical Framework

Theory is used in this study to frame the sociopsychological tradition so that it explains the communication environment of live game streaming and how that environment causes people to act in certain ways. Theory, as used in this study, is methodologically oriented (Punch, 2014). It will drive the research process and form perspectives that will allow the results, which will be discussed in Chapter Four, to make sense. In this instance, the theory is within the communication tradition, which lends the theory its underlying assumptions about the world, the way communication occurs, and even what the term communication means. The following section will explore the communication theories that will be applied in this research.

Parasocial Relationships

For this study, para-social relationship theory will find its application in both the streamers and the viewers of the streams, often referred to as the "community" (Cullen & Ruberg, 2019; Giertz et al., 2021; Smith et al., 2013). The immediacy of real-time communication could create a stronger perceived bond between the viewer towards the content creator, but also from the streamer towards the audience. The idea will be to see how this added

closeness impacts the LGS culture. Dibble et al. (2016) describe parasocial interactions as "… a media user's reaction to a media performer such that the media user perceives the performer as an intimate conversational partner" (p.21). This study will combine the ideas of both parasocial relationships and parasocial interactions under a more extensive and broader "parasocial" concept. To reiterate, within this study, when parasocial interaction relationships are described, it will simply refer to a relationship where one person has an inflated idea of the closeness of the relationship compared to how the other person perceives it. Within this study, the definition will follow the example set by Rebecca Rubin and Michael McHugh (1987) who combine the terms parasocial relationship and parasocial interaction to form an encompassing term parasocial interaction relationship. A simplified definition of the combined term basically states that this parasocial process is when someone develops a one-sided emotional connection with a persona that exists in a public arena. Parasocial theory has always found a home in entertainment, as media tends to require a certain level of personal attachment to a persona like Jay Leno of the Tonight Show, Laura Croft from Tomb Raider, or anime characters, etc. (Klimmt, Hartmann, & Schramm, 2006; Ramasubramanian, & Kornfield, 2012; Sood & Rodgers, 2000).

Historical Background

For a historical background of the theory, in 1956 Donald Horton and R. Richard Wohl published "Mass Communication and Para-Social Interaction: Observations on Intimacy at a Distance," where they first introduced the concept of parasocial interaction. This study described where media consumers would experience the sensation of interacting reciprocally with media personalities, despite this obviously not being the case. The parasocial concept eventually became more solidified within the psychological and psychiatric fields as scholars began to understand that these parasocial interactions were developing into long-term relationships, which were one-sided attachments with chosen media personalities (Brown, 2015; Rubin and McHugh,

1987). This point in the history of parasocial interactions is where Hartman (2016) would want

the distinction between parasocial interactions and parasocial relationships to be clarified. For

the sake of scholarship, this distinction will be provided, but for the purpose of this study, the

combined definition of parasocial interaction relationships used by Rubin and McHugh (1987)

will be used. The summarization of the difference between parasocial interactions and parasocial

relationships presented by Hartman (2016) is as follows: interactions are short-term delusions of

personal interactions where the media persona is present within the media. Parasocial

relationships, on the other hand, are longer, more personal, involve feeling deep emotional

connection as if they're in a genuine long-term relationship burgeoning between the media user

and the media personality, and can occur even in the absence of the media persona (Kurtin et al.,

2019; Hartman, 2016). As with the definition of communication in Chapter 1, the exact

definitions of parasocial interaction and parasocial relationship will vary depending on the

backgrounds and academic traditions using them (Klimmet et al., 2006). The variation in exact

definition of these terms is another reason this study will use the combined concept of parasocial

interaction relationships.

Recent Scholarship. Recent research on parasocial interaction focuses heavily on online

media such as YouTube celebrities, social media personalities, and vloggers. Rasmussen (2018)

examined how beauty content creators on YouTube build relationships with viewers, leading to

brand deals. "The interaction goes beyond simple product placement and branded entertainment,

instead, viewers socialize with YouTube celebrities, who may also serve as a product

ambassador. In a sense, YouTube celebrities become a friend sharing their opinion" (Rasmussen,

2018, p.280). As Rasmussen points out the online content creation space is a ripe garden for

parasocial interaction relationship development, which can then be monetized by brands or even

the creators themselves.

Rasmussen was not the only scholar that year to focus on the connection between parasocial theory and YouTube. Kurtin, O'Brian, Roy, & Dam (2018) used a structural equation model to replicate an earlier study based on television as the entertainment medium, but this time they chose to make YouTube the platform of choice. These authors concluded that exposure to the personalities on YouTube did indeed produce an increase in parasocial involvement. They also found that the parasocial involvement justified extending the theoretical expectations of parasocial theory to online social media and online entertainment. In a similar vein Liu, Liu, & Zhang (2019) looked into how vlogs (which can occur on multiple platforms rather than just on YouTube) impact brand evaluations through parasocial interaction relationships. Using convenience sampling surveys, regression analysis, and bootstrapping the research found that the vloggers' attractiveness, the amount of use of the platform by the viewers, and intentions of parasocial developments by the viewers all had significantly positive impacts on the viewers' opinions of the brand quality, affect, and preference.

Stretching the online content direction a bit further, Yuksel and Larbreque (2016) focused on the individuals using social media establishing perceived friendships through online interactions. The authors used grounded theory methodology and triangulating observational netnographic data of student athletes' social media accounts combined with in-depth interviews. The conclusion was that individuals will develop parasocial interaction relationships with other individuals and not just brands focused on trying to develop those types of reactions. Staying within the pattern of the literature on the topic found in this study, Mu Hu (2016) looked at the impact scandal had on parasocial interaction relationships and the concept of parasocial breakups. Hu found that scandals do, in fact, impact those who experienced parasocial relationships with actors. Hu also found that the parasocial connection was stronger when it was with the actor as a character in a movie rather than with the actor in an interview or talk show.

At this point in the chapter, the connection between parasocial theory and online entertainment, communication, and social media is pretty well established, but some broader studies could be useful for a fuller understanding. Tilo Hartmann (2016) who was also mentioned in chapter one adds to this study by presenting a focus on the topic of clarifying the differences between parasocial interactions and parasocial relationships. For Hartman, who also wrote an article with Jayson Dibble and Sarah Rosaen (2016) on the topic, it is important to understand that parasocial interactions are temporary relations that occur between the viewer and the on-screen persona while engaging in the content, but that it is contained within the experience of the content. For instance, an audience relates to the character being played by an actor. Whereas parasocial relationships carry on beyond the limited experience of the content. An example of this is people who begin to feel a deep friendship or romantic feelings for an actor even after the viewing of a movie is over. For the sake of this study, the clarification isn't as vital as it is for some other studies and this is why the larger concept of parasocial interaction relationships is used instead. However, if the clarification between the two becomes a necessity in extreme cases or to explain audience behavior then references back to Hartmann's stance will be used.

In an exploration of 60 years of parasocial interaction research, Liebers & Schramm (2019) discovered that research about parasocial phenomenon began to rise dramatically around 2000, and spiked between 2014 and 2016. (Liebers & Schramm, p. 10). It seems that with the rise of online communications and social media, interest in parasocial theories has become more valuable to the research community. In general, the research seems to provide a solid logical bridge for this study to walk across from parasocial theory in traditional entertainment mediums towards online media and online social environments.

Applicability to LGS. Regarding how this theory might apply to live game streaming, literature already exists looking into similar entertainment and communication mediums like YouTube and social media (Chen, 2016; Chung & Cho, 2017; Redd, 2012; Tolbert & Drogos, 2019). From those examples, a logical comparison can be made with similar aspects of the streaming environment. Taking YouTube videos as an example, there is more of a communication immediacy between viewers and content creators than with traditional media (Kurtin, 2018). However, the immediacy of the communication found in YouTube videos' comment sections isn't as pronounced or direct as live streaming's direct comment system because the comments are not made in real-time while the content is being created like it is with streaming. For instance, a Plyrocknation Twitch stream will have the audience commenting during the live portion of the stream, whereas any YouTube video (not YouTube Gaming live streams) is prerecorded making direct contact via the text chat under the video a post-production act. There is a reciprocation of communication found on YouTube, where the creators often make videos replying to the comments (Report of the Week, 2018). This back-and-forth communication exchange is not common in traditional media; it can lead to para-social relationships burgeoning within that online communication environment (Wattenhofer et al., 2012; Sokolova & Kefi, 2020). With parasocial relationships developing, even with the communication pathways being delayed through static comment-then-reply video patterns seen with YouTube videos, the direct real-time communication pathways present in live game streaming could be even more susceptible to parasocial developments (Chen, 2021; Kowert & Daniel, 2021; Leith, 2021; Lim et al., 2020).

Identity Management

The second communication theory being used in this study is identity management theory. Identity management theory will be assessed in both the streamers and the audience as

both are presenting personas in this shared online space. This theory will hopefully provide a depth to the other two theories by providing a mechanism that will help express how people create a presence in the online communication space and develop relationships. For instance, if a streamer presents their personality as a high-energy, partying, "bro" the audience may develop a sense of closeness because they like that persona, and they may match that same energy in the chat even if neither the streamer nor the audience member is actually as extroverted as they are acting. The purpose of using identity management theory is to provide context if content creators are presenting various forms of identity to which the viewers react and either act genuinely or respond in kind. There could be a fairly large spectrum of persona authenticity from totally genuine to totally inauthentic in both the streamers and the audience.

Brief History. A summarized history of the theory explains that Identity Management Theory, or IMT, was developed in the 1990s by Cupach and Imahori (1993). IMT has "gained significant attention in recent years with the proliferation of different web-enabled and e-commerce services" (Ferdous & Poet, 2012, p.1). It proposes that individuals perceive their identities differently at different points across time and space (Imahori & Cupach, 2005).

Cupach and Imahori are credited with developing the theory, while the inspiration for their theory came from Erving Goffman (1967) via his writings in *Interaction Ritual: Essays on Face-to-Face Behavior.* Goffman used the term "face" as a reference to the persona that is presented to the public, and the public could either accept or reject this face. The person would then adapt the "face" to befit a persona that the public would accept. Cupach and Imahori took this idea and refined it in their works. Cupach and Imahori (1993) state that communication requires an individual to successfully negotiate multiple identities in a mutually acceptable manner during interactions. Adapting how you present yourself to others is a concept that most

people naturally understand and apply. As Ferdous and Poet (2012) mention, this concept has become even more relevant as electronic communication has taken a position at the forefront of society.

People's Many Faces. People are able to present a much wider range of "faces" in an online social space; thus, this theory has received more attention in recent decades. Strano and Queen (2013) discuss how Facebook users deal with other people on the platform by tagging them in pictures which might show a different face to the public than the participants desired. The users worried about their ability to suppress certain aspects of their lives in an attempt to "save face." Planken (2002) discusses how people often present many faces in the midst of negotiations. This can be especially true when negotiating internationally with a multitude of cultural cues and values. Cultural differences once again come up when Lee (2008) discusses the manipulation of face when people are in international friendships. The desire to maintain a particular face in social groups, when physical distance is a factor and the ability to control what face other people see is prevalent. In this same vein of thought, the realm of live streaming could be rife with the opportunity to adjust one's "face" for the sake of social acceptance and fiscal success. With on-air personalities vying for attention and financial support from a community of viewers, who in turn are vying for attention and social clout, the LGS communication environment is perfectly set up for a look at the impact of identity management theory on the subjects. For instance, there are streamers such as YouTuber Dr. Disrespect, who present entirely made-up characters they act out as if they were traditional actors (TheSlickDaddyClub, 2022; DrDissRespect, 2019). Whereas some streamers present mainly the same basic personas on and off stream with only minor variation between their true faces and their entertainment faces (TimTheTatman, 2022). Since streamers are also entrepreneurs building their individual brands (Gjestang, 2020; Koch et al., 2020), there is additionally an off-air business persona that must be

navigated and presented in business environments while making deals with major companies for sponsorship and advertising (Murray, 2021; Brown, 2022; Fingas, 2021).

There have already been other studies examining the competency of online communication, especially social media sites, to simulate in-person communication and how the medium impacts identity management (Barkhuus & Tashiro, 2010; Bowen & Pennaforte, 2017; Luo, 2010). Santucci (2021) suggests that the closer a medium gets to replicating communication cues found in face-to-face engagements, the more the identity management of participants replicates face-to-face encounters. "Collocation, synchronicity and the ability to convey and interpret facial expressions, body language, and speech, to variations in the cognitive effort, communication ambiguity, and physiological arousal" (Santucci, 2021, p. 355). Thus, Santucci might suggest that a Zoom call will create a more authentic reaction from participants rather than an Instagram post. According to Santucci people are more likely to exaggerate their personas the more distanced from in-personal communication the platform and medium become. Streaming creates a one-way visual and audio connection, with a near-instant two-way linguistic communication through text in the chat box. Since that communication environment exists because the structure of the LGS platform requires it to exist, it could be possible that the streamer would be more heavily influenced to alter their persona. However, the audience could be motivated to present a particular face to the streamer, moderators, and fellow community members in order to garner a sense of personal connection. This is where the two-way communication environment found in LGS could cause para-social interactions to intersect with identity management theory and create an environment that enhances both theories' effects on the participants.

Recent Literature. The literature in recent years dealing with identity management theory covers a breadth of topics and focuses. Some studies look at how women manage their identities in the STEM fields (Ryan et al., 2020), as well as how they navigate various and non-binary sexual identities in a work environment (Pham, 2022). Then Ryan et al. (2020) article looks at how women can navigate a work environment that tends to be heavily male populated so that they are seen to fit into the culture and be seamless employees. The second study focused on interviews with women who have sexually fluid identities and how they try to fit into the workplace without causing disruptions. The conclusion found in both these articles is that much of how these women navigate their own personas with co-workers is based on the co-workers' reactions, both perceived and real.

International politics also have a footprint in identity management scholarship. Steven Ward (2019) looks at the importance of status in world politics as he looks at expanding the current scholastic focus, which he states is built off of the social psychology of individual attitudes and behaviors, to adjusting to a broader focus seeing the states as unitary or anthropomorphic actors. Ward claims that by broadening the focus to include actions on a larger scale his approach not only includes previous explanatory possibilities but also provides researchers with a more flexible framework to understand the variety of ways in which status dynamics influence international politics.

Bringing the literature on IMT more towards the topic of online communication found within the larger subject of live game streaming, were three studies that build up in relatability to this paper from online education (Sime & Themelis, 2020) to social media (Adjei et al, 2020) to twitch content creation (Chou & Lu, 2022). Sime and Themelis (2020) focused on how educators could present multiple identities on multiple online platforms and technologies. The study asserts

that online educators should be trained in developing competency with online presence while portraying themselves in a digital space and confirm the importance of visual representation; from video calls to emojis in a text-based setting. (Sime & Themelis, 2020). They stated that the impression that visual signals gave to the students was impactful in directing the thoughts of the teachers' role as educators and critical thinkers. The Adje et al. (2020) article focused on how managing online identities has an impact on personal information disclosure on social media sites. They discovered that users would trust the privacy measures of the sites they were using more than the actual measures would suggest they should. Some users did not understand the availability of their information online and how online information privacy functioned within such a setting. Furthermore, the authors found that there was a greater concern about personal information privacy than there were actions and policies in place to protect that privacy.

Finally, there is a study conducted by Shih-Wei Chou and Guan-Ying Lu (2022) which uses self-presentation theory to develop a belief-motivation-intention model to explain the motivations of streamers to engage their community through their content. They state that the content creators are directed by their beliefs on self-presentation, which are characterized through self-efficacy, social norms and involvement in the community which develops within their audience. This article is particularly good at showing how identity management theory applies to LGS. One such observation was that content creators are invested in their communities on an emotional and social level because their online communities "…provide resources to motivate content creators through various benefits, including social support, information seeking, self-presentation, coping (process/support for dealing with situational demands) and monetization [sic] of user-generated content (UGC)" (Chou & Lu, 2022, p. 2578).

This is a very important aspect of how identity management relates to social presence theory and parasocial theory in that the content creators are deeply invested in the community feeling emotionally connected to their presented identities or "faces." The community must feel a genuine presence of the creator in order to develop that loyalty and emotional investment which can then give the creators the positive responses they are looking for. Another topic raised by Chou and Yu is how external and internal drivers are required for good consumption value, many of the current systematic approaches are too heavily geared towards external drivers without giving enough weight to internal drivers. Their paper sought to take an approach to solve this imbalance by focusing on identity management, more specifically using self-presentation theory. Their approach will help to inform the current study through the use of identity management (including SPT) as presented by Chou and Yu, but this study will also use social presence theory and parasocial relationships to try and make sense of and describe the motivations and intents of both the content creators and their communities which build the social culture which develops as a result of the unique communication environment present within the LGS industry.

Social Presence Theory

The third and final communication theory used for context and understanding during this research is social presence theory. This theory ties in very nicely with the other two in establishing an understanding of how participants experience the culture, the communication environment, and the online society in an impactful and meaningful way. As stated in Chapter 1, this theory will be used to gauge how these types of environments simulate in-person connectivity and how that impacts cultural cues and social engagements within the LGS culture. The literature on social presence theory presents a range of uses and definitions. For instance, Lowenthal (2010), argued that there is a continuum along which social presence is applied. On one end of the spectrum social presence can be defined as people's perceptions of another person

being real or being actively present. This definition of the theory focuses on how people project themselves into an environment and whether others can perceive them. However, on the opposite end of the continuum, the focus shifts to whether there is positive interpersonal and emotional connection between communicators (Lowenthal, 2010).

Brief History. The literature dealing with social presence theory begins to show a move towards a focus on interpersonal and emotional connections as used in this current study back in 1976. That year is when this theory moves into the realm of telecommunications and focuses on how the medium itself can impact the sense of immediacy and how that sense of immediacy is affected by elements such as physical distance, eye contact, smiling, and personal topics (Short et al, 1976). Later in the mid to late 1990s Charlotte N. Gunawardena & Frank J. Zittle took the theory further and introduced online interaction, specifically online education, to the mix (Cui, Lockee, & Meng, 2013). Gunawardena (1995) presented the idea that although online and video courses were presumed to be low in social context cues, they could still be experienced as interactive, active, interesting, and stimulating by students.

In this paper, Gunawardena posited that the medium wasn't solely responsible for the sense of presence, but that moderators were essential to there being a sense of community being felt by the students. Gunawardena and Zittle (1997) further argued that social presence can be cultured among teleconference participants and is a factor of both the medium and people's perceptions in their subsequent interactions. They concluded that the people involved had a large impact on whether social community was experienced rather than just the medium of communication alone. Biocca et al. (2003) later added to the idea that social presence exists along a continuum. They argued that a simple here-or-not-here definition was unable to explain the mediated social communication phenomenon. As it stands, the literature presented so far, as

well as sources that will be presented within the rest of this paper, seems to offer a mixture of opinions about the medium's impact on the perception of social presence.

Social Presence Foundations. The concept of social presence is particularly pertinent to live game streaming, as during the event one camera is (usually) focused on the streamer, taking up a small certain portion of the screen, while another portion of the screen shows their actions in-game. This live video production is occurring while there is also a live chat in which the community can interact with each other and the streamer. This live chat is streamed and updated in real-time and can be seen beneath or beside the video portion of the stream on the screen. There are a few other methods of interaction that could also impact the sense of personal immediacy, like sound clips and visual stickers which the audience can send to the streamer as they play in real-time on the stream. This means a literary look into what social presence is and how it is applied in modern settings is particularly applicable to this study and the content held within.

A major concept called "networked minds theory of social presence" Biocca & Harms, 2002, p. 11) was established in studies and papers by Frank Biocca and fellow researchers at Media, Interface, and Network Design (MIND) labs in the early 2000s (Biocca et al. 2003; Biocca & Harms 2002; Biocca, et al. 2001). The networked (mediated) minds theory of social presence focuses on conceptualizations of social presence in the mediated environment, which is exactly what comprises the LGS environment. Biocca and Harms (2002) argued that mediated social presence is the purview of people, not of technologies. Biocca et al., (2003) shared the concept with Lowenthal (2010) that social presence exists along a continuum, not the more classic understanding of a here-or-not-here definition. They expressed the thought that the former definition could not explain the phenomenon of mediated social communication. Moreover, Biocca (1999) earlier expressed the idea that social presence is not just the awareness

within the environment, but rather it also includes any form of behavior or sensory experience that indicates the presence of another intelligence.

This same group of researchers at MIND presented a three-stage clarification of their definition of social presence. In 2001 Biocca, Harms, and Gregg provided the following explanation. The lowest tier of social presence involves a peripheral sense of spatial co-presence of the other as well as observations of the states of the other such as identity, intentions, and attention. The mid-tier includes psychological involvement as well as one's connection to the intentional, cognitive, or affective states of the other. The final top tier of social presence is comprised of actively engaging in behaviors. The degree to which one's perceived actions are interdependent, connected to, or responsive to the other. Other authors found a similar inclination within social presence (Kim et al., 2011). They wrote that the sense of presence could develop from perceptions of mutual attention and support, a sense of community, and open communications to provide a genuine experience of connectedness (Kim et al., 2011).

Walther (1992) and Tu (2001) both expressed the idea that social presence requires social contexts, many of which are obviously present in person-to-person interactions. For instance, Tu (2001) stated that social contexts, such as task types, perceptions of privacy, topics, and social relationships could also affect the degree of social presence. This was then connected to how a person receives and perceives feedback from the community by Garrison et al. (2001) and Rourke et al. (2001). They both posited that receiving feedback from the community provides growth in the sense of social presence for the user. There were three refined categories and indicators of social presence presented by Rourke (2001) as affective responses, interactive responses, and cohesive responses. Basically, these are the types of responses received by a person that could also evoke a greater sense of presence within the online social group as well as in other social settings.

Other Studies on Social Presence. The previously mentioned sources were provided to establish the foundational concepts for the theory of social presence, but now the sources will include some more recent applications of the theory. Also, the primary application of the theory in the previously mentioned sources was for distance education purposes. This topic is still a focus for much of the research into the theory's application. This can be seen in studies done by Wut & Xu (2021), Wut, et al. (2023), and Tackie (2022). The 2021 Wu and Xu paper focused on how social presence theory impacted students during the COVID-19 pandemic since many of them had to attend classes via online resources. The results were more focused on the comparison to in-person education, finding that there were some areas like being able to assess student effort and focus were not as recognizable for the teachers. These results do not particularly pertain to the content of this LGS study as the comparison to in-person relationships does not carry over to the medium which is completely online. However, it could have a bearing if comparison to in-person fan meetups becomes included for context reasons.

Wut, Ng, and Low (2023) discuss the more traditional university online education experience from the three distinct aspects of behavioral, cognitive, and emotional engagement. The results found varying results based on geographical location (Malaysia vs. Mainland China and Hong Kong). They found learning and engagement were greater in larger classes for the most part. This will be an interesting tie-in, as stream audience size could have an effect on chat engagement. The 2022 paper by Tacki further studied the effects of online learning on students during the COVID-19 pandemic, this time using students in Chicago as the subjects. Tacki came to a similar conclusion as Wut and Xu that online education for students, especially for younger students in Tacki's study, did not produce particularly successful results. One aspect, that could differentiate these results from those found in the LGS environment is that the sudden onset of online communication caused by COVID-19 forced parents, teachers, and some students who

were not comfortable or used to the technological aspects of online communication to adapt. By

contrast, community members in the LGS environment tend to have a very sound comfort level

with this type of technology and tend to already be comfortable using it and know how to use it

to maximum efficacy.

Outside of educational settings, social presence has been used to examine whether a

virtual setting impacts the functionality of human resource departments (Bickle, et al., 2019).

The authors found that if departments applied a community of inquiry, social presence model,

and SPT-inspired instructional design, there was a positive impact on the productivity and impact

of the HR departments for those they served. Social presence theory can also be used to assess

customer engagement behavior and customer brand identification by marketing departments or

any brand managers wanting to increase brand impact on customers (Song, et al., 2019). This

study found that a higher sense of presence developed in the brand page or by the brand page

moderator would increase customer engagement and a higher presence of other customers would

decrease brand presence but could increase customer-brand identification. Basically, the more

the brand is perceived as a presence itself the more customers would engage it as a persona, but

the more that other customers had a presence the brand became more seen as a distant entity

rather than a fellow social participant. Similarly, a study looked at whether social presence

expressed in live-streamed sales could impact travel item purchases with the same veracity and

influence as in-person sales (Xu, Huang, & Shang, 2021). The authors found that social presence

via live-streaming did not have the same capabilities of limiting no-sale decisions the same way

in-person sales interactions could.

In general, social presence theory has been used to explore the engagement of

stakeholders of oil and gas companies (Yuen, et al, 2023), how Snapchat impacts social

relationships (Kahlow, Coker, and Richards, 2020) as well as other social media networks'

impact on interpersonal relationships as well (Kaewsaiha, 2019). Then there are studies that

combine the mentioned preceding social presence theory concepts to investigate the marketing

and social media aspects of social presence theory to explain how computer-mediated

communication (CMC) theories and relevant work in the communication literature can be used

to enhance the impact of social media branded contents (Liu, et al., 2022). These concepts can be

used to provide valuable context to the topic of this study itself, as live game streaming (LGS) is

a social media entertainment platform that makes use of marketing and interpersonal CMC

communication to bolster the video content's impact on the audience.

LGS Related Literature

Since this proposed research will be situated in the live game streaming context, a

foundational understanding of video games, video game culture, e-sports, and live streaming as a

platform is needed. This section of the literature review will explore the dynamic and rapidly

evolving gaming industry by reviewing relevant scholarly literature, industry news and media,

and cultural sources to provide a current and socially relevant perspective on all the

aforementioned components of the LGS environment and culture.

Video Games

A Brief History. Sometimes an understanding of a topic needs to begin at the most basic

and foundational level. For LGS, that foundation is video games. Before *Pong*, there was *Tennis*

for Two, built by Willy Higinbotham in 1958 (Kent, 2010). Higinbotham, however, did not find

his fame in creating a video game. Rather the video game he created on an oscilloscope was

made for entertaining visitors during a career day at his job with Los Alamos Laboratory as a

member of the team building the first atomic bomb (Sullivan, 1994). Higinbotham was

unconcerned with the video game and didn't even bother to patent it, which makes some

historians believe his game led to the success of the more famous *Pong*, which closely resembled

Tennis for Two, more than a decade later (Anderson, 1983). The first video game to really be

accessible outside of an exhibit or lab was *Spacewar!* Initially developed by three students at the

Massachusetts Institute of Technology, Stephen R. Russell, J. Martin Graetz, and Wayne

Wirtanen in 1962 (Graetz, 1981). The idea of *Spacewar!* Was that two players could control

dueling spaceships and attempt to shoot each other with torpedoes while orbiting a virtual black

hole (Ivory, 2015). Ivory stated that the importance of this game was that it caused video games

to be seen by the public at large and understood to be a viable entertainment option.

In 1966 Sega released *Periscope* as an arcade video game in Japan, which was so

commercially successful that retailers in the U.S. and Europe began to import it for their

customers (Kent, 2010). Skip forward to the point when video games history took off after Atari

released its home model, which would later be called the Atari 2600, in 1977 (Goldberg, 2008).

This home model made the arcade experience available in the home, which led to the next big hit

in video game history. In 1986 Nintendo released the American version of the Famicom console,

called the Nintendo Entertainment System (NES) (Kent, 2010; Ivory, 2015). This moment in

gaming history is important because the NES brought gaming *back* into the house in a

mainstream and major way after the video game crash of 1983 (Cifaldi, 2012, Ivory, 2015).

Eventually, as will be shown, video games become a major social and fiscal force in the U.S.,

primarily because of individual gaming as opposed to arcade or public gaming. As a final major

historical note, in-game voice chat was first introduced in a PC game named *MechWarrior 2:*

31st Century Combat, released in 1995, but consoles didn't get the feature until the Sega Dream

Cast system released in 1998 which allowed for an external internet adapter and mic to be

plugged in, however, the first console to have a built-in network adapter (not an add-on) was the original Xbox in 2002 (Krane, 2017).

Financial Impact. Video games have grown since those NES days to be a multi-billion-dollar industry (Anderson, 2017). In fact, one man, Gabe Newell, who started the PC virtual video game store company Steam, is personally worth an estimated $5.5 billion (Chalk, 2017). The World Economic Forum predicts that the video game industry will be worth $321 billion by 2026 (Read, 2022). The video game industry is also often referenced as being larger than movies and music or movies and sports combined (Witowski, 2021; Saltzman, 2021). However, Ricardo Rodriguez (2022) clarifies that most of those claims only take in box office revenue, whereas if the entirety of the movie industry, including TV replays, streaming, and licensing were included, movies would still outperform video games. The point is that video games are a major entertainment industry on par with any other entertainment medium. Video gaming is still a personal venture, as in the revenue is now focused on smartphones, consoles, and computers for the most part, as opposed to arcades or VR experiences (Clement, 2022). To put it another way, people do not intentionally go "out" to play video games but rather play them either at home or wherever is the most convenient.

Social and Cultural Impact. With video games having such a sizeable financial footprint on society, the question becomes, what is their societal and cultural impact? This question has had quite a few answers. For instance, Derek Burrill (2017) looks at the active effects on humans as they play video games. He discusses how video game research has been mostly conducted by those who wish to defend the medium and provide only positive results, or those extremely biased towards the negative effects, but a rational discourse providing both positive and negative social impacts from video games has been difficult to find. He then delves

heavily into psychological factors and theories. Basically, Burril (2017) concludes that, while playing games, people experience emotional and psychological reactions that can be quite strong. Another study looked into how video games impacted high school students' engagement in the subject matter of genetics (Anetta et al., 2009). The study delved into the idea of using the popularity of video games to enhance academic studies. The study found the results to be inconclusive in that there was greater focus on the subject matter but not always greater retention of information. However, that study also stated that there could be a need for a deep story or a high skill gap (difference in players' skill levels) to be required for a game to induce high information retention.

Not Just Fun and Games. Video games have also been used in the training of cognitive functions in older adults and have been shown to improve those cognitive functions with the playing of video games (Anguera et al., 2013). The authors of that study describe and define what cognitive functions are before building into an explanation of how video games can actually aid in the cognitive control of older adults. For instance, when given an adaptive version of *NeuroRacer* to play in a multitasking training mode, older adults (60 to 85 years old) were able to reduce multitasking costs when compared to both an active control group and a no-contact control group. This allowed the older adults to attain cognitive levels beyond those of untrained 20-year-old participants. These positive results lasted for an incredible 6 months. Spence & Feng (2010) investigated the ability of video games to modify processes in spatial cognition. It studies how video games, especially quick action games like first-person shooters, could be used to alter the declining cognition of spatial recognition in everyone. Some can even use this method as a treatment for certain physical and mental ailments. One such instance of training the mind and physical reaction times can be found in some NFL players using video games in a training setting to increase their reaction times and pattern recognition. Similarly to

the Anguera study above, there was another study about the educational benefits of video games in a learning environment (Brown, 2014). Brown's work indicates that when appropriately applied, the gaming aspect motivated greater integration and memory of the educational materials, and if students genuinely found the content interesting, they were more likely to focus more deeply on the content.

Morality, Philosophy, and Games. Cultural and moral discourses have also developed and are still developing around video games and their content over the past couple of decades. With over 155 million Americans playing some form of video games, the medium clearly has an impact on society beyond just passing the time (Taylor, 2015). There are articles that posit the video gaming culture is an immoral boys club with sexism running rampant (Alexander, 2014; Kowert et al., 2017; Tompkins et al., 2020). In comparison, there is literature questioning whether real-world morality has any part to play in the fantasy and fictitious worlds of video games (Biggs, 2012) or whether games can even teach real-world morality in mentally healthy individuals (VGChartz Staff, 2010). Stopfer et al. (2015) investigated whether playing video games enhances narcissistic behavioral patterns because of the individualized nature of gaming. There is a study about video games looking at where responsibility falls, within a parental relationship, for the moral content of entertainment digested by children (Steinkuehler, 2016). The Steinkuehler article is particularly interesting because its conclusions run counter to most of the literature on children in gaming. Most gaming literature, including those listed in this section, generally assumes there is no parental guidance when children are engaging with video games, or that video games are only played by children, which previous stats have disproven. There are even existential articles that try to define what video game culture is at a core level (Shaw, 2010; Teicholz, 2020, Wirtz, 2022).

Esports

Esports is an emerging category of amateur, collegiate, and professional competition industries based on video games (Leroux-Parra, 2020). In fact, the industry is so new that the spelling of Esports varies depending on who is writing about it, as can be seen in the references listed in this section. In this proposed study, the spelling of "Esports" will be used as opposed to "eSports," "E-Sports," and "ESports." Tobias Scholtz (2019) explains that Esports is not a new form of competition, but he must include events like casual competitions amongst friends, which date back to the beginning of computer games, to make that argument. This study will look at Esports within the framework of being organized and mostly professional game competitions, not just casual competitions amongst acquaintances and small organized informal competitions. To be sure, there were offline tournaments that started in the early 1990s, like the Nintendo World Championships. Still, these were rare, and the concept of being a professional competitive video game player or streamer was not truly established in any meaningful way at this point (Hiltscher, 2013).

Esports: A Brief History. The term Esports finds its origination in South Korea with the creation of the Korean Esports Association (KeSPA) (Leroux-Parra, 2020). Leroux-Parra (2020) explains that in the early 2000s, the South Korean government recognized an opportunity to charge up its economy by focusing on building a strong internet infrastructure. This improved internet infrastructure led to gaming cafes which eventually started gaming tournaments. Esports were formally organized when the government implemented the KeSPA to guarantee fair competitions and maximize the economic fruit that professional video game competitions created (Leroux-Parra, 2020). Other developed countries began to follow suit in their own ways, developing an international Esports community that saw paid tournaments grow from ten in 2000 to 264 in 2012 (Hiltscher, 2013). Today, the growth of Esports continues. EsportsEarnings.com

(2022), a website dedicated to following Esports tournaments and recording the winnings, shows the January to October 2022 total Esports prize money was well over $139 million. To be clear, that is how much money has been won by professional players in payouts by the tournaments alone. This number does not include sponsorships, advertising, and streaming earnings. The website also shows individual player totals, with some players earning well over $500k in tournament earnings this year and total career earnings in the millions. Again, this is just tournament earnings and does not include all the other revenue streams available for these players.

With that kind of financial security possible through playing video games professionally, it's no surprise that Esports has grown in popularity the same way that traditional sports have developed popularity prior in history. While the recent World Championships of the game *League of Legend*s was considered a disappointment, the event reached over 826,000 average viewers, with peak viewership reaching 1.4 million (Murko, 2022). The Esports industry has even grown in influence to the point where 125 universities have official Esports teams, with many universities offering Esports degrees (Morrison, 2019; Burton, 2019). Surmise it to say that Esports is a viable career choice now and is an influential social and cultural force. Understanding how impactful Esports are will tie together with the next section focusing on live streaming to help explain how live game streaming has exploded as an entertainment format.

Esports Culture. It is equally important to understand the culture of Esports as that is part of what fuels the culture and social aspects of LGS, as well as what dictates viewership numbers. With the central ethos of Esports being competition, it's no surprise that competition has a major part to play in the community that surrounds the official competitions (Railsback & Caporusso, 2018; Huston et al., 2022; Steinkuehler, 2020). This competitive environment can

sometimes lead to adverse physical and social expressions. For instance, sometimes players will go without proper sleep in order to practice more or experience life outside of the gaming environment (Bonar et al., 2019). One study presented that a particular game *CS:GO*, a first-person shooter (FPS) game, "represent gamers as young males who are mostly white, offering audiences a limited worldview that supports a dominant social, cultural, and global ideology" (Young, 2021, p. ii). Cullen (2018) suggests that esports provides an environment and culture that is antifeminist and ties the idea of meritocracy to masculine gaming culture. The problem with this position is that there would not be Esports if there were no competitions based on capabilities; it would simply be gamer culture. Competition with winners and losers is the very foundation of Esports. So, tying genderless competition settings found in Esports to a gendered culture study is unfair and somewhat biased. However, Cullen does make some valid points like the fact that the majority of Esports competitors are male. The point to take away from these articles is that some negative cultural traits can be tied to the Esports culture.

However, there are also positive aspects to the Esports culture. An interesting study on diversity of team composition in Esports found that cultural diversity was a positive influence on results, but that skill level and language diversity negatively influenced results (Parshakov et al., 2018). They concluded that Esports managers should seek diversity but not thoughtlessly ignore language barriers and skill levels. Another study focused on how Esports caused the players to grow their social skills because of the team-based nature of many competitions (Nielsen & Hanghøj, 2019). Since video games can be solitary in certain circumstances, the social nature of team competitions helps some people who would otherwise not have as much social contact develop interpersonal life skills. Additionally, Esports gives team members a similar sense of belonging and social acceptance that regular sports provide in school-aged children and young adults (Harvey & Marlatt, 2021). In this study, Harvey and Marlatt report that similar to

traditional sports, Esports can be used in an educational setting to maximize these social factors to enhance academic performance and involvement in school culture. Professional Esports players practice around 50 hours a week with official training schedules, advertisement obligations, and other professional obligations (Jacobs, 2015). This fact is important because it shows that Esports can train for hard work and dedication within the workforce. Playing games may not seem difficult but using maximum focus and energy for 12-14 hours a day becomes exhausting no matter the activity (Nielsen, & Karhulahti, 2017; Paravizo & Souza, 2018).

Live Streaming

To connect video games to the final product of live game streaming, the other ingredient, live streaming, needs to be included. Live streaming is integrated enough into society that most people know what it is. Still, for the sake of consistency, a definition will be given. Live streaming is when a user sends live video over the internet of themselves or an event for others to watch and react to in real-time (Lu et al., 2018) For instance, this definition allows for events to be included like LGS, concerts (Live Stream Concerts, 2022; Rugg & Burroughs, 2016; Thomas, 2020;), Church Services (Bryson et al., 2019; Live Services and Events Guide, 2022; Struzek et al., 2019;), and just about any other activity you can think of, like swimming, woodworking, just chatting, podcasts, etc. (Dux & Kim, 2018). Many of these real-life streams occur under a category on Twitch called "IRL" or "In Real Life." This category which can be found simply by typing IRL in the search box on the Twitch main page is the landing place for most non-gaming live streams on the Twitch platform. The IRL page on Twitch is an excellent bridge between non-gaming streaming and LGS because it is located on a platform intended and built upon LGS in Twitch (which will be discussed more in the next section on LGS), but IRL is a category of other non-gaming activities that streamers can broadcast to the same Twitch audience. The

existence of such a channel on Twitch shows how interconnected the two concepts of LGS and general live streaming are.

History of Live Streaming. In this proposed research, live streaming is intended to focus on live video and audio streaming, not just the streaming of data without video. The first live video stream, or at least the first recognized live video stream, was in 1993 and featured a live concert performance of a band made up of Xerox PARC computer scientists and engineers called Severe Tire Damage (yes, they made the abbreviation of their band STD) (Bybyk, 2021; Meisfjord, 2018). This concert was seen as an opportunity to try out a new technology called Multicast backbone, so the band streamed their shows, which were intended for private audiences, to their colleagues at Xerox (Bybyk, 2021). The streamed video was about the size of a stamp, had a horrible frame rate, and still took up about half of the bandwidth of the entire internet at the time (Meisfjord, 2018). Just an interesting side note, according to Mesfjord, Severe Tire Damage was able to turn their "pirate radio" image into opening for Rolling Stones a year later.

In 1995 Real Networks developed a media player capable of adequately playing live streams, but the next major milestone live stream occurred in 1999 with a presidential town hall meeting at George Washington University being webcast live (Bybyk, 2021; Democratic Leadership Council, 1999). However, this event didn't really make live streaming a commercially used media format. There followed some other live-streamed events like YouTube Live in 2008. This was a major live-streaming event hosted by YouTube featuring big stars like rapper Will.i.Am and singer Katy Perry. Even after a fairly large event like YouTube Live, live streaming couldn't quite break into mainstream entertainment (Dobuzinskis, 2008; Bybyk, 2021; Meisfjord, 2018). It wasn't until YouTube developed its own streaming platform

in 2010 and Twitch became established from Justin.TV in 2011 that live streaming truly began to take off and become what it is now (Bybyk, 2021). The growth of Justin.TV into Twitch TV will be covered in the next section on LGS. However, the point to be taken away from this section is that in about 30 years, live streaming went from an underground technology test by some engineers to a media format that includes platforms like Twitch, YouTube Live (including YouTube Gaming), Facebook Live (including Facebook Gaming), Tik Tok, Periscope, LinkedIn, Twitter, Instagram and others (Bennett, 2022; Bous, 2022).

Live Game Streaming

The literature provided so far has expressed the process through which video games have tied into Esports and then how Esports tied into the live streaming medium to give birth to live game streaming (LGS). One of the main factors that runs through both LGS and some regular non-gaming live streams, is a focus on the personality of the creator. For instance, many of the largest LGS channels are simply creators like TimTheTatman, Dr. Disrespect, Nickmercs, XQC, and Dr. Lupo, who individually entertain their audiences while playing a game (Grayson, 2021; Mukherjee, 2022; Coulson, 2021). However, when live game streams are not personality based, Esports tend to play a large part in LGS content creation (Burroughs & Rama, 2015; Matsui et al., 2020; Wohn & Freeman, 2020). So, there is often a bit of overlap of LGS concepts when a large personality streamer also gets involved with Esports.

TimTheTatman, Dr. Disrespect, Nickmercs, and other similar streamers often focus their in-game content on competitive first-person and third-person shooters (FPS), thus connecting with an active and engaged esports audience (Cooney, 2022; Murray, 2022; Pal, 2022). First-person shooters are games that are basically like playing paintball through the eyes of the in-game character (Janzs & Tanis, 2007; Randomhouse, n.d.; Voorhees et al., 2012). Third-person

shooters are the same, but with the camera set slightly back further behind the in-game character rather than through the eyes of that character (Denisova &Cairns, 2015; Pötzsch, 2017). These types of games have a competitive aspect at their core, even if not played professionally, similar to how pickup basketball at the gym is still competitive even if it's not at an organized league level. Live game streaming (LGS) offers a diverse menu of gaming options, and not all LGS content creators focus on Esports. For instance, streamer Plyrocknation focuses primarily on horror and action games (Plyrocknation, 2022), RetroLongplay plays retro games (RetroLongplay, 2022), Pokemonchallenges plays various Pokemon games and creates challenges for himself to spice up the play of RPGs (Pokemonchallenges, 2022). Many other streamers like the ones listed above play all variations of games. To be clear, LGS isn't just Esports streamers and streamers focused on competitive multiplayer games.

History of Live Game Streaming. The history of live game streaming begins with live streaming, but that has already been covered. So, LGS history, as a separate entity from plain live streaming history, starts with the history of Twitch, and for those in the know, that means Justin.tv. Justin.tv was a live blog site for a man named Justin Khan and three of his friends, as they simply streamed their daily lives on the internet (Stargame, 2018). However, as Esports (competitive video game playing) rose in popularity, the focus of the content on Justin.tv shifted to video games as more users started streaming games on their platform. Once video games began to take over the platform, a decision was made by Justin and his friends to launch Twitch.tv to give these gamers their own space (Edge, 2013). After this shift was made to provide gamers with their own streaming space, LGS began to flourish. Other major online platforms like YouTube and Facebook took notice of Twitch's success and followed suit creating their own LGS platforms in YouTube Gaming and Facebook Gaming.

As shown in Chapter 1, Twitch, and live game streaming (LGS) in general, has grown into a major entertainment industry with both financial and social impacts. A large portion of people under the age of 49 now use live streaming and LGS as their primary entertainment source ("Daily Time Spent," 2020). Live streaming has even grown to the point where it competes with traditional media like TV and Movies (Restream Team, 2022; Wise, 2022; Yanev, 2020). Part of this movement of viewers away from traditional media platforms toward live streaming, and LGS in particular, has seen rapid growth over the past few years ("61 Streaming Stats," 2020; Gursky, 2022; Wise, 2022.) It has been suggested that this exchange in popularity of the platforms is due to the growing familiarity with online entertainment and online social engagement (Kemp, 2022; Leith & Gheen, 2022). Live game streaming has experienced an increase in viewership over the last three years, with 3.7 billion hours streamed in 2019 and 8.8 billion hours streamed in Q1 of 2022 (Brooks, 2022). That is over a double increase in hours watched in the last three years. To crystallize this concept, online content, mobile content, and social media all have higher daily usage percentages than linear TV viewership in 2014-2018 (Bayindir & Paisley, 2019).

With LGS growing in influence and fiscal importance, a bit more of a look into the LGS industry could be useful in cementing its status in societal prevalence. While there are many online platforms that support LGS, three platforms comprise 94% of the market: Twitch with 72%, YouTube Gaming with 13%, and Facebook Gaming with 9% (Byshonkov, 2022). Many other smaller platforms made up the final 6% but don't have a large enough footprint yet to focus on. These percentages roughly work out to hours watched as Twitch with 8.8 billion hours watched, YouTube Gaming with 1.4 billion hours watched, and Facebook Gaming with 1.1 billion hours watched (Q1 2021 Live Game Streaming Trends, 2021). To connect this information with what Brooks shared above, hours watched do not equal hours streamed and

vice versa. Also, there is a year difference in the stats (Q1 2021 vs. Q1 2022). Usually, there are more hours watched than streamed. Since multiple people will watch a stream, the hours watched are usually higher. This means these stats are showing growth in the industry as the hours streamed in the following year matched the previous year's hours watched. As a final stat to bolster the future of LGS, the age breakdown of the viewers (for Twitch) is as follows: 16-24 years old - 41%, 25-34 years old - 32%, 35-44 years old - 17%, 44-54 years old - 7%, 55+ years old - 3% (Clement, 2021). This data suggests that the younger generations are more apt to use LGS as a major form of entertainment and also that LGS has a future of growth in the entertainment industry with the younger people being comfortable watching streams as they age the same way that older generations are comfortable with the entertainment technology of their youth.

Live Game Streaming Culture. The topic of LGS culture is quite fluid as it is still developing and evolving. As has hopefully been established with the previous scholarship presented, it tends to blend aspects of video game culture, Esports culture, and live streaming culture. To echo this point, Benjamin Burroughs and Paul Rama (2015) wrote a paper expounding precisely this point, stating that the future of gaming is found through streaming media and technology found in Twitch's platform. One strong aspect of the culture brought about by this combination of Esports, live streaming, and entertainment is how spending is tied to on-air performances (Wohn & Freeman, 2020). Part of this spending pattern can be explained by the content creators leaning into impulse spending (Jiang & Cia, 2021). This type of spending has created an economic model that brands, content creators, and streaming platforms have recognized and leaned into (Chen et al., 2022). LGS content creators can evoke spending behavior in the viewers by evoking a sense of urgency, making them feel like spending is linked to belonging to the group and fulfilling other gratifications for the viewers through financial

engagement (Chen et al., 2022; Hilvert-Bruce et al., 2018; Jiang & Cia, 2021). Sometimes there is a pressure to perform which comes from in-game performance expectations found in the Esports environment (Wohn & Freeman, 2019), but sometimes it comes from the desire of the viewers to tease, trick, and engage the streamers and other audience members through sound effects, paid comments, and visual effects applied to the stream after financial engagement (Hilvert-Bruce et al., 2018; Karhulahti, 2016; Plyrocknation, 2022).

There are apparent social gratifications that drive the culture of LGS as well. The desire to socially belong, to be recognized, and to develop friendships constitute significant factors in the development of LGS culture (Dux & Kim, 2018; Ruberg & Brewer, 2022; Skardzius, 2020). As with every other social environment, there are both positive and negative interactions and relationships. There is a fairly significant amount of scholarship focused on how women are treated, viewed, and impacted by the LGS culture (Ruberg et al., 2019), as well as some racial (Woodhouse, 2021) and sexuality factors involved (Freeman & Wohn, 2020; Ruberg & Brewer, 2022). Some of the scholarship presented here on the negative cultural aspects of LGS tends to overly focus on or over-represent the worst parts of the LGS community rather than presenting the overall environment as a whole. Some of the previous scholarship mentioned in this chapter, as well as some scholarship by Kim and Kim (2020), has shown friendships and social connections are also a part of the LGS culture. This study will not delve deeply into these types of social and political topics but rather focus on a broader scale which can include the micro factors that impact streamers and viewers on more of a macro scale than these detailed topics afford. Basically, this study is looking at a larger section of the forest so as to not miss it for the trees.

Summary

Live game streaming (LGS) is a significant communication and entertainment medium that has a sizable fiscal footprint and a significant social impact. This proposed study seeks to fill some of the gaps in the LGS literature. By leveraging the theoretical perspectives of parasocial relationships, identity management theory, and social presence theory, this proposed research will explore LGS and the communicative interactions between content creators and their audiences. Firmly rooted in the socio-cultural tradition, this research seeks to understand how the communication environment impacts and molds the social culture of live gaming streaming (LGS). Up next, Chapter 3 will discuss the proposed methods and research design of this qualitative study.

CHAPTER 3: METHODS

Overview

As previously discussed in this study, live game streaming (LGS) is another entertainment avenue that heavily leverages communication technology and the ability of humans to communicate with each other over the internet. This communication process can impact the psychology and social cues experienced by the users, both content creators and the audience. However, this study uses the communication theories of parasocial interaction relationships, identity management, and social presence to give perspective and understanding to the cultural environment created within the LGS communities. Since live streaming combines the influence of traditional media with the communicative impact and emotional connection of social media (Tammy-Lin et al., 2019), it is ripe for research into how it socially impacts those engaging in it. Furthermore, LGS has been growing in popularity for years to the point that it is now competing with traditional media (Wise, 2022; Yanev, 2020; Restream Team, 2022). For example, in the first half of 2022, 71 million hours of content are viewed daily with 140 million monthly active users on Twitch, the largest LGS platform (Wise 2022). This clearly shows a broad communication reach and a broad social impact with that much viewership and interaction by the audience. Given these factors, it is worthwhile to explore how this communication pathway impacted the streamers (content creators) who rely on the socio-cultural factors inherent in LGS to generate viewership, camaraderie, and possibly a livable income as well as the community of audience members who follow them.

Research Method and Design

The design for this study is a qualitative content analysis case study with an emergent design. To start looking at the method and design it is best to start at the root of this research, and that root is qualitative research. Qualitative research "is primarily concerned with understanding

human beings' experiences in a humanistic, interpretive approach" (Jackson et al., 2007, p. 21). As this study is focused on interpreting the human experience of being culturally and socially impacted by a communication environment present within the live video game streaming community, that definition of qualitative research perfectly encapsulates the foundational ideology of this study.

The essence of qualitative research is finding the quality of an experience, or said another way, the distinction and differentiation of an experience (Aspers & Corte, 2019). This study seeks to apply common communication theories like identity management, parasocial relationships, and social presence theory to provide context through which understanding of this communication environment exists. There is a slight twist to how these theories will be approached in that the focus will be on the content creator as well as the audience. This differentiation in the application of common communication theories was applied to both the researcher's approach towards the topic and the assessment of the culture and environment impacting the individuals being studied and how they experience the LGS environment.

Once the decision to encapsulate the study in a qualitative framework was made, choosing to use emergent design content analysis of live game streams allowed the stories of those most immediately impacted by the socio-cultural effects inherent in the LGS environment to be told. The content analysis approach took on a thematic focus for the purpose of adding structure, clarity, and understanding to the data. To summarize, this study used thematic content analysis since the topic of this study requires finding themes to make sense of the interactions and cultural cues experienced by both the streamers and the online communities who engaged with the content as the themes emerged. This process brought about an honest and clear expression of how parasocial interaction relationships, identity management, and social presence theory had an impact on the streamers and their communities (Terry et al., 2017). Furthermore,

by choosing an emergent thematic analysis the stories of the individuals experiencing the impacts of LGS were able to be placed within a theoretical framework for accurate data analysis and descriptive presentation (Anderson, 2007, Vaismoradi et al., 2013).

This study also employed an emergent design to allow for adjustments and new information to be represented properly. "Emergent design involves data collection and analysis procedures that can evolve over the course of a research project in response to what is learned in the earlier parts of the study" (Given, 2008, p. 246). Humans, as subjects of social and cultural research, can be complex and unpredictable. As such, using a study design that allowed for adjustments and evolution of content seemed wise. Emergent design welcomes unanticipated information allowing for addition to depth and richness of data (Pailthorpe, 2017). This research used live communication in a large public forum between the streamer and audience members who are using anonymous screen names. The chance for unexpected actions and reactions seemed to be likely, as proved to be the case. By choosing emergent design, this volatility could be welcomed, and more authentic data was assessed.

Qualitative Content Analysis

Qualitative content analysis was chosen for this study as it seemed to best fit the purpose of the study as well as the data being collected. As Creswell and Poth (2013, p. 42) put it, "Like the loom on which fabric is woven, general assumptions and interpretive frameworks hold qualitative research together" To provide a less poetic definition the following is included:

> Qualitative research is a situated activity that locates the observer in the world.
> Qualitative research consists of a set of interpretive, material practices that make the
> world visible. These practices transform the world. They turn the world into a series of
> representations, including field notes, interviews, conversations, photographs, recordings,
> and memos to the self. At this level, qualitative research involves an interpretive,

naturalistic approach to the world. This means that qualitative researchers study things in

their natural settings, attempting to make sense of, or interpret, phenomena in terms of

the meanings people bring to them. (Denzin & Lincoln, 2011, p. 3)

This study looks at the streamers and their audience members, how they communicate,

and how this communication environment impacts the ever-evolving culture that is developing

within the LGS community. As the definition states, this study observes these people in their

"natural" setting and then interprets what occurrences are recorded. There were no interviews,

but the publicly available live streams along with their real-time chats were observed and

recorded without any direct interaction from the researcher. The theories of parasocial interaction

relationships, identity management, and social presence theory were then included to provide

thematic frameworks through which the content analysis can be filtered to make sense of the

data.

The function of using theories as thematic tools rather than foundational cornerstones is

that thematic analysis does not particularly hold to any one methodology for its use, but rather it

has a flexibility that allows it to apply to many different methods of qualitative inquiry (Terry,

Hayfield, Clarke, & Braun, 2017). This type of flexibility works strongly with the emergent

design and the communication environment found within the LGS. Using theories as sense-

making tools was the best way to record and analyze data without constricting and restricting

valuable data collection. The exact details of the information-gathering process will be discussed

in more detail further into this chapter under the appropriate headings.

Content Analysis. Since the main topic of this study did not require a long-term time

element, as it intends to express what content creators and their communities experienced in real-

time and in the current state of the LGS environment, the content analysis with the use of

communication theories to find various themes in data was chosen as the best course of action.

Various streamers (content creators) along with their communities' live chats were viewed and analyzed to decipher some of the elements that comprise how they experienced and interacted with the industry and the developed online social groups. Consistent content data types and themes were conjoined with relevant communication theories (parasocial interaction relationships, identity management, and social presence theory) to express a coherent assessment of the impact that the communication environment had on the culture and vice versa.

Research Questions Revisited

Central research question (RQ): What cultural and communication themes emerge from the observation of live game streams?

RQ1: What observed interactions indicate parasocial relationships between the live game streamer and the audience?

RQ2: What role does social presence seem to play in the live game stream communicative environment?

RQ3: What observed interactions indicate how streamers and their audience navigate identity management within the live game streaming environment?

These four questions are the driving force behind this research. In order to understand how the communication environment builds, relies on, and retains the culture found within LGS, looking at the themes of the content being produced by the creators as well as finding themes within the reciprocal communication that occurs between streamer and community was needed. Thus, thematic content analysis was chosen as the primary data collection method, with supporting sources used to clarify and define the data. Through content analysis, the way that content creators present their on-air personalities, present their video content, and communicate with their audiences provides insight into how the culture is built. Also, looking at how the

communities (audience members) communicate back to the streamer as well as with each other in real-time provided cultural cues for analysis as well. This data was enhanced and clarified using communication theories such as parasocial interaction relationships, identity management, and social presence theory. For instance, are the parasocial interaction relationships only forming from the audience towards the streamer, or did the streamers also start to form emotional connections back toward the audience? Basically, answering the chosen research questions was the best way to get a grasp on what causes the LGS culture to function and thrive through witnessing it and processing that data through communication theory.

Setting

As elaborated in the first two chapters, the setting for the study existed within the live game streaming (LGS) environment. LGS has become a major entertainment category that significantly impacts the cultures of the countries within which it exists (Wise, 2022; Yanev, 2020; Restream Team, 2022). For example, LGS, a significant subset of the overall live-streaming category, has seen a substantial increase over the last three years, with 3.7 billion hours streamed in 2019 and 8.8 billion hours streamed in Q1 of 2022 (Brooks, 2022). So, the choice was made to understand the prosumers of the LGS platforms and what motivates them through the impact of the three chosen communication theories. LGS is a unique entertainment environment in that the audience has instant communicative access to the on-air talent as well as the ability to be a part of the show through that communication channel (Wang, 2019). This unique feature of LGS creates an interesting entertainment environment for both viewers and content creators, which is ripe for research, especially on the side of the streamers. This researcher has spent multiple years as a streamer and content creator in the LGS environment. As such, some internal insight and curiosity spurred the choice of LGS as the setting for academic research.

To be sure, the LGS environment has been studied before (Kaytoue et al., 2012; Jia et al., 2016; Li et al., 2020). However, there does seem to be a vacuum when it comes to using the theories chosen for this study to assess both streamer behavior and audience behavior rather than just looking at audience interactions. There have been uses and gratifications studies done on the part of the consumer/viewer (Cai & Wohn, 2019; Hsu et al., 2020; Dux & Kim, 2020), but the gap in scholarship exists when communication theories are applied to the content creators, and that is another reason why this setting was chosen. In fact, trying to parcel out and understand how the content creator impacts the culture of their streaming communities required the use of all three theories mentioned earlier. The use of the primary theories in this study helped to provide an understanding of the culture yet to be fully engaged through academic research.

Participants

This study's purposive sample included participants who are active in the live game streaming industry. Participants were categorized as either participant streamers (originators of the live stream) or audience members (both commenting viewers and passive viewers). Purposive sampling is used in naturalistic inquiries and involves selecting participants (or other units) based on the purpose of answering the research questions (Teddlie & Yu, 2007). This matches up with the credibility and overall trustworthiness aspects discussed later in this chapter. The content of the live streams was recorded using capture software such as Stream Labs OBS and stored on an encrypted hard drive which is stored separately. The subjects were streamers and their communities who are mostly classified as being in the First-Person Shooter (FPS) genre. The streamers are chosen for their genre, mostly focusing on first-person shooters. The channels are also chosen based on audience size and live chat activity. However, there were some different genres included to provide contrast and context to the main content theme. There is also some broad variation in the size of the streamer audiences, to gauge how population

impacts the results. The size of the concurrent viewership (average number of viewers at one time) varied from twenty to the tens of thousands. These participants are precisely who the research questions focus on, and so this aspect of transferability is exceptionally solid. The information is highly applicable across other LGS studies, live streaming studies, and entertainment at large studies.

Sample Selection Criteria

As was stated before the sample is purposeful. It will be based on the content of the channels and audience size. To be specific, the criteria were first-person and third-person shooter live gaming streamers with a few variety streamers added for context with concurrent viewer numbers between twenty and tens of thousands. There were some very low-level demographics based on streaming genre categories. The choice was made to find a purposeful sample through channel size diversity rather than strict genre diversity. However, some genre diversity was included. The sizes of the audience were categorized into small (20-500 average concurrent viewers), large (500-5000 average concurrent viewers), and exceptionally large (5000+ average concurrent viewers). Audience size was also categorized into follower numbers which matched with the concurrent viewer numbers. For instance, streams with 1000 -10,000+ followers had a concurrent viewership of 200 - 500, those with 100k – 1 million followers had concurrent numbers of 500 - 5000, and those with 1million+ followers had 5000+ concurrent viewers.

Another category used was whether or not the streamer presented a personality that is their own, or if they play a character on screen. All the streamers will be publicly available on their various streaming platforms (Twitch, YouTube Gaming, Facebook Gaming, and Kick), and the audience members will be using screen names while only communicating within an on-screen public chat box during the stream. So, both audience anonymity and privacy were protected as much as possible for a publicly available stream and it was at the sole discretion of

the users. For instance, an audience member could have named themselves BlueApron and have

no connection to their real-world selves or they could have chosen to use their real name. The

only comments that are recorded are public comments and thus are entirely up to the discretion

of the user as to how much exposure they receive.

Observed Streamers/Content Creators

Streamers, the first category of participants, are the individuals who host the shows and

manage the channels as the owners and CEOs of their brands/companies (Coulson, 2021;

Tamkin, 2021; Chalk, 2021). They are fully aware of, or at least are fully responsible for, the

public exposure they receive. This study observed active live game streamers who publish their

content on publicly accessible streaming platforms. The actions of the observed streamers are

how they present their planned content to the audience, but also included is how they interact

with and communicate directly with the audience. These streamers are observed by using their

live streams which are also recorded. This method of observation allowed the researcher to

observe the streamers in their element without influencing their delivery or decisions in any way.

Their communication with the audience was recorded in an authentic and real-time manner,

producing results that provided genuine insight into how on-air behavior influences the culture

that envelopes the community as a whole. This process is further covered in more detail under

the data collection section below.

Observed Participants

The second category of participants is the audiences of these streamers. These are people

who watch the streams, communicate with the streamers and each other through live text chat,

and will also include those who simply "lurk" or watch but don't engage the community in any

way. The audience participants are divided into two categories; active participants, those who

comment and interact back with the streamer, and passive participants (lurkers), those who

simply watch the stream and read the chat without engaging in the stream themselves. Even though the audience members are not being interviewed, they are observed participants who entail a vital factor in the communicative environment that impacts and develops the culture found in LGS. The researcher observed in a totally passive manner and did not add comments or interact with the participants in any way. More details about this process are covered in the data collection section of this paper as well.

Anonymity of Participants

The participants' actual identities remain anonymous, which allows for the collection of the most genuine and accurate data. The collected information is publicly accessible; community members can select screen names that do not directly link to real-world identities. Streamers only disclose the data they wish to make public. Only the streamers' publicly available information was used for categorization and reference. The viewers enjoy at least the same level of anonymity, if not more, with their self-selected screen names being the sole identifiers. Unless there was a compelling reason to scrutinize this information, all names and pseudonyms were presented as chosen by the users themselves.

Observations. There were eight distinct content creators/streaming channels chosen for this study. Each streamer was recorded for at least 10 hours each (between 2 and 5 hours per stream minimum) during multiple streams for video analysis, data acquisition, and validation. Some streams had as many as 20+ hours viewed and recorded. The total time spent on content collection reached 200+ hours of raw recorded content. Much of the recorded content is simply repeated conceptually and as such was not transcribed but was still viewed and recorded. The process used in the video analysis is discussed in greater detail later in this chapter within the data collections section.

Procedures

This research, while technically a case study, has evolved into a hybrid form that combines elements of a collective case study and digital ethnography (Creswell & Poth, 2017). It amalgamates multiple cases to form a singular cultural observation. The study exhibits ethnographic characteristics as it aims to comprehend the culture and practices within the LGS community (Creswell & Poth, 2017). However, the culture was studied by observation through multiple cases without engaging the culture directly. The researcher does have experience with the culture and has been a part of it prior to this study, but that experience is simply used to provide context and deeper understanding rather than being an active part of the study's procedural process.

The case study procedures adhere to a pattern of case identification, intent expression for case selection, data collection from various sources for a comprehensive understanding of the central topic, data analysis, and conclusion presentation (Creswell & Poth, 2017). This process aligns with Lincoln and Guba's (1985) summary of problem identification, context understanding, issue exploration, and lessons learned.

The studied cases were identified by the researcher being a part of the streaming community and observing the culture and communications environment. Curiosity arose as to the impact that the form of communication present within LGS had upon both the audience and the streamers themselves. As R.E. Stake (2006) points out, case study involves minimizing intrusion and observing the ordinariness of the case. As such the researcher has removed themselves from the environment to ensure they do not impact the culture from within it. Secondly, the culture was perceived to be unique in that it combined the influence of traditional media with the communicative impact and emotional connection of social media (Tammy-Lin et al., 2019). With online streaming, especially live game streaming, increasing in popularity and usage

(Muralidharan, 2021; Forrester, 2021; Clement, 2021), the need for study into how this communication environment creates or impacts the rapidly growing culture present within the LGS industry and communities became apparent.

To be sure, there have been a few research papers written about how communication theories already mentioned in this chapter affect the audience members in a live streaming environment, however, the streamers themselves have been neglected in these regards. Also, the actual connection of the communications environment to the resulting culture and relationships developed was still somewhat lacking. So, this research also aimed to breach new grounds by providing a heavier focus on the streamer and investigating how impactful these theories are on both ends of the communication pathway instead of just one. There is especially a uniqueness in the way this study combines the three theories of parasocial interaction relationships, identity management, and social presence theory to form an interconnected and mutually reliant concept. They ended up not being three separate theories that just happened to relate to the topic, but rather intertwining theories that built and fed off of each other in an almost cyclical manner. So, with the intent of the study covered, and the realm of the cases identified, a more detailed focus on the exact procedures should be presented.

Streamer Selection

While the streamer selection process has been described previously in this chapter, for the purpose of this section, it will be repeated here once again, but with more emphasis on the exact criteria for each. First, the selection process was semi-random because multiple platforms and audience sizes were used as criteria. Further, there are no official comprehensive lists of ranked streamers that would supplement this study's selection criteria. Additionally, the sheer volume of active streamers available on the various platforms limited the value of ranking lists. Thus, the semi-random purposive selection process leveraged platform-based searches coupled with genre

and audience size criteria to reduce potential researcher bias. There was a focus on first-person and third-person shooter streamers, with a few variety streamers (plays different genres of games instead of mostly one genre type) added in for context and comparison. The size of the streaming community channel varied as well, as the size of the community can impact how the communication occurs. The number of concurrent viewers will range from 20 for the smallest stream to tens of thousands for the larger streamers.

Both TimtheTatman and Doctor Disrespect were well within the "extremely large" category with close to 5 million subscribers each and concurrent viewership into the tens of thousands. So when a search on YouTube Gaming for first-person streamers was conducted they were some of the first streamers to show up. The same process was followed with CourageJD. With 4 million subscribers and 1.5k-2k concurrent viewers, he was smaller than both Doc and Tim but was large enough to settle into the upper echelon of the four middle-sized streamers chosen.

After having some of the upper end of the streamer size selected through YouTube, Facebook Gaming was perused for streamers in the next size tier. This is where StoneMountain64 was chosen as the largest streamer on that platform, with 3.4 million followers and between 2k and 3.5k concurrent viewers. Then, looking for smaller but still mid-sized streamers, Spartakus (360k followers and between 1k-2.5k concurrent viewers) and AverageDad (437k followers and concurrent viewership between 1k-2k) were chosen. Finally, Twitch was chosen as the platform. At this point, the only needed size were small streamers. This is where Plyrock (1.5k followers and a concurrent viewership of 25) and MenziesxMedia (1.5k followers and a concurrent viewership of 20) were chosen from a list of smaller streamers. Also, Ply and Menzies were chosen because they played with more variety of game genres than the other streamers and the variety would help add some balance to the results.

Content Viewing and Capture

The researcher recorded the streams in real time. These types of narratives are referred to as "field texts" by Connelly and Clandinin (2000). Field texts can be gathered from various sources such as journals, field notes, transcribed texts, collected letters, memos, and similar documents (Cresswell & Poth, 2016). In this study, the recorded videos or transcribed segments of live streams function as field texts, serving as a form of video journal. The context for this process is provided by the genre of the games played by the streamers, their on-air personas, the social culture of their communities, and the overall culture of LGS during the study period. This is the origin of the multiple information sources mentioned by Creswell and Poth (2017). The live streams were recorded using a screen capture software named "Streamlabs OBS" and stored on a removable, encrypted hard drive. As previously mentioned, the volume of recorded content varied, but it was never less than 10 hours per streamer (8 in total) and could extend to over 20 hours if the stream offered a diverse range of content. Sequences of particular relevance in either on-air content or in-chat conversations will be transcribed and coded.

Analysis and Presentation

The next procedural step is to analyze the data. This is where the theories of communication will be used as sense-making tools. The communication and content within the streams were processed using the theories of identity management, para-social interaction relationships, and social presence theory to provide insight into the happenings and how the culture is developing. The similarities and differences that impacted the results and gave possible hints as to the underlying principles of emotional and psychological cause and effect happening within the LGS communication environment are highlighted. Once the videos and transcriptions were analyzed themes, commonalities, and outliers were noted and highlighted for presentation.

Finally, all of this information is combined and presented with suggestions for further research to provide a conclusion, thus fulfilling the final procedural step for case studies.

The Researcher's Role

In this study, the researcher served the role of the research instrument, gathering and collecting the data through observation of live and recorded video analysis. In qualitative research, the researcher is the human instrument through which data is gathered and analyzed (Haynes, 2012). "In other words, the qualitative researcher uses 'his or her eyes and ears and filters' to collect, analyze, and interpret the data" (Wa-Mbaleka, 2019, p. 34). This approach allows the researcher to immerse themselves in the subjects' personal experiences with the phenomena under investigation (Nasim et al., 2016; Brisola & Cury, 2016). However, it is important to note that using a human as the data collection instrument can introduce potential flaws and biases; researchers must be vigilant about maintaining the integrity of their process (Pezalla et al., 2012; Poggenpoel & Myburgh, 2003; Stewart, 2010). Yet, the unique perspective and characteristics of the researcher can enhance the authenticity and accuracy of content analysis results (Pezalla et al., 2012). This study aims to leverage the researcher's familiarity with the LGS industry, its culture, norms, and jargon, to foster an understanding of LGS culture and gain deeper insights into the communicative environment and the underlying meanings in these conversations that might otherwise be overlooked by those unfamiliar with the context.

Reflexivity

The ability to reflect upon one's own actions and biases is an invaluable life skill. The research conducted within this study should reflect that principle. The researcher admittedly has connections to the culture, industry, and environment being studied. They have performed as a streamer themselves on a significant level for a few years. That experience included streaming for three to four hours a day for a minimum of five days a week and making around $1k a month

from streaming. Personal experience is part of what led to the desire to study the topic involving the LGS in the first place. Seeing how other streamers performed their shows compared to who they were behind the scenes heavily impacted the researcher's desire to understand the socio-psychological and socio-cultural effects that derived from the communication environment unique to LGS. The researcher attempted to be as aware as feasible of the possible biases that can occur from personal experiences, and instead turn that experience into a positive position of being able to frame what is observed into a more digestible format for academic research purposes. The researcher is not currently working as a streamer. Their past experience with the LGS environment, both good and bad, was also considered when analyzing the stream chats and videos. To be clear, the researcher has a neutral outlook on streaming as a social and moral force and is fully aware of the many positives and possible flaws and issues that exist within that culture.

Data Collection

"Qualitative research is inquiry aimed at describing and clarifying human experience as it appears in people's lives" (Polkinghorne, 2005, p. 137). When trying to describe the human experience through qualitative research, there are a few data collection methods that are the most common. Among those methods are interviews, focus groups, surveys, document analysis, observations, and audio and video analysis (Saadeh, 2020; Cresswell & Poth, 2016; Gill et al., 2008). The primary source of data for this study came from observations of the live streams and chats as well as audio and video analysis of recorded content using video recording software. These streams are stored on an encrypted hard drive and relevant portions were transcribed for future analysis. Twitch, YouTube Gaming, Facebook Gaming and Kick were the primary sources for the streaming content. The video recording software used were Streamlabs OBS and OBS Studio. Both can record individual windows, apps, or the entire screen if needed, along

with all audio. This allowed for both the content and the text chat to be recorded for later analysis and transcription apart from the content creator's possible edit of the content found in archived postings. All the streams were publicly available at the time of the live stream, with screen names chosen by the community used within the chat.

This observation process allowed the researcher to assess the community involvement through the live chat and third-party engagement applications as well as the engagement from the streamer towards the community and the communication occurring between the two parties. Observing the live streams led to the use of previously mentioned communication theories to explain the cultural impact occurring. O'Conner (2005) described qualitative observations as "the process of immersing yourself in the study of people you're not too different from" (p.5). When observing participants, the researcher tends to be passively involved, as the researcher will not want to indirectly impact the results by possibly shaping the participants' behaviors (Qaddo, 2019). In the case of watching a live stream, the passive observation was fairly easily accomplished as the interaction is online and text-based, allowing for near complete anonymity by the researcher. By watching the live streams, both the streamers and their community could be observed and analyzed simultaneously.

Data Analysis

The qualitative data analysis process involves transformation and interpretation (Richards and Morse, 2007). This is to say the researcher is taking a spectrum of somewhat unrefined data and then condensing and clarifying the underlying themes at play so that it presents a story (in the case of narrative design) that explains how a human experience is occurring. However, there is usually a large amount of data in qualitative research, and there is a fine line between being immersed in that data and drowning in it (Seers, 2012). Seers mentions that the first step to avoid drowning is to organize the data by coding it in some way. Creswell & Poth (2018) describe the

coding process as "(reducing the data into meaningful segments and assigning names for the segments), combining the codes into broader categories or themes, and displaying and making comparisons in the data graphs, tables, and charts" (pp.183-184). This process started with taking notes during the viewing of the streams and making special note of reflective comments and events. Then the notes were summarized with important comments and events noted with both broad and specific phrases or words, capturing themes, patterns, and repetitive concepts that arose. The researcher then created categories that encompassed the relation of the themes, patterns, and repetitive concepts. Using literature and theories to provide context the researcher was able to create an understandable point of view for the readers and then presented that point of view.

There is also the question of inductive versus deductive reasoning, which also applies to qualitative data analysis (Trochim, 2006). "Arguments based on experience or observation are best expressed inductively, while arguments based on laws, rules, or other widely accepted principles are best expressed deductively" (Soiferman, 2010, p. 1). However, Creswell and Plano Clark (2007) explain that deductive research works from a theory towards hypotheses to data and contradicting theories while inductive works "bottom up," using the views of the participants to create broader themes and connect themes. From these definitions, this study used both inductive and deductive reasoning in the data analysis. The study inductively analyzed collected data for themes, patterns, and categories. While deductive analysis was used to connect the data with the study's theoretical framework.

As previously stated, this study used the codification of transcripts to identify common themes that arose in the participants' answers. For instance, when multiple streamers presented an intentionally false personality (playing a character) while on air because it allowed them to manage the identity they wished to present to the audience in order to develop a particular

culture and communication environment, that was coded as a particular form of identity

management and parasocial interaction which influenced the way they use the medium. Analytic

notation was used to connect ideas and common themes within the transcripts. With disciplinary

backgrounds as a major influence on what was considered relevant data (Baily, 2008), a

communication focus dictated the focus of the codification process.

Trustworthiness

Trustworthiness is a foundational building block of qualitative data management (White,

2012). This is why "researchers should maximize data utility to answer the research questions"

(para. 4). Trustworthiness should be applied and scrutinized in every phase of the analysis

process, including the preparation, organization, and reporting of results (Elo et al., 2014). That

is why even the origination of LGS as the topic of study is being presented for review. When

evaluating credibility, the criteria for reliability and validity are similarly used in both qualitative

and quantitative research (Emden & Sandelowski, 1999; Koch & Harrington, 1998; Ryan-

Nicholls & Will, 2009). Schreier (2012) comments on this concept in that there doesn't appear to

be a clear dividing line between qualitative and quantitative data analysis. He also notes that both

types of research use similar terms and criteria for reliability and validity. Yet to relate this

information to this study, the focus was on qualitative criteria when evaluating aspects of validity

in content analysis (Kyngäs et al., 2011).

The purpose of trustworthiness in a qualitative study is to support the researcher's

argument that the findings are worth paying attention to (Lincoln & Guba, 1985). Since this

study uses both inductive and deductive reasoning, establishing a consistent standard of

trustworthiness was essential. As such, there are four primary terms that Lincoln and Guba

proposed in 1985 that are used in this study; credibility, dependability, conformability, and

transferability, with a fifth term, authenticity, being added to the list later on in 1994 (Elo et al., 2014).

Credibility

Lincoln and Guba (1985) used the term credibility to replace the prior term internal validity because they found that much of the presumption for internal validity came from the idea that there was only one reality. However, with qualitative research, there are multiple perspectives and thus, multiple realities as far as the participants are concerned. Therefore, in their system, credibility provides the breadth of possibility to still present an accurate result with multiple perspectives. White (2012) explains that for credibility to be established, the researcher must have satisfactory cultural familiarity with the participating environment. This familiarity is needed because for the researcher to process the sampling honestly and accurately; they must understand the subject matter of which they are studying. This was the first facet of the trustworthiness applied to this study, as the researcher is significantly familiar with the LGS industry and culture, with the researcher possessing years of experience in that industry. This experience allowed for an understanding as to what data relates to the communication topics and which are better suited for other fields of study.

Moreover, participants' input must be honest, clearly recorded, and accurately presented (Whittemore et al., 2001). Since the streams and chats presented in this study were recorded for the entirety of their viewing, stored on multiple hard drives, online storage, and via transcript, the honest, clear, and accurately presented aspects of credibility are covered as well. Furthermore, there is a triangulation of the data through live stream viewership, which includes the live stream chat, and relevant research literature for higher credibility. Member checks are where the interpreted data is sent back to the participants for their evaluation of the conclusions (Anney, 2014). This was planned to be used to "control the obliteration and biases of inquirer during the

analysis and interpretation of the results" (Anney, 2014, p.10). Basically, this is providing a method of checking back in with the content to ensure that quotes weren't misunderstood or taken out of context. To ensure this aspect is as validated as possible, multiple reviews of the transcripts against the recorded content will be conducted rather than participants surveyed because of anonymity. There is one more action that increases credibility, and that is persistent observation (Bitsch, 2005). This is settled by the amount of time spent in observation. So, the 200+ hours of streams watched, and the years of experience within the industry leading up to this study satisfy this criterion.

Dependability and Transferability

Dependability and transferability are similar concepts in that both focus on ensuring that the research design and operations are distinctly identified (Guba, 1981). The purpose of verifying these factors in research is that they allow for the replication of methodology with an expanded scope or simply replication by future researchers. "However, it is important to differentiate between the *dependability* of a method in producing similar interpretations, and the *reliability* of a method in producing identical results" (White, 2012, para. 5). Qualitative (dependability) research focuses on describing the participants' experiences with accuracy, whereas quantitative (Reliability) focuses on using numbers to describe a phenomenon. Sandelowski (2000) further clarifies that interpreting the results, providing valid applications of analysis, and collecting knowledge so that other researchers can build off of it are essential for validating data from a qualitative study.

This study's dependability was established by employing the following three strategies: (1) an audit trail, (2) a code-recode strategy, and (3) peer examination (Chilisa & Preece, 2005; Krefting, 1991; Schwandt et al., 2007). This is basically the act of keeping the data in raw formats as well as a record of how the researcher received the data. The intent is to show how the

data was collected, recorded, and analyzed (Bowen, 2009; Li, 2004). As stated before, all data was backed up on multiple hard drives, online storage, and transcribed. There were clear time stamps and process trails as to how and when the data was collected. Code-recode strategy is simply coding the data, giving the researcher a 2-week gestation period, and recoding the same data. Then the coding is compared to ensure they match or, if different, find out where the differences occurred (Chilisa & Preece, 2005). Peer examination was provided by this researcher's three-member dissertation committee.

Transferability refers to the degree that which the results of a qualitative study can be transferred to other contexts or settings by other researchers (Anney, 2014). This means there should be ample description of the research process so that others can follow suit and apply the core of the research to their purposes. This type of data has been referred to as thick descriptive data (Li, 2004). Shenton (2004) explained, "without this insight, [thick description] it is difficult for the reader of the final account to determine the extent to which the overall findings 'ring true'" (p. 69). The context within which the study was conducted has been heavily described in this study within the first three chapters, and the actual live streams were aptly contextualized upon recording.

Confirmability

Confirmability is exactly what it sounds like; it is the degree to which the results of a study can be confirmed or corroborated by other researchers (White, 2012). Confirmability's purpose is to guarantee that the results of a study are not "figments of the inquirer's imagination but are clearly derived from the data" (Tobin & Begley, 2004, p. 392). This can be achieved through practices like a reflexive journal, audit trail, and triangulation (Bowen, 2009; Koch, 2006; Lincoln & Guba, 1985). Since these three practices have already been discussed in some detail prior in this study, confirmability has been taken seriously and addressed adequately.

Ethical Considerations

The protection of subjects is vital to all research studies. This is accomplished through the application of appropriate ethical principles. With the subjects of this research being streamers whose means of earning a living are tied to the industry and culture being studied, ethical considerations are taken very seriously within this study. Also, the audience members were also heavily considered when applying ethical recording methods. While this study observed public, online interactions and does not include interacting with any human participants, protecting the identity of observed subjects remains essential.

A method of ensuring ethical research is preserving the anonymity and confidentiality of the participants (Munhall, 1988). This goal was accomplished to the degree that the participants themselves allowed. In the actual manuscript, the names of the participants will be limited to only what each participant chose to publicly reveal during the streams. The streamers were categorized by genre, size, and streaming platform, and the audience members were simply listed according to which stream they were recorded interacting with.

<div align="center">

Chapter Summary

</div>

The research conducted in this study is a qualitative digital ethnographic content analysis case study with an emergent design. It used an observation of audio and video content data collection method, which was then contextually compared and contrasted against relevant literature for analysis. The study focused on how the communicative environment of live game streaming impacts the LGS culture at large, as well as the effects on both the individual streamers and their communities during live game streams. There is also a focus on how prevalent communication theories have helped provide clarity towards the way streamers conduct their shows and communicate with their audiences. The qualitative content analysis case study design allows for the culture found within the LGS to be understood from the perspective

of the communication environment's impact. Qualitative content analysis allowed the researcher to explore the communicative environment in the live game streaming (LGS) context. The topic of LGS and its cultural environment is one that the researcher is familiar with, but the particular avenue of analyzing how these particular communication theories explain the content creators has been untapped for research purposes. This study worked to explain how the communication environment impacts the streamers as well as their communities using communication theories to provide deeper context and meaning when applicable.

CHAPTER 4: FINDINGS

Chapter 1 encapsulates key background information on theories of parasocial interaction relationships, identity management, and social presence theory, and their relevance to live video game streaming. It further elucidates how the research is anchored in the sociocultural tradition. Chapter 2 offers an exhaustive review of pertinent literature and traces the evolution of live streaming, with a specific focus on live video game streaming. It presents current statistics, historical trends of the medium, and additional insights into the foundational theory and tradition employed in the research.

Chapter 3 delineates the methodological blueprint of this qualitative content analysis, justifying the chosen approach and revisiting the research questions. It also scrutinizes the data collection and analysis procedures, followed by a discourse on the reliability of the methodology.

This chapter presents the outcomes of data collection, viewed through the lens of the research questions. It explores the common themes within different tiers of live game streams and an examination of the community and culture building observed within these streams. This chapter also provides a comparative study of content structures between large and smaller live game streaming (LGS) channels and evaluates the elements that foster the strongest personal bonds between the community and the streamer.

Sample

As outlined in Chapter 3, the data collection procedure involved observing and documenting variously sized streaming channels from the three leading platforms: YouTube Gaming, Facebook Gaming, and Twitch. The streams predominantly featured live gaming content from first-person and third-person shooter genres, supplemented with a selection of various streamers for context. Viewer counts ranged from 20 to several tens of thousands concurrently, with follower/subscriber counts spanning from 1,000 to over 5 million. Basic demographic data were gathered based on streaming genre categories.

The sampling strategy prioritized diversity in channel size and platform over genre. Nevertheless, some genre diversity was inherent due to the selection of streamers, providing additional insights into the cultural evolution of specific channel communities. Audience size was classified as small (20–100 average concurrent viewers), medium (500–5,000 average concurrent viewers), and large (5,000+ average concurrent viewers).

All streamers were publicly accessible on their respective platforms (Twitch, YouTube Gaming, and Facebook Gaming), and audience members, identifiable by screen names, interacted exclusively within a public chat forum during the stream. Data collection took place over 4 months from August to November 2023.

Participants

Eight streamers were included in this study. The primary factors used for selecting the streamers, as mentioned in Chapter 3, were the genre of games being played needed to be primarily shooters (either first-person or third-person), and the size of the channel in terms of followers/subscribers and concurrent viewership needed to vary from small to medium to large. There were two exceptions made for the sake of contrast and comparison where Plyrock Nation is a variety streamer, meaning he plays different genres of games, and MenziesxMedia, though not a pure variety streamer, did play something other than a shooter in one of his streams.

Streamers were selected through natural discovery and the research's knowledge of significant streamers. For example, the researcher knew of Tim the Tatman and Doctor Disrespect prior to the study but discovered Average Dad and Spartakus through random discovery upon visiting the various platforms and searching for the genre classification of the streams games being listed as either First-person shooter or Third-person shooter genres. The streamers were also chosen based on follower numbers and concurrent viewership numbers. It is important to know that Twitch is the largest streaming platform, and the two streamers chosen for this study from that platform were chosen because of their style, and the need for smaller streamers, but Twitch as a platform has just as many large-scale streamers as other platforms.

YouTube Streamer #1 – Tim the Tatman

Tim the Tatman is a YouTube Gaming streamer with 5 million+ subscribers and consistent concurrent viewer counts of 20k-40k+ per stream (TimTheTatman, 2023). Tim has been streaming and creating gaming content for over ten years. During this study, his primary games were shooters Fortnite and Call of Duty. Tim gives off the personality of a "bro." He is positive and likes to tease and be teased by his community of viewers. His content begins with real-time communications back and forth with his viewer chat box, then shifts in focus to in-

game content. Live streams were observed on August 3rd, 4th, 8th, 10th, and October 14th, 2023.

YouTube Streamer #2 – Doctor Disrespect

Doctor Disrespect is also a YouTube Gaming streamer with 4.5 million+ subscribers and consistent viewer counts of 20k-40k+ (DrDisRespect, 2023). Doc, as he is known to his audience, has been streaming for over a decade and uses a persona. Doc wears a wig and costume to create a character that won video gaming championships in 1993 and 1994. This character acts like an entitled pro gamer and uses that antagonism to verbally jockey back and forth with his community as well as be washed in praise. That is the schtick, he is either telling them off or they are providing him with exaggerated compliments similar to the Chuck Norris jokes which are popular. For a quick example, during the August 9th stream a chatter stated, "His black steel is not even moving in the wind" (DrDisRespect, 2023). This was in reference to the in-game character he is controlling moving around quickly, but the webcam showed Doc having his wig (which Doc named Black Steel) not blowing because he is too cool for the wind to affect him. Doc also usually starts his streams with a bit of a skit and conversation with the viewer chat before starting to play his primary games which are first-person and third-person shooters, which he can sometimes change in the middle of his streams if he gets frustrated with the prior game. Live streams were observed on August 4th, 9th, 23rd 2023.

YouTube Streamer #3 – CourageJD

CourageJD is the third and final YouTube Gaming streamer focused on during this study. Courage has 4 million+ subscribers and concurrent viewership between 1.5k-2k (CourageJD, 2023). The persona Courage uses on-air is intended to be seen as his real personality. Courage was a professional announcer for professional esports leagues before starting his career as a full-time streamer (James, 2020). He is a positive vibes streamer who treats chat participants as just

some friends hanging out with him. Courage sometimes streams with TimtheTatman and Doctor Disrespect if they happen to be playing the same games during their streams. Live streams were observed on August 7th and 21st 2023.

Twitch Streamer #1 – Plyrock Nation

Plyrock Nation (streamer refers to himself as Ply) is a small streamer on Twitch with 1.5k followers (the same thing as a subscriber on YouTube Gaming) and a concurrent viewership of 25 (Plyrock Nation, 2023). Ply is known as a variety streamer in that he plays a large variance of video game genres. The show is more focused on the audience interacting with his personality than the games he plays. Ply has been streaming for six years. Ply is a persona intended to resemble a World Wrestling Entertainment heel character with a heart of gold, meaning he playfully antagonizes his audience in an obviously outlandish manner, encouraging his chat to tease him or interrupt his streams. He will have moments where he shows his real personality show when he thanks chat for their participation, or if it is a charity stream he shows that he is actually a good guy. He pretends that the audience interrupts and messes with his show when they play sound effects (Blerps), post-digital stickers on the screen, and use digital cards that have instructions he has to follow. He also has in-stream rewards so if people pay for subscriptions up to a certain amount he will eat spicy food, drink cannabis water, or dress up in silly costumes. The community plays along and gives him money through these events even when he is acting like they are upsetting him. Live streams were observed on August 6th, 8th, and 13th 2023.

Twitch Streamer #2 – MenziesxMedia

MenziesxMedia is another smaller streamer who uses Twitch with 1.5k followers and a concurrent viewership of 20 (MenziesxMedia, 2023). Menzies was discovered by the researcher while watching Ply's stream when Ply decided to "raid" or send his viewers into Menzies'

stream directly from his own. Menzies is a high-energy streamer/music producer whose channel's motto is LSP (Love Support and Positivity). He is highly focused on interacting with the audience and creating a party-like atmosphere lights flashing, audio cues, and DJ-type music activities. His on-air persona is one of authenticity and is supposed to represent his real-life personality. The dates of the streams watched were August 4th, 9th, and October 13th, 2023.

Facebook Gaming Streamer #1 – StoneMountain64

StoneMountain64 is a large streamer on Facebook Gaming with 3.4 million followers and between 2k and 3.5k concurrent viewers (Stone Mountain64, 2023). StoneMountain is heavily focused on First-Person Shooter games, and most specifically Call of Duty. He is a positive personality streamer who is intended to be experienced as his real personality. Stone Mountain is known for explaining his in-game decisions as he is making them, making the stream feel very interactive through high communication with the chat box viewers during the in-game activities. The dates his stream was viewed were August 21st and 23rd 2023.

Facebook Gaming Streamer #2 – Spartakus

Spartakus is a mid-sized streamer with 360k followers and between 1k-2.5k concurrent viewers on Facebook Gaming (Spartakus, 2023). Spartakus is very heavily focused on gameplay and plays almost entirely one game, Call of Duty. Spartakus will talk about what he is doing while playing the game but is much more focused on playing well and being competitive than any other factor during his streams. He is also a streamer who is supposed to be presenting his real personality to the audience. The streams watched for this study were on the dates August 3rd, 5th, 6th, 9th, and 19th 2023.

Facebook/Kick Gaming Streamer #3 – Average Dad

Average Dad is another mid-sized streamer with 437k followers and concurrent viewership between 1k-2k on Facebook Gaming and Kick (Average Dad, 2023). His real name is

Dean which he often uses on stream. Dean was primarily a Facebook Gaming streamer but started to dual-stream and switch over to the website Kick during this study. This means he was streaming to both sites at the same time. Although his formatting and programming were primarily designed for Facebook Gaming, his streams were watched and recorded on Kick.com. Again, the streams were being shown at the exact same time on both platforms and the show was the same from the side of the streamer. Dean is a very high-energy positive streamer who is heavily focused on gameplay, but he is very interactive with the chat during his gameplay similar to Stone Mountain. He focuses on Call of Duty as his primary game. The dates watched for the study were August 14th, 16th, and 17th 2023.

Content Analysis: Streams and Chat

Within the content analyzed for this study, there seemed to be two distinct portions of content presentation: pre-gaming conversation and gaming content. These two portions of the stream can vary in the length of time dedicated to each, but to some degree, these two sections of a stream exist. As it turned out with the streamers in this study, half of them used a lengthy pre-gaming section (anywhere from ten minutes to an hour and a half), while the other half had only a couple minutes of conversation or just a "stream starting in…" countdown screen. It is important to note that not all the streams viewed for this study were watched from beginning to end. To be clear, every streamer was watched multiple times and during those multiple viewings, every portion of their stream was viewed. Nonetheless, the inherent characteristics of live game streams, as observed over several years in the industry, typically preclude viewers from consuming an entire stream.

These streams frequently span 6 to 8 hours, with variable start times and days. Even streams of shorter duration, generally lasting between 3 and 4 hours, are commonly viewed in sections by most viewers. This is why the number of viewers watching at any given time

"concurrent viewers" is used as a measurement unit in this study and the industry, rather than the

total number of viewers. Sometimes viewers pop in for 5 minutes or watch for hours

Often streams are played in the background while viewers do other activities. If watched

on a computer, streams are often placed on the second monitor or a phone while primary actions

such as work or gaming are performed on the primary monitor. This information is common

knowledge in the industry and their communities and was also gained from the researcher's years

of experience in the industry. The practice of "lurking," or leaving the stream on while doing

other activities, is so common that the streamers have a text code "!lurk" that the viewer can type

into the chatbox (Wilcox, 2022). This text command will send a message that tells both the

viewers and the streamer that this particular viewer is not actively in chat, but rather has the

stream running in the background.

Another issue is that, unlike TV shows, streams do not always start at an exact time on

exact days. Most streamers try to be consistent with times and dates, but they can vary quite

drastically. For instance, the Tim the Tatman stream mentioned below. During that stream, Tim

stated that it was rare for him to stream on a Saturday, but he felt he had to because he had

missed so many of his regular streaming days during the previous week. This inconsistency is

where posts on other social media platforms come into play. They alert viewers who follow the

streamers on those other social media sites to an upcoming start time. But even these alerts on

other sites can be inaccurate by 30 minutes to an hour. So, to simulate a natural viewing process,

as well as it simply being impossible to always catch the start of every stream with the time

variations, the viewing and recording of these streams were done in sections. For instance, if a

single channel was watched four separate times for 3 hours each, only two of those viewings

would start at the beginning of the stream. This is also because many of these streams last for 6-8

hours. To view all the portions of the shows at some point, different sections of the shows were watched on different days.

Finally, an additional macro factor mentioned in this study that impacts the streams is how the streamers make use of extensions and platform native existing cybernetic instruments. The term platform(s), when referenced within this paper, is used as it is within the industry context, where it will refer to the website or service. So, platforms would be the websites Twitch, YouTube Gaming, Facebook Gaming and Kick.

Pre-Gaming Conversation Content

The initial portion of a stream usually involves a timed countdown to the start of a stream, an introduction video or live introduction, and then just the streamer talking with the audience/community for a bit. This "talking" to the community is where the streamer literally speaks audibly to the audience, and then the audience (a.k.a. chat) can type their responses back in real-time. Often the chat, the collection of viewers who are willing to type in the chat box, will start the conversational topics by typing in an interesting question or statement which then compels the streamer to respond. Both parties are communicating in real-time with each other. One great example of this pregaming process can be seen in Doctor Disrespect's stream mentioned below. However, it is important to note that when the streams are later added to some of these channels as recorded content the intros and countdown screens are often edited out, so referencing the online recordings of streams viewed in this paper that are located on the platform archives will not always show the countdown but will more regularly show the intro video. This difference between live and recorded content is mentioned in case some of the below streams are viewed from their archives. Hopefully with the knowledge of the difference in pre-gaming presentation between live and archived content won't be as off-putting. It is always best to simply watch the stream live and see how the events play out live. To begin the pre-gaming

examples, a stream from Doctor Disrespect's channel on August 23rd, 2023, will be a perfect

starting point to establish what a really good pre-gaming portion of a stream is like (Doctor

Disrespect, 2023).

Doctor Disrespect Pre-Gaming

This intro for the prominent streamer Doctor Disrespect (Doctor Disrespect, 2023) starts

with a sunset metropolitan skyline with a cigar in an ashtray, some flip phones, and a battery-

powered old-school radio in the forefront looking like it is on the veranda of an expensive house

with an infinity pool overlooking the city (Figure 4.1). There is 80s/90s techno music playing in

the background of the scene (think of something that sounds like it comes from the movie *Tron)*.

This sets the environment and context for the upcoming stream as well as the character of Doctor

Disrespect, who pretends to be a video game champion from the 90s.

Figure 4.1

Doctor Disrespect Pregame

The radio turns on its blank screen to reveal a five-minute countdown. After five minutes the full introduction video begins. However, during those 5 minutes, the viewers join the community chat and begin to talk to each other individually and to the community at large. They use common "Doc" stream phrases like "yayayayaya" "2times yaya" and also use channel-specific themed emojis, seen on the right side of Figure 4.2. These are all common chat comments used to engage other community members and bring up excitement for the stream.

Figure 4.2

Doctor Disrespect Countdown

Once the countdown is finished the actual introduction to the stream is started. In this particular intro scene, Doctor Disrespect (commonly known as Doc) uses a green screen setting to make it humorously appear as if he is driving to the studio from the golf course in his thematically colored golf cart while he talks on his (obviously disconnected) flip phone. He uses this faux phone conversation to provide a comedic introduction to the stream and establish his character's persona. As can be seen in Figure 4.3, Doc is using the phone while still wearing ear-covering headsets/earphones and clearly not fitting in the cart while driving it.

Figure 4.3

Doc Golf Cart

At the very end of this scene, Doc tells the person on the other end of the call that he is on the 16th hole and to just "run the intro." This leads to a montage video of clips from his past streams which are highlights in both gaming action and established community cultural cues like calling himself the "two-time, back-to-back, 1993-1994 Blockbuster World Videogame Champion," "yayayaya," and other similar sayings/phrases that originated during his past streams. While this video is playing the chat box is filled with the community members, referred to as "The Champions Club," echoing the sentiment of the introduction video and getting each other hyped up (Figure 4.4). This intro serves the purpose of establishing the identity of Doc as well as the sense of social presence for the viewers.

Figure 4.4

Intro Video Chat Interaction
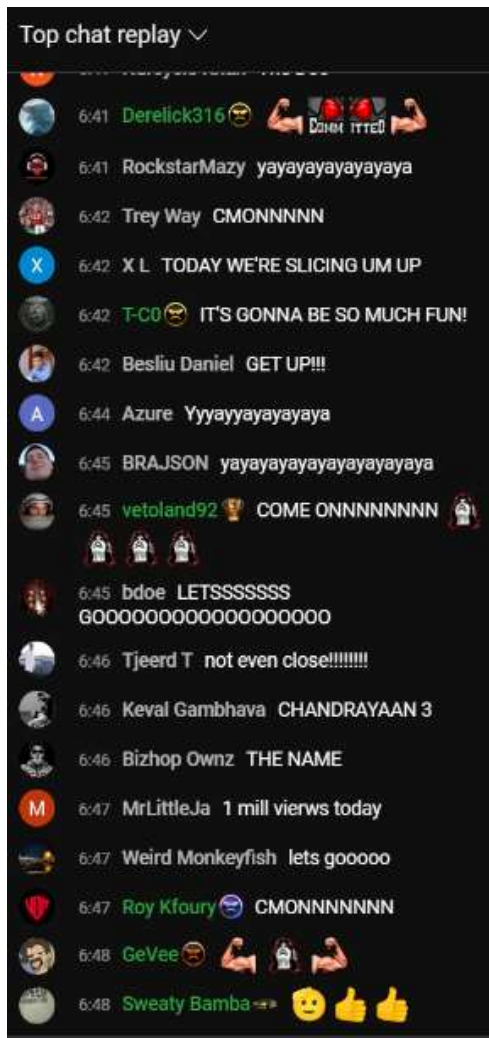
The intro video fades into another green screen scene that looks like a concession stand inside of a sports arena themed with Mountain Dew as the sponsor. This scene has Doctor Disrespect standing full body visible as he tells the audience (viewers and active chat participants) about the planned events for the stream. He describes the games he will play, the videos he will review, and announces that the biggest portion of the stream will be reserved for a competitive Madden Football match against fellow streamer Tim The Tatman. Doc then walks

off-screen. The scene then shifts to the primary camera angle for the stream where Doc is sitting

in his gaming chair with the green screen behind him showing either gameplay or graphics and

videos (Figure 4.5). Doc uses low-mental focus games or very short playtime games as a

backdrop to his conversation with chat during the "pre-gaming" phase. This use of low-mental

focus games appears to be how Doc manages the cognitive cost associated with the active

communication required for his pre-gaming portion of the stream while still presenting some sort

of activity on-screen. For instance, the game Wordle (Figure 4.5) only takes four to five minutes

to complete and it allows him to play the game while staying in character and really leaning into

and establishing the persona of Doc, before reading chat and donations. He banters back and

forth with the audience about what the words could be, pretending to compete against them,

when in reality the game is a single-player word game.

Figure 4.5

Doc "Pre-Gaming" Game
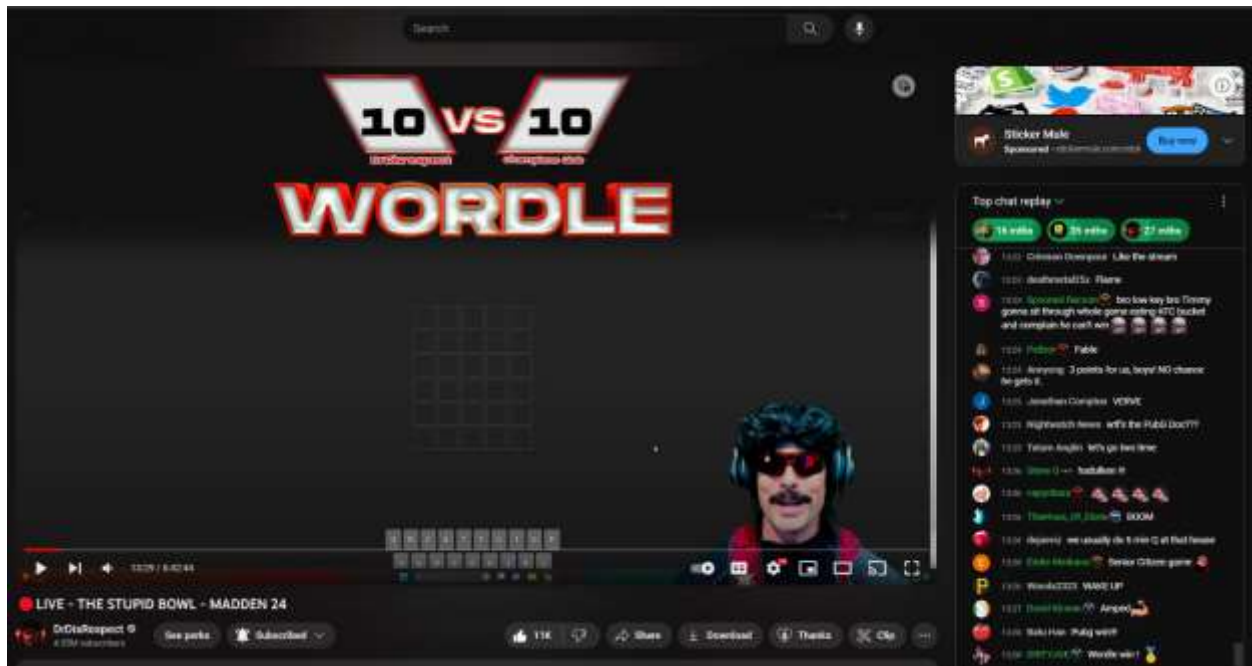
The primary game or focus of the stream hasn't started, and the intent of pre-gaming portion of the show seems to be allowing for communication back and forth with the community. When compared to his in-game portion presented further down in this chapter, the contrast between how he engages and communicates with the audience/chat is quite clear. This focus on the communication with chat makes this portion of the show similar to a "just chatting" scene that most other streamers use for this portion of their streams, however, there is some sort of activity going on in the background. Again, the games Doc plays during this section of the show are easily paused and short in execution time so he can read comments that come with donations and other particularly interesting chat comments. That difference in focus (chat vs. game) is why this portion of the show is still considered pre-gaming for this study. The concentration on the games is negligible compared to the intent of communicating with the community. This stream was a strongly representative example of the other Doctor Disrespect streams viewed for this study as they all followed a similar pattern during pre-gaming and gaming portions of the stream.

Tim The Tatman Pre-Gaming

Tim The Tatman is another large audience streamer with 5 million subscribers on YouTube and a concurrent viewer count of 20k+, Tim The Tatman (TimTheTatman, 2023). The stream chosen for this section, October 14, 2023, was specifically chosen because it gives the best example of what a pre-gaming portion of a stream can be. It isn't an exception compared to Tim's other streams, but rather the exemplification of how his pre-gaming section creates a sense of community and relationship, thus establishing the communication environment for the channel. This was a stream that occurred after Tim had taken a week off from streaming because his stepmother had died (explained further down). These conditions lead to this stream having a particularly strong impact on both the streamer and the community.

The pre-gaming section of the October 14th stream began immediately following the countdown when Tim goes straight into a "full-cam" shot of him at his desk. Full-cam refers to the entire presentation window being filled with a shot of the streamer (Figure 4.6), rather than there being mostly gameplay footage with only a small rectangle being reserved for the streamer's visage as would be the case during the gaming portion of his stream (Figure 4.46). In this beginning scene, Tim begins with a heartfelt, but lower-energy introduction statement that simply begins with, "Good morning." He then wishes good morning to his stuffed penguin sidekick "Kevin" (Figure 4.6) and tells Kevin that it has been a long while since he has streamed on a Saturday with a light chuckle. Tim then turns his attention to chat and says "I appreciate you all being here. Thank you for tuning in already. Starting off on a little bit of a somber note here."

Figure 4.6

Tim The Tatman Full-Cam With Kevin

The Reason for His Absence. Tim goes on to explain that the reason he had not streamed for a week was that he got a call from his father telling him that his stepmother was in the hospital, that "it was not looking good," and that she eventually passed away on Tuesday. He said with a bit of a chuckle that he was not just trying to dodge the conversation about the Dallas Cowboys (his favorite team) losing to the San Fransico 49ers (Doctor Disrespect's favorite team). As proof that he wasn't dodging the good-natured teasing he would have received, Tim also mentions that he made this announcement on the first of the week on his social media accounts. He followed that by saying he knows that not everyone follows his social media so he wanted to explain what had happened live, as well as making an announcement that he would be missing the next week of streaming because his friend, recording artist Kane Brown, was having a birthday golfing trip and he was asked to go with him for the week. Tim said that he was glad he chose to take the time to spend with his father and that he was sorry he missed the streams but was happy with his choice. This process of explaining his absences from his expected streaming days showed a sense of reverence for his community. He wanted them to at least know why he wouldn't be there for them to watch and talk to, as well as creating a vacuum of real-time community communication for them.

In response to this announcement, the chat reacted by typing in words of encouragement and love, heart emojis, channel-specific Kevin emojis (Kevin is the stuffed penguin mascot that sits beside Tim as can be seen in Figure 4.6), and some good-natured teasing jokes like calling him "Timmy Tenders" or saying he only works part-time (Figure 4.7 & Figure 4.8).
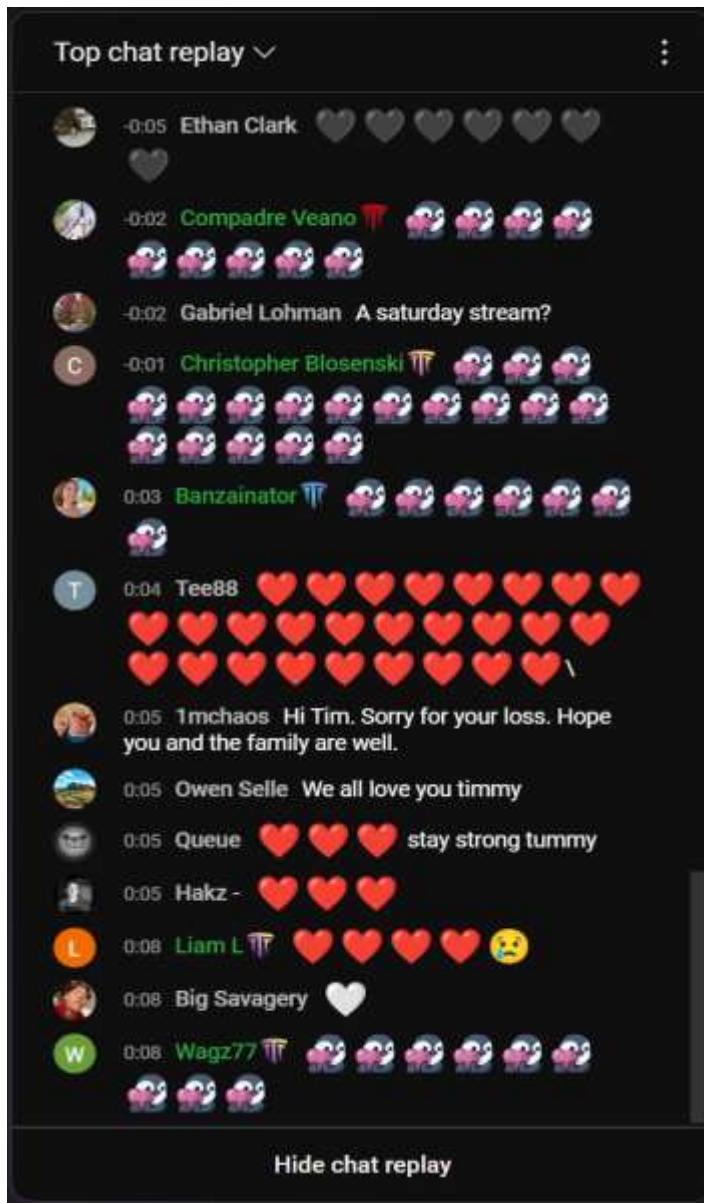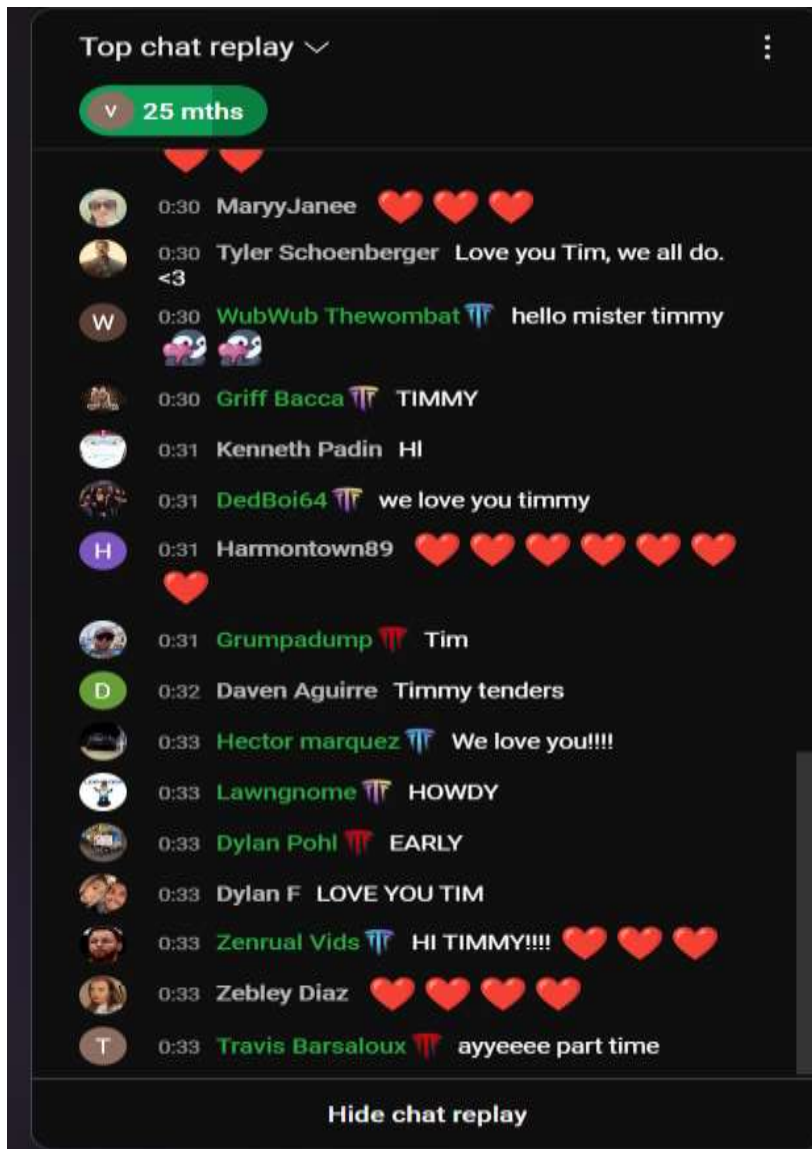
Figure 4.7

Tim's Encouraging Chat

Figure 4.8

Tim's Encouraging Chat #2

Tim continued to explain for a few more seconds about how it was a very sudden illness and told a bit more of a detailed story about when he left his home in Florida to go to New York and hang out with his dad in the hard times. He wrapped up his story with the statement, "Basically, this sucks. There's no two ways around it." He then said, "There was a ton of support and prayers from y'all so thank y'all. My dad greatly appreciates it and my family greatly

appreciates it." It is important to note that throughout this whole conversation, Tim approached

the topic with a very conversational and honest approach. This was more of a chat with his

"friends" in the community, than a news announcement or an entertainment scene. There was

one comment on the VOD (Video on demand) of this stream that seems especially apropopriate

to the context of the streamer and their community by a user with the screen name

@mayhemmkr9493 which said "Just know your whole community is here for you and we have

your back on anything you need. Much love and I really hope you guys heal from this." One

other interesting thing that occurred during this time was that the chat started to send paid "super

chat" comments and renewed their paid memberships with positive and caring messages

attached. This process highlights their messages in the chat with a green background to make the

comment stand out, but in this instance, so many people were doing it that the whole chat turned

green (Figure 4.9).

Figure 4.9

Tim's Super Chat Messages
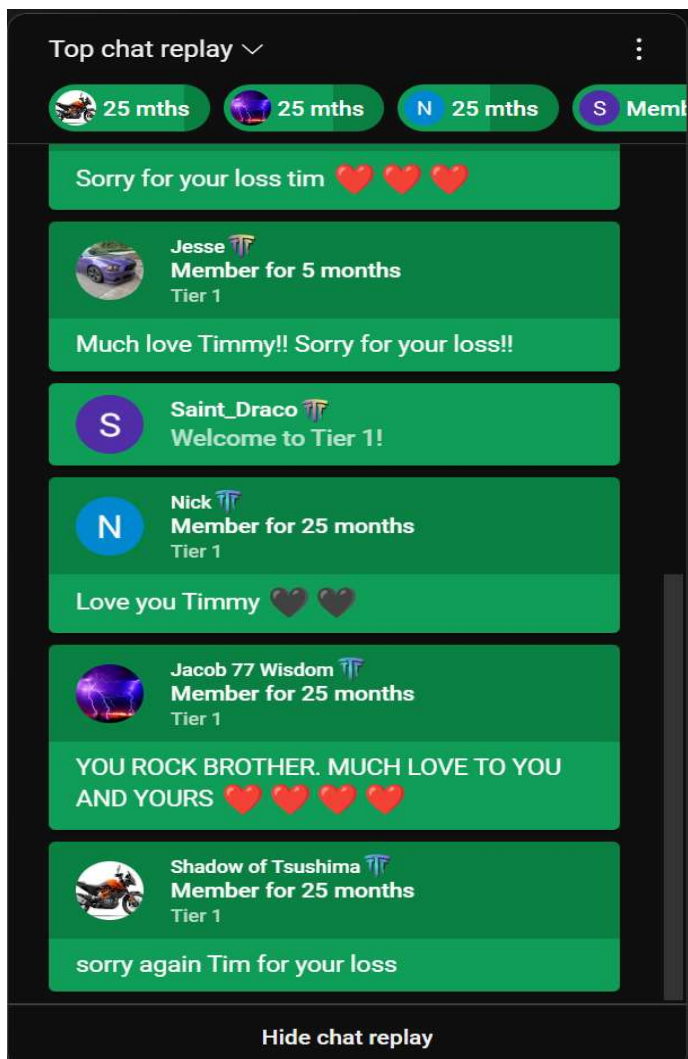
Back To the Show. Tim continued to reiterate everything he said in the first six minutes of the stream for another four minutes in order to return the environment back towards a more casual vibe from the more serious previous tone as well as to reconnect with the chat members who might have been coming into the stream a bit late. At about the ten-minute mark of the pregaming portion of the stream, Tim shifts focus to the reading of donation messages, thanking the chat for their 100 renewed paid memberships, and discussing the upcoming video game he is

about to play. Then after that brief overview of upcoming content, Tim shifts the conversation to

the results of his favorite American football team (Dallas Cowboys) losing to his friend and

fellow streamer, Doctor Disrespect's, favorite team (San Fransisco 49ers). This is where the

communication environment shifts back to the chat teasing Tim as he recounts his sorrows of

having to watch his favorite NFL team lose. Around the twelve-minute mark of the stream, the

chat box starts to show comments like "Dak is the problem," referring to the Dallas Quarterback,

"I live and die with my Chicago bears… don't be a fake timbo," "They losing to my chargers too

Tim after this Monday y'all got an easy schedule", and "get rid of Dak!" These are not

comments made in a mean spirit but rather made in a friendly teasing manner that is often found

in friend groups. It is a sign that the chat and communication environment were returning to the

normal flow seen in previous streams.

      It's a Culture Thing. This normal flow of the pregame stream was recognized in some

of Tim's other observed streams. However, the flow of conversation between streamer and

community, the teasing good-natured jokes, and the way Tim leans into the teasing seen in those

other streams were all similar to this stream's pregame section. A brilliant example of the culture

building, community building, and relationship building that is nurtured and developed during

the pregaming section of his streams can be seen during another one of Tim's streams on

October 14th at about the 18-minute mark. This is when Tim reads a donation comment that

says, "Chat always gives you a hard time about the Cowboys sucking – real and true; being fat –

less true in the last couple of years; and also being terrible at games – will always be true, but we

love and appreciate you Tim and you help us with our own struggles." To which Tim replies:

      Thank you for the donation. I always say this, OK, I know we joke around a lot. I yell at

      you guys. You guys joke around with me, but at the end of the day, I truly feel like this

      community is like… it's like… a family banter. Does that make sense? You know? It's

like where you joke around with someone you love and you care for but it is all in good

fun. At the end of the day, when real stuff happens, like what happened last week, you

guys do what you did and were supportive. (Tim The Tatman, 2023)

This sequence of quotes from the viewer's comment to Tim's response is very

representative of almost all of Tim's content and how his community interacts with him and the

content. This communicative cultural relationship connection is also a common thread in almost

all of the streams that were viewed for this study. As the reader examines the other interactions

presented further down in this chapter, they should take the communication and cultural

environments expressed in this example into account as a lens through which to assess the other

examples. There tends to be a friendliness and familiarity which are the primary underpinnings

of the comments made and how the streamers react. Even with Doc's stream mentioned above,

the community knows that the persona/identity Doc acts out, being an abrasive and arrogant

video game professional player past his prime, is intended for humor and interaction and they

react accordingly. Sometimes they egg this side of his persona on, and sometimes they act as

though they are antagonistic towards it, but it is clear that the audience who interacts with the

streamer through the chat box understands the underlying cultural connection between the

streamer and community. This understanding of the character being played on screen as well as

the culture and communication environment that character evokes is an important factor to keep

in mind as to how a streamer and their chat communicate, and how that communication differs

depending on the streamer's persona. Keeping this particular relationship between streamers and

their communities in mind will help the reader understand the comments written by the

community in the chat boxes more contextually.

It's a Relationship Thing. One final interesting sequence of events occurred during

Tim's pregaming portion of the October 14th stream, where at 38:01 into the stream Tim

reiterates the relationship he has with his chat by saying "Spam 4head so I know you are listening to me," instructing his chat to all type "4head" followed by Tim saying:

I'm going to have videos uploaded when I am gone on the golf trip next week. If you see someone saying something like "This guy doesn't even stream anymore" just let 'em know. Just be like "Hey man, that is my part-time streamer. You can't talk bad about him." But let 'em know he had a golf trip with the circumstances… (TimTheTatman, 2023)

An interesting example of Tim letting the audience experience a moment of his real-world life during a stream comes in at 39:14. This is where Tim announces that another streamer and real-life geographically local friend, Dennis or "Cloaksy," has jumped into his Discord voice chat channel. Discord is a VOIP service used by many streamers similar to Skype or Microsoft Teams. Tim immediately says "I need you guys (chat) to understand. I'm going to go into this Discord, and he is going to try to talk to get me off this stream. Do you guys understand that?" This statement from Tim was said in a way that seemed like Tim was going to let his chat in on a little secret. Tim starts to talk about a game coming out for about two minutes and then gets ready to enter the voice chat room with the announcement to his chat "OK Dennis is going to try to talk me off this and get me to the bar" as a final prognostication of what is about to happen. Then Tim entered the Discord voice chat room, and once Dennis unmuted his mic the first words out of his mouth were "I have a really good idea I just thought of." This causes Tim to make a playfully exasperated face (Figure 4.10).

Figure 4.10

Tim Exasperated

Tim then asks "What's the idea?" in a coy manner, and Dennis says "I'm thinking…there are some college football games on right now, right? What if we take in a nice tequila soda? Ninety calories." Tim then starts to laugh and explain that one of their other friends had already asked him to do the same thing and he had to turn him down in order to stream. This went on for a few minutes as these two streamers continued to have a regular real-life conversation about their Saturday plans live on-air. This is the type of content that creates a sense of presence for the viewers.

Plyrock Nation

The past two streamers are two of the largest live-gaming streamers in this study with followers between 4.5 and 5.5 million and concurrent viewership that ranges from 18k to 35k+ and they stream on the YouTube platform (TimTheTatman, 2023; Dr DisRespect, 2023). Plyrock Nation on the other hand is a small Twitch streamer with 1.5k followers and concurrent viewership that ranges from 18-40+, usually falling in around the 25-viewer level (Plyrock

Nation, 2023). The concurrent viewership is calculated by looking at active viewership numbers

that are present on the screen during the stream and then just calculating the average. Plyrock

Nation, or "Ply" as the streamer is called on stream, also has a "Stream Starting Soon"

countdown video that runs before the stream is live. Again, almost all streamers in this study

have some sort of welcome screen or countdown video that runs before the actual live stream

starts. On this day, August 8th, 2023, the video included clips from previous streams (Figure

4.11).

Figure 4.11

Plyrock Countdown Screen

Viewers can tell that the stream is starting as there is late 1980s hair metal rock music

that starts about five seconds before Ply comes on the stream and gives a warm welcome to the

chat (Figure 4.12).

**Figure 4.12**

Plyrock Live Intro and Pregaming Screen

The introductory speech starts with a high-energy "What's going on everybody? It's your man Plyrock. It's Tuesday night and we are coming to you live! People are watching from all around the world, and we have a big one for you tonight!" At about the 3-minute mark, Ply begins to discuss the game he is going to play and then turns his attention towards the viewer chat saying "Let's see who's here. Let's make some f*cking noise! Athena, you are first! Welcome in! The queen of snacky happiness is here!" He then goes on to call out the names of the people in the chat box with similar personalization for each. This process of personalizing the welcome messages can establish a sense of presence, Ply's on-air persona, and a relationship with the viewers. Ply says at about the 3:30 mark "Kornogg is here! He's my number one fan!" while flipping off his middle finger to the camera during the "number one" part. This was followed by "Preacher's in the house! How's it going? Welcome in. I hope you took a healthy sh*t today."

Ply's persona is that of a wrestling heel attitude and these interactions help to drive it home. For those that don't know, a wrestling heel is a wrestler from the entertainment wrestling companies like the WWE (as opposed to the actual competitive sport of wrestling) who is given the role of the "bad guy." However, the wrestler cheeses it up a bit, the crowd knows that they are almost comically playing the bad guy, and often they make the character like a lovable villain. An example of this was The Rock (Dwayne Johnson) when he was active in the WWE.

Another interesting part of this stream is that Ply uses an extension program that allows the community to set up Blerp WalkOns, or sound alerts that play when people start watching the stream, which is accompanied by a visual alert on the screen (Figure 4.13). This allows the user to feel recognized by both the streamer and the community as well as letting the user who sets off the sound alert to express their personality through the sound clip chosen for the WalkOn.

Figure 4.13

WalkOn Alerts
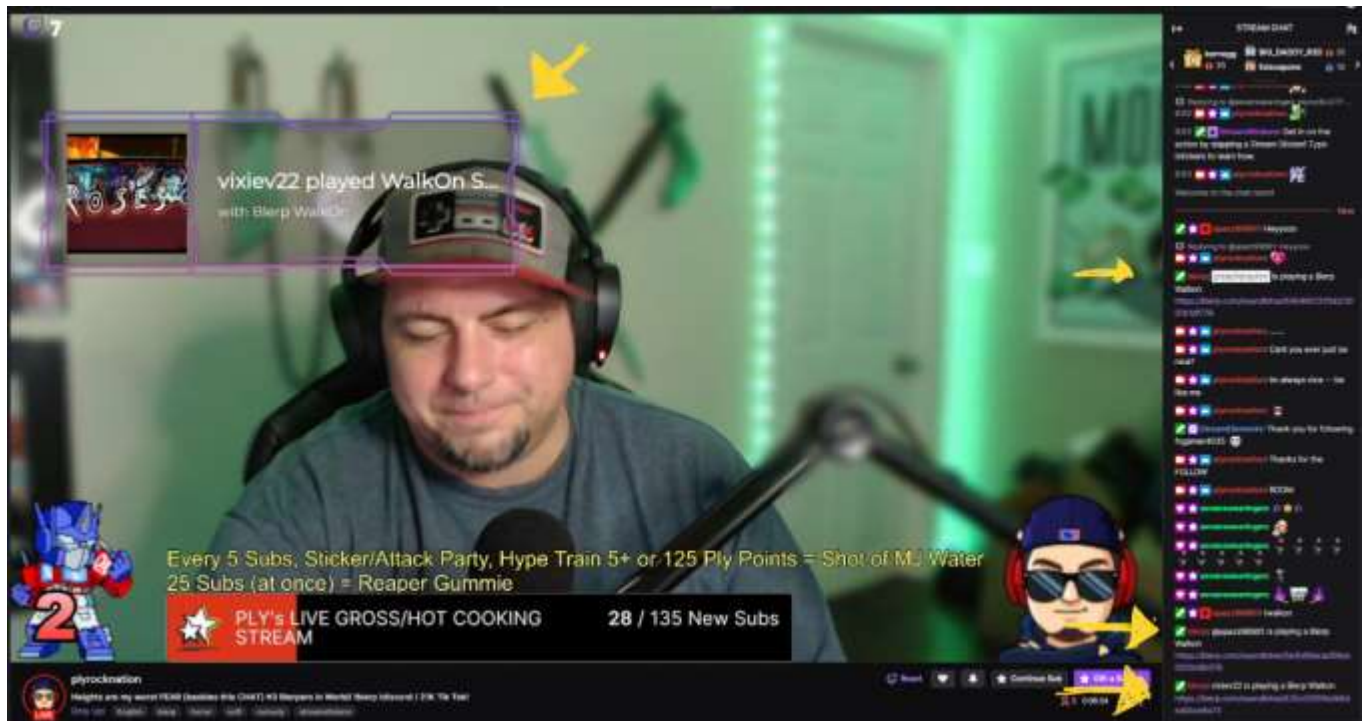
The Blerp WalkOn allows the whole community to see who has entered the chat and hear their chosen sound bite which gives a sense of individual presence and personality to the community member behind the screen name. There is also a text message in the chat box which states that Blerp has been played and the person has started watching the stream (Right side of Figure 4.13a).

**Figure 4.13a**

Ply's Chat WalkOn Messages
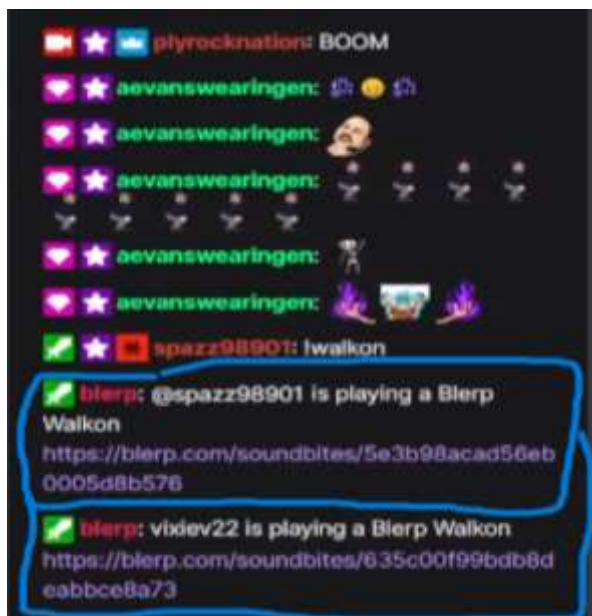
There is another aspect of the Blerp stream extension which will be covered later in the cybernetics portion of the chapter, where it allows people to pay for the right to choose any sound from a library of audio clips, and then play that sound live on the stream. So, the streamer could be talking and get interrupted by a sound bite from a movie, or have to react to a sound clip from a comedy, etc. The reason it is mentioned here is that Plyrock Nation is a particularly heavy user of the extension. For instance, the aforementioned stream had a short 5-minute intro video. During that five-minute intro video, five Blerps were played. That is a significant amount

of airtime where sounds that the community controls are allowed to take up airtime that the

streamer has to either wait for or react to. It's interactive and provides a significant boost to

viewer presence and identity.

　　Plyrock's pregaming portion of the observed streams ran between 25 and 45 minutes

long. The August 13th stream offered a wide variety of pregaming elements, including drinking

cannabis water and eating spicy foods or peppers for money (Figure 4.14). In the mentioned

figure, the bottom portion of the screen displays writing and pictures that represent community

goals tied to monetization practices. For example, when it states "Every 5 subs…= shot of MJ

Water" or "= Reaper Gummy," it means that if the chat gifts five or 25 paid subscriptions to the

channel, he will drink cannabis water or eat a Carolina Reaper pepper gummy. This also applies

if they put digital stickers, which they pay for, on the screen or play a certain amount of Blerps,

which also costs money. In summary, if the audience pays enough money causing Ply to do silly

actions on-air, this then leads to the bar at the bottom filling up to the point where he has to dress

up in costume like whatever character it lists. During this particular stream, the costume reward

was Bob Ross (Figure 4.14).

Figure 4.14

Community Engagement Mechanisms
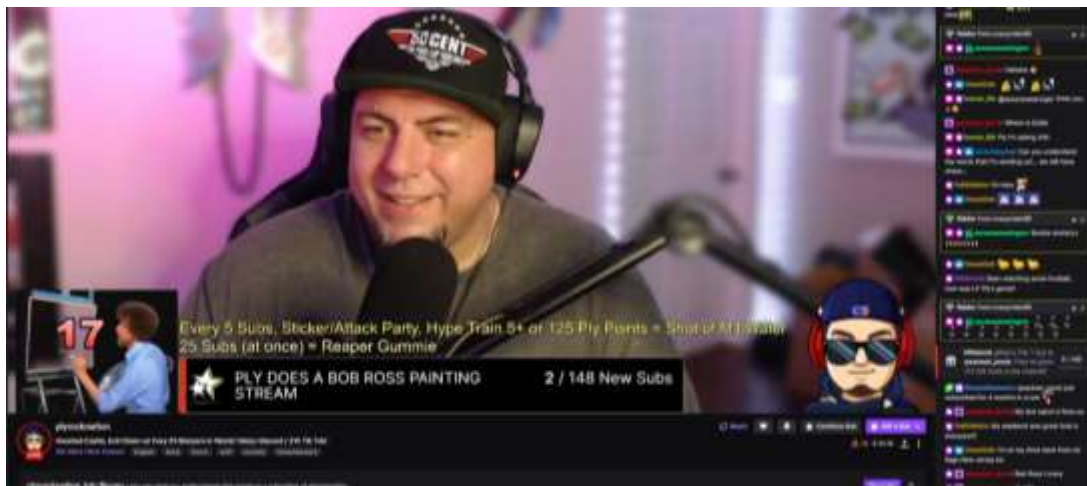
It should also be noted that around the 2:55 mark, Ply begins to describe his weekend and how he went to see 50 Cent live in concert, before being interrupted by a Blerp. Then right after at about the 4:10 mark, someone gifts two subscriptions to the community. Sounds play, a GIF pops up in the upper right-hand corner and the counter on the bottom left of the screen ticks up to thirty from seventeen (Figure 4.15). Shortly after that happens other viewers echo these actions as Ply says in a playful facetious manner, similar to Doctor Disrespect, "NFL dropping two subs. Look this thing could take off at any time. We gotta be careful! I don't need to dress up like Bob Ross…" Ply provokes the chat by acting as the antagonist and expressing annoyance at the monetary gifts given to him and other viewers. This behavior prompts someone to post a virtual sticker, initiating a "sticker party" where the entire chat can place stickers on the screen for free for about 20–30 seconds (Figure 4.16). This same type of action goes on until the thirty-eight-minute mark when Ply finally says "OK. Here we go. We are starting the game."
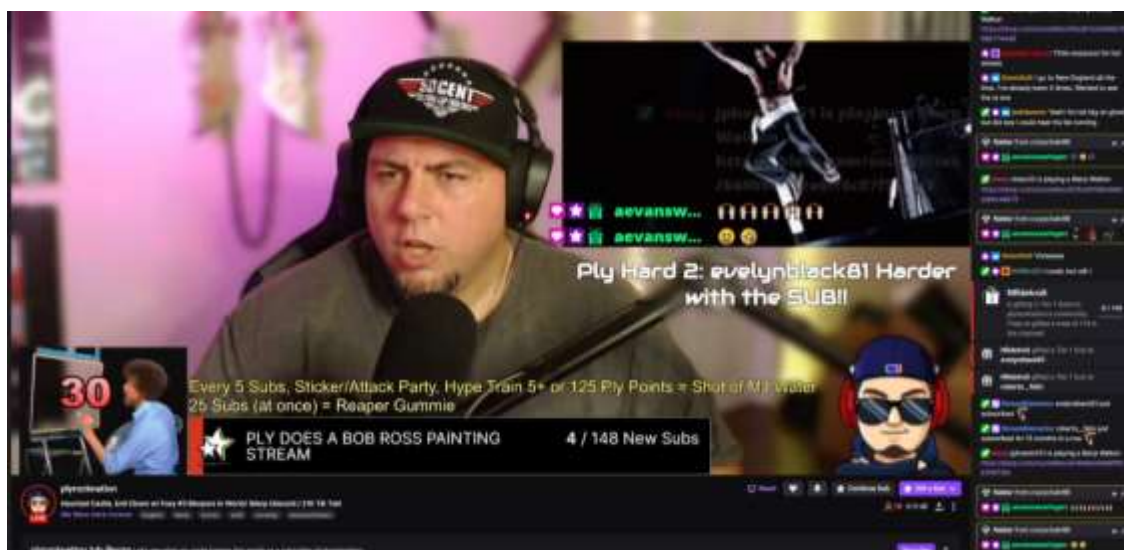
Figure 4.15

Plyrock Subscriptions

Figure 4.16

Plyrock Sticker Party

MenziesxMedia

The next small streamer, MenziesxMedia, engages his audience with an active pregaming

segment. With approximately 1,500 followers and a concurrent viewership in the low to mid-

twenties on Twitch, MenziesxMedia's October 13th stream begins with a screen displaying

"starting" and hip-hop music playing in the background (Figure 4.17). This setup lasts for about

6 minutes, allowing viewers to join the chat. An intro video then plays, counting down from five

like a space shuttle launch, showing images of switches being flipped and knobs being turned,

simulating MenziesxMedia preparing to start the stream. A faux warning screen follows,

cautioning viewers about stunts performed during the show. MenziesxMedia then appears,

wearing an alien mask and accompanied by fast-tempo hip-hop music (Figure 4.18).

Figure 4.17

Menzies Countdown

Figure 4.18

Menzies Alien Intro

Menzies begins to dance to the music, creating a party-type atmosphere and enhancing his on-air persona, with a voiceover from an announcer saying, "Welcome to Menzies X Media!" The chat responds with emoticons in the chat box to the right of the screen and with comments like "It's a figment of your imagination!" Menzies takes the mask off at about the 8:40 mark of the video and says "Whew had to take that off. I could barely breathe with that thing on. How are we doing? How are we freaking doing? I hope you all are having a great spooky month!" and "So many freaking legends! Welcome to Menzies Media! Get in here!" followed by "I hope you have had a freaking amazing week. We are getting ready to get right into it. We are going to get freaky crazy tonight!" Finally, a community member named xostarlight jokingly said Menzies must hate her for canceling their game—she humorously wrote, "blew me off for COD." He responds to her with, "And listen Star. I do not hate you, but listen, twenty lashes with a wet noodle for saying that."

Not Quite Broadway. Menzies' explanation as to why he had to play COD (Call of Duty) on stream that night gets interrupted by another user, DaveDemented, playing a Blerp titled "hype" which is an EDM dance music sound clip to which Menzies starts dancing again with the proclamation "Yo! It's Friday! Turn it up!" Menzies has a similar reaction to some other community members referred to as "Queen" and "Stuff." During this time there are lots of streamer-initiated sound effects like a crowd cheering and arena sounds while Menzies poses like he just shot a basketball, dances, and greets chat members as they enter the stream chat. Menzies then starts to joke around and pretend like he is scared of the Halloween decorations in the background of his room which can be seen in Figure 4.18. He then performs something almost like a single-act play, saying he is scared of the "big ass spider" that is coming for him. The chat reacts with comments like "Oh no, not the Halloween spooder!" "Loving the Halloween setup!" and "Keep that thing away from me!"

Menzies continues the back-and-forth banter with chat. As they continue to tease him he proclaims "Shots fired!" and puts up a graphic with a cartoon gun pointing back at the viewer to emphasize the statement (Figure 4.19). Then followed it with a graphic of the word "wasted" from the video game Grand Theft Auto V.

Figure 4.19

Menzies Gun Graphic

This interactive communication continues with the same general type of content until the 28:56 time stamp when a viewer notices the electric piano in the background and asks if he plays any music. This evokes a response of "Do I play music?" from Menzies, leading to him hitting a button off-screen, and hip-hop/rap music starts to play. He starts to sing a full rap that he wrote and recorded himself. He states right before singing "I didn't make this beat, but I did write these bars. Every other beat you hear on this stream I did write though." He then plays three more

songs that he wrote in their entirety himself in almost a mini-concert. The chat responds to the music with dancing and musical emotes, but still teases Menzies about canceling on xostarlight with their comments.

Q&A Time? At 35:48 Menzies asks if the chat has any questions for him and then says "For the next fricking 10 minutes we are going to do a Q&A. If you got questions, I got answers." Immediately after that sentence community member DaveDemented played a Blerp that simply says, "You suck!" followed by a second Blerp that is an audio clip of a young teenage boy getting angry at a video game yelling "1v1 me! 1v1 me you P*ssy!!" For context, a "1v1" is what some gamers do to settle arguments or to simply prove who is better at a game. It is where one person will set up a private video game match with the other person so that only they can join, and then the two individuals will play the game only against each other instead of in a normal lobby or server with multiple other people. Thus, one versus one a.k.a. "1v1." After that second Blerp by DaveDemented Menzies says "Oh yeah? Take this!" then plays a video clip from one of the Batman movies where Batman is punching a villain in the face…a lot. Menzies then says "Take this ass whoopin'" as if he was Batman and DaveDemented was the villain in the clip. Then, to show that the two of them are just joking around, Menzies shows a clip of the two of them playing a game off-stream together as a final culmination of their faux online argument. This whole interaction has clear implications towards building a sense of relationship between streamer and community as well as providing a sense of social presence. This faux argument however shifted the content away from a Q&A session to simply more back and forth between Menzies telling stories about some of his off-stream gaming and the chat teasing him.

Cybernetics and Menzies. One way chat is given the chance to mess with Menzies is the use of "channel points." Channel points are a built-in cybernetic mechanism by Twitch where viewers accumulate channel points while they watch each particular channel. The streamers can

then put different rewards and actions connected to using or spending those points during a

stream. This will be covered more in the Cybernetics section of this chapter, but this much

needed to be understood because not long after Menzies started talking about his off-stream

gaming, a viewer used those points to enact the "flashbang" reward. Menzies has this reward set

up so that if someone enacts it, the sound effect of a flashbang grenade from a video game plays

and extra lights that he has set up in the room turn on. The room gets very bright and the flash is

directly in his face. He then acts as if he can't see (Figures 4.20 & 4.21).

Figure 4.20

Menzies Flash Bang

Figure 4.21

Menzies Flash Bang Chat
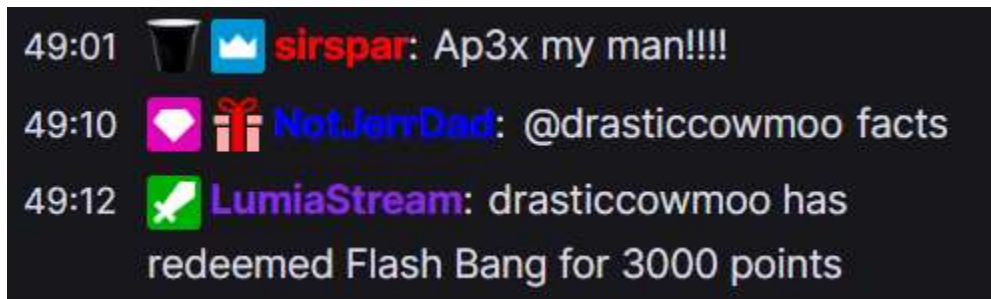
Menzies responds by punching in the air as if he is blindly punching at someone while saying "Whoever did that, I'm going to whoop your ass!" This is just one of many similar channel interactions available to the chat. The pregaming section continues on similarly to the first forty-nine minutes until the 1:17:17 mark when Menzies finally says, "Let's get into this game!" and starts up the game Call of Duty over an hour after the stream started.

Other Streamers

The past four examples give a strong impression and great examples of what pregaming sections for live gaming streams present. Plus, they give a nice broad variation in streamer size, providing some contrast for comparison. However, there were four other streamers of various sizes viewed and recorded for this study. With the primary examples of pre-gaming content already presented, the other streams can be assessed more briefly and placed together in a final all-inclusive section Just as there is much similarity in pregaming content among the first four streamers, then there is also a similarity between this next group of four streamers. This consistency in content structure will allow for a more generalized presentation of their content to add the weight of repetition to actions, without having to bore the reader with a detailed recounting of similar elements.

This next group of four streamers has a mix of medium and large-sized communities, as opposed to the large and small categories of the previous four streamers. Courage JD (CourageJD, 2023) is the largest streamer in this second group at 4.2 million subscribers on YouTube Gaming with concurrent viewers ranging from 2.5k to 3.5k. StoneMountain64 (StoneMountain64, 2023) is the second largest group with 3.4 million followers on Facebook Gaming and between 2k and 3.5k concurrent viewers. The terms subscriber and follower on Facebook mean the same thing as they do on Twitch, but are used differently than YouTube terminology. For example, a subscriber on YouTube is simply someone who follows a page for free to get alerts for when the streams go live, but on Facebook and Twitch a subscriber is someone who pays a certain amount every month and they receive some extra perks like skipping ads, extra stickers and emotes they can use in chat, and similar digital items.

On YouTube, the monthly paid service is called a membership, and the audience "joins" to become a member rather than subscribing to become a subscriber. Spartakus (Spartakus, 2023) has 393K followers on Facebook Gaming and between 1k-3k concurrent viewers. The fourth streamer is Average Dad (Average Dad, 2023) and he has 438k followers on Facebook Gaming and 16.1k followers on Kick, with 1.5-2.5k concurrent viewers on Facebook and 300-500 concurrent viewers on Kick. Both of these game streaming platforms were used to record data because, as of the writing of this chapter in late 2023, Average Dad is streaming to both websites.

CourageJD. The first streamer to be studied in this second group of four is Courage JD during his August 7th stream (CourageJD, 2023a). His pregaming portion of the stream started right into a full cam of himself in his streaming room. There was no countdown or introductory video. This scene is visually similar to Tim The Tatman, Plyrock Nation, and Menzies in setup and camera angle. Courage starts with "Helloooo! Hello chat!" in a very cheerful and upbeat

manner. Chat responds with comments like "2 min late," "2 min late, unprofessional," "always late bro," and "#late." Again, for clarity, this is obviously done in a teasing manner, though not everyone in chat thought it was a friendly gesture and someone commented "Yall chill." Courage JD responds as well say "I am not late as F dude. Don't get it twisted bro." Courage then commences to read something from his phone to himself in silence. As he does so chat continues with salutations and teasing comments like "Tim the Tatman would never be this late." Around the 1:15 mark, he briefly discusses the upcoming release of Call of Duty: Modern Warfare 3, saying that it gives him the most mixed feeling he has had for any Call of Duty release.

Upon saying this the chat begins to normalize into discussions about the game alongside requests to game with him, and small talk. The requests to play with CourageJD were particularly interesting as signs of parasocial interactions. Statements from the chat about the game were "Same engine and MW2?lol!" "I agree with you!" and "Are they going to make Warzone 3?" The other comments were things like "Hey man big fan and can we play Fortnite together my username is windywarrior5922," and "You look like you have lost weight!" This basic communication banter goes on for a few more minutes before Courage starts playing the game after only five minutes of pregaming content.

The Facebook Three. The next three streamers that will be presented have a presence on Facebook as a primary streaming platform. The interesting thing about all three of them is that of the streams that were viewed for this study, none of them had a significant pre-gaming portion to their streams. They all have their logo on the screen for a few minutes with the message "starting soon" on the screen and then either the stream just starts up or there is a brief 10-15 second intro video similar to the intro videos already described for other streamers before the gaming starts. Spartakus is a great example of this. As stated Spartakus has no official pregaming section. The stream simply starts with him actively playing Call of Duty: Warzone 2. He will make an intro

statement where he says hello to the chat while the game loads into the playable part. In general,

his introductions are similar to what he said during an August 3rd stream: "Welcome back to

your favorite stream. I am dropping in with some randoms". With that simple sentence, he

welcomes in the viewers and lets them know what he is about to do with the video game he is

playing. He then goes into playing the game and talks to chat while in-game, technically ending

his introduction to the stream. The other two Facebook channels have extremely similar

presentations. They start their streams with the game already started and they make some very

brief statements welcoming in the chat and explaining what they are planning to do with the

stream. These statements last around two or three minutes and then the portion of their streams

where they are actively playing the games begins.

Gaming Content

The live gaming content is the lifeblood of the streams covered in this study as they are

mostly focused on first-person and third-person shooter games with a few exceptions. The

gaming portion of the stream is when the content creators start to play a video game live on-air

while still orally communicating with the chat. The streamers will describe their in-game actions,

thoughts, strategies, replies to comments typed in the chat box, or just whatever topic is on their

minds. This type of communication is intended to create a virtual environment that simulates

going over to a friend's house to play video games together. The gaming content portion of the

stream tends to take up the majority of the stream's on-air time but also has more repetition in

the communication environment than the pregaming portions of the streams. The focus of the

streamer becomes split between playing the game and still communicating with chat and keeping

them involved. This section of the chapter will follow a similar structure as the last section in

that it will start with the two largest streamers, followed by the two smallest streamers, and then

finish with the four streamers that fall in between.

Doctor Disrespect

The first example of the gaming portion of a stream for Doc would be on August 4th, 2023. However, this day is a bit different than his other streams observed during this study in that he chose to show other people's gameplay instead of his own. During this stream, Doc was showing a tournament of the game Counter-Strike: Global Offensive. This difference in gaming content will be important because it allows Doc to have more of his focus on the stream's community and the chat box while live gameplay is still showing on the main screen and being processed by the streamer and community. An interesting note is that while watching the professional competitors play, during the breaks in the professional broadcast, Doc would also play a part of the same game that allows the user to open up in-game cases that house different weapon paint jobs. It's a bit like gambling in that you pay for the right to open a certain amount of cases, without knowing if the cases hold a paint job that is desirable and rare, or common and undesirable. It is not shooting other players in a virtual space, but rather opening up virtual cases with a single click (Figure 4.22). This process seemed to keep the audience engaged as it had the same appeal to his audience as when onlookers watch someone else play dice in a casino.

Figure 4.22

Doc Opening Cases

This activity allows Doc to cut back to the actual in-game activity of the tournament when the teams start to play after breaks. For instance, at the 18:30 mark when the tournament announcers are energetically describing the matchup between the teams that are playing in an excited voice Doc responds, "God these guys know how to hype up huh?" and then "They got right into it! Look at this! Holy Sh*t!" The chat responds with an emoji of a valuable knife skin that Doc unlocked as a sign of excitement as well as comments like "YAYAYAYAYA" "Wow the legend!" "That's dope!" "Let's Go!" and "Baby Baby Baby!" (Figure 4.23).

Figure 4.23

Watch Party Chat
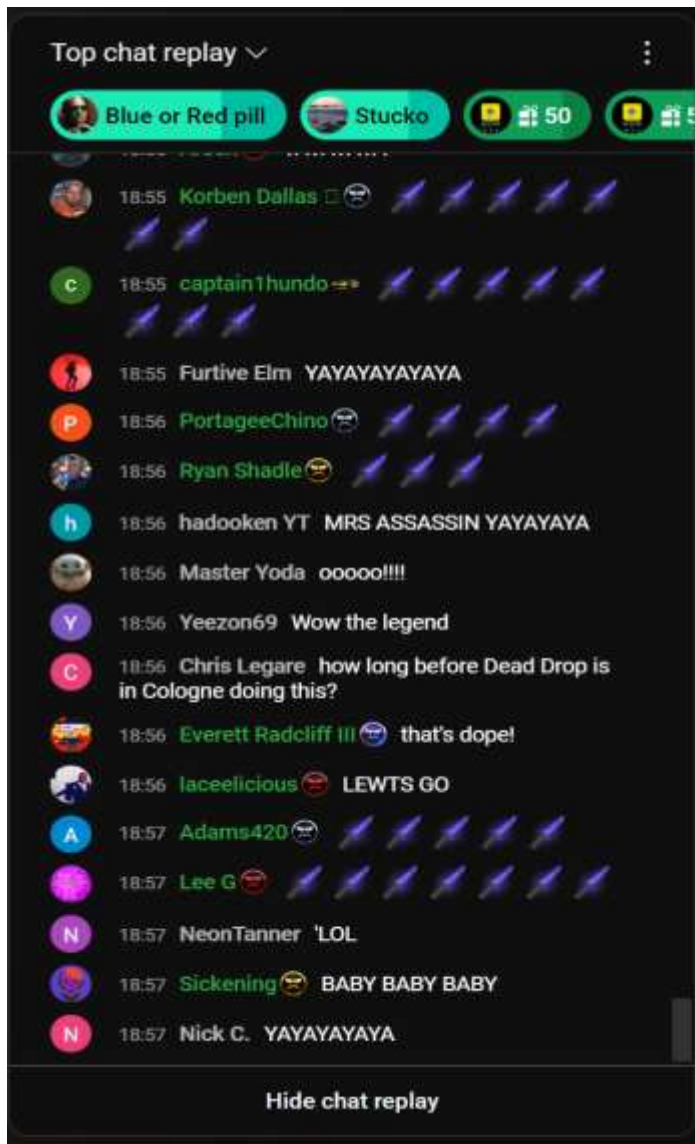
The knife emoji as stated is referring to an in-game weapon skin that Doc unlocked, but it is also a recurring joke, as Doc has had a real-life replica of the knife made that he can bring up on stream while he claims the skin is worth $150k when it is actually worth about $15k (Figure 4.24). This is similar to the "Yayayayaya" and "baby baby baby" comments as those too are common Doc catchphrases.

Figure 4.24

Doc's Real-Life Knife
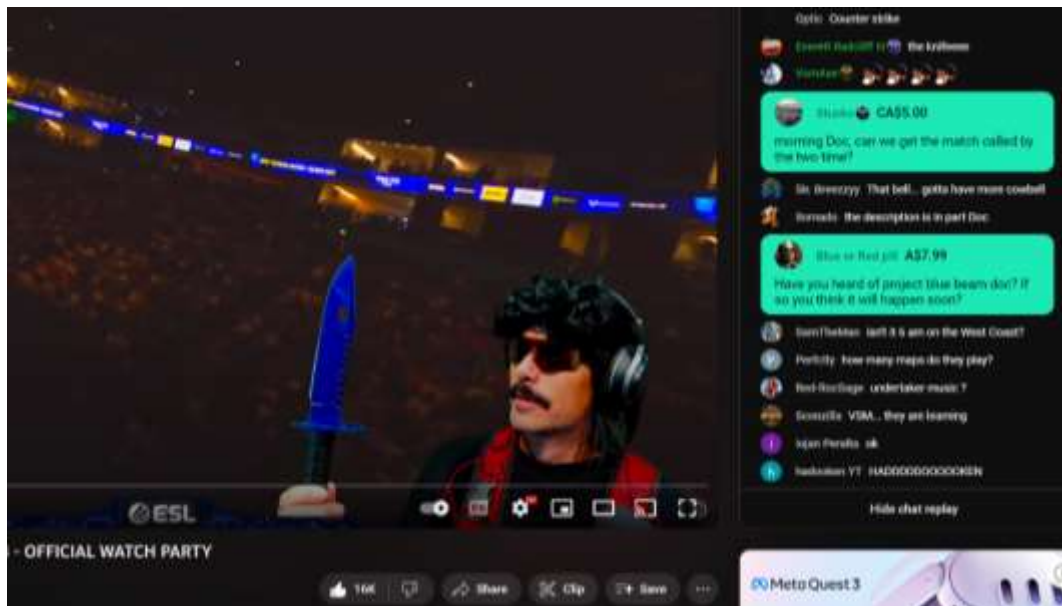
Impactful Inside Jokes. This commonality in topics and shared inside jokes between Doc and his chat could be used to enhance the sense of relationship between the streamer and the viewer community. He intentionally exaggerates numbers and his gaming skills as a part of engraining his comedic persona of an overconfident slightly over-the-hill professional gamer into the ethos of the community and culture. An example of this exaggerated persona communication can be seen earlier in the stream at about the 5:30 mark where he says that he hasn't received the $150k PC that he was promised for showing this championship on his stream. Then, shortly after that comment, he claimed that one of the professional teams playing in the tournament was trained by him. Another recurring example of his character exaggeration is when he states that he is the "Two time, back-to-back, 1993-1994 Blockbuster Videogame Champion" in his introductory video mentioned in the previous section on pre-gaming content. It all plays into the identity of a playfully cocky video game professional.

This playfulness can be seen in another of Doc's streams which occurred on the 9th of

October when Doc asks, "What are these guys doing?" in a negative connotation like he knows

more about the game he is playing than the other team. Chat responds by asking if he is only

playing with one hand or talking about his hair (an intentionally obvious wig), nicknamed "black

steel," saying it doesn't even move in the wind when he plays. Similar comments follow giving a

playfully exaggerated assessment of Doc's gaming capabilities. At the 4:19:00 mark Doc uses

video transitions to further this type of engagement with his chat as he shows a robot that

proclaims "You are the champion" to shift between the ending of one in-game round and the

start of another (Figure 4.25)

Figure 4.25

Champion Robot
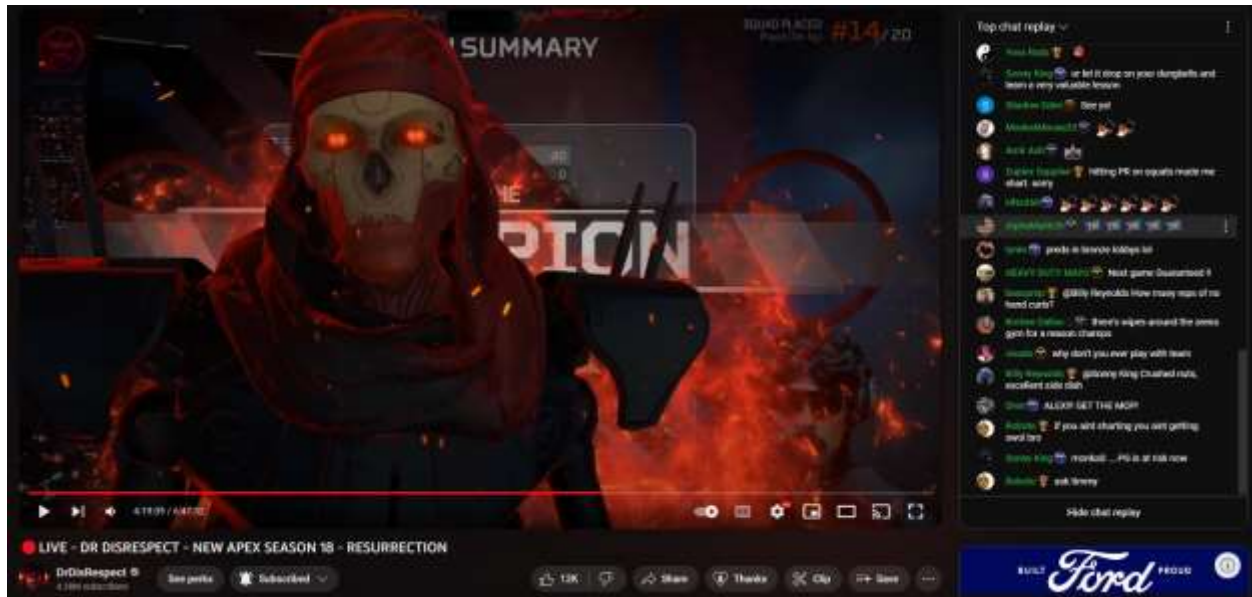
While all this on-screen action is playing out, the viewers in chat are also having

conversations within their own communication group. Someone made a comment about using

the bathroom while working out and the rest of the chat chimed in with comments like "Champs,

Keep your dungbells away from the dumbbells," "If the bench is smelly just know, the person

who last used it had some explosive diarrhea," and using hot poop emojis and Doc drooling

emojis (Figure 4.26).

Figure 4.26

Chat Workout Poo Conversation
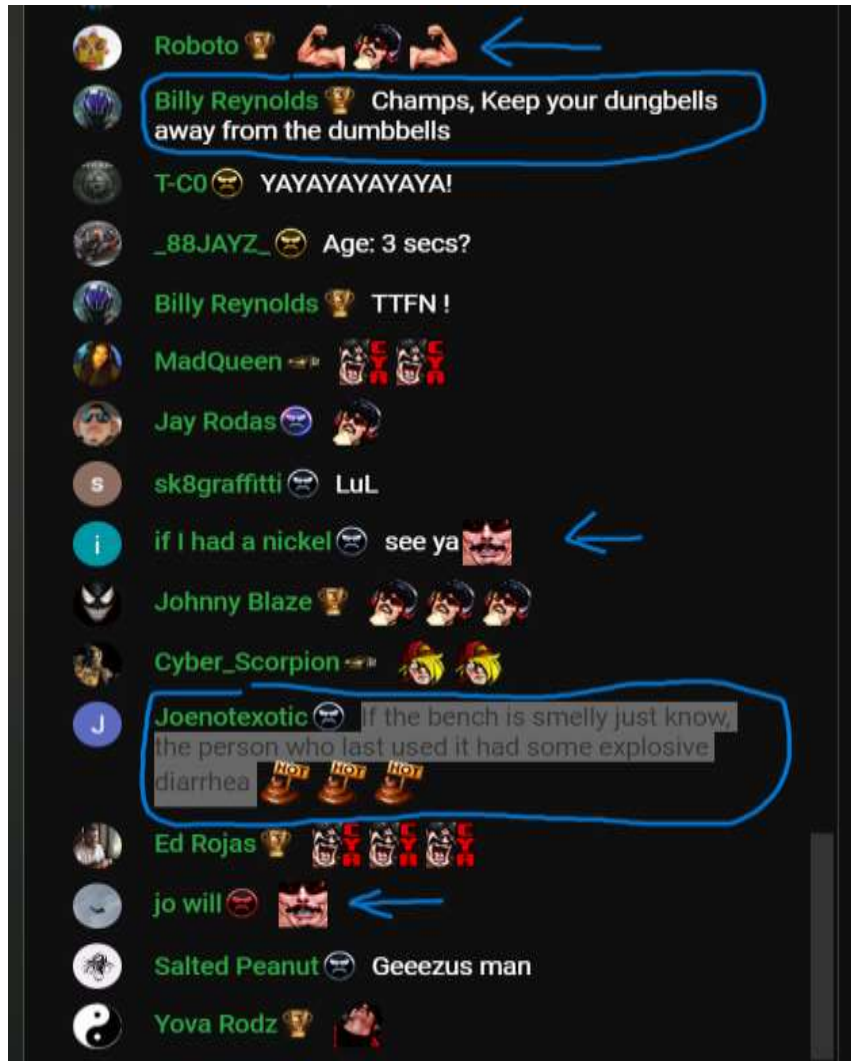
This type of conversation between Doc and chat, and chat amongst themselves, is par for

the course for the streams viewed for this study. There are a lot of exaggerations, bathroom

humor jokes, and an atmosphere that heavily resembles a WWE "backstage" skit. Doc, in all

three streams observed for this study, at random moments during the stream, would take a break and proclaim he had to take a "hot kaka diarrhea break" or similar line. Doc sets the environment and then chat simply follows suit. It is also important to note that Doc, though normally very engaging with his chat, will often shift his focus to his in-game performance in whatever shooter he is playing and not read chat while playing. Doc will try to balance in-game performance and audience engagement so that both aspects of his stream are constantly entertaining. Also, If he is playing with other streamers or teammates, he will talk to the teammates in an audio server like Discord which the audience can hear as well. In these situations Doc will sometimes only read and react to chat in between the matches or during lulls of in-game action. If he is playing solo, he will still focus mostly on gameplay, but he will describe what he is doing and talk about the game as he is playing it as if the chat were in the room with him and he is discussing the game with chat. For instance, at the 4:25:20 mark of the October 9th stream, Doc talks about other players, who are not as good at the game, saying, "The sheep are slowly getting phased out."

Tim The Tatman

Tim the Tatman is a similar YouTube streamer to Doctor Disrespect in that he tends to focus on mostly the act of gaming when he is in the match. Also, like Doc, he will not let the in-game action become a total detriment to his communication with the viewers. He maintains his discourse with the chat well enough to keep them engaged with the on-screen content. During his August 8th, 2023 stream, Tim opens the stream with a cardboard cutout of Jake from State Farm sitting beside him. Technically, this is considered pre-gaming content, but it lasted only a few minutes, gives context to the environment during the gaming portion, and provides the foundation that this stream was sponsored by State Farm. Being sponsored dictates that the first two hours of this stream, the portion of the streamed sponsored, will play out a bit differently from Tim's normal streaming content. Performing a sponsored stream also means that Tim has to

control his language as evidenced by Tim telling chat "No swearing!" at the fifty-minute mark.

Tim also asked the viewers to type "#ad" in the chat box so that he could be reminded not to

swear himself. As can be expected, some of the chat obliges while others take the opposite

approach in order to tease Tim. One chatter suggested, "Shout breakfast food instead of

swearing." With another chatter proclaiming "You can't not use bad language. That language

MADE YOU!!"

Tim Has His Own Game! Kind Of. At 49:09 into the stream Tim also states that he is

playing a Fortnite mod called "Only Up" during the two-hour ad and then "We might play some

actual games with Dennis" after the ad is over. A mod in video game terms is when the design

elements have been provided to the players so that they can take the properties and software

engine of the game, but make their own maps, game modes, and even totally different games

using the software and in-game items. In this case "Only-Up" is a mod where items that are used

as backdrops and environmental ambiance, like sushi rolls, bike racks, bushes, etc. are enlarged

and placed in such a way that they require jumping and climbing to scale ever higher into the

sky. The goal of the mod is to reach the top without falling. Normally, Fortnite is a shooter in

which players eliminate each other until only one is left, but in Only Up, the goal is for a single

player playing by themselves to scale these objects until they reach the top. This particular

version of Only Up was made specifically for Tim to use, and it allows him to play the game

while still having banter with the chat more than if he were playing the base Fortnite game.

The on-screen gameplay started about a minute before those statements were made, with

Tim choosing the game mode while discussing it with chat. Again, through this whole process,

Tim talks to chat as if they are present with him and can influence his decisions. He asked his

chat moderator and assistant "Wipz" which game mode was tougher and then asked chat what

they thought. A chat moderator, also known as a "mod" (different than a game mod. It's

confusing, I know.) is a person to whom the streamer gives certain administrative powers so that they can curate the chat box and maintain a communication environment that aligns with the stream's culture, as well as to eliminate any illegal discourse or solicitation. In this particular case, Wipz is also the tech guy, assistant, and much more. Wipz sets up the streaming programs, fixes any technological glitches, records moments that will be used later for recorded content, and also interacts with the chat. The community will talk to Wipz and treat him as a part of the community and almost like an off-screen sidekick to Tim.

Furthermore, Tim discussed choosing an in-game character with chat. This causes chat to respond with comments like "Tomato!" which is a reference to a character in the game who has a tomato for a head, "That's Goku" and "Vegita" referring to characters in the game modeled after Japanese anime characters. After Tim chooses Tomatohead as the character he starts to play the game. The first thing Tim says once the level is loaded up is "Isn't this nice?" commenting on the visual presentation of the game. After that, Tim starts to figure out the controls and game physics while audibly expressing his thoughts so chat can follow along and give their opinions. He makes statements like "This game mode has a save mode?" and "I can collect coins! This fun." The chat replies to him in kind with agreement, giving suggestions on play style, and the ever-present teasing comments.

Chat and Wipz as Sidekicks. Tim often talks to "chat" as if they are a second whole character in his stream. For instance, just a few minutes after introducing the game to them he talks to them and says "Don't embarrass me in front of my new sponsor. Seriously." when referring to State Farm watching because of the ad he is running for them. There are other similar comments where the chat plays almost the antagonist to Tim's progress in the game. Their identities naturally fall into these archetypes, in no small part because of Tim's choice of communication style with chat. As stated before, Tim is a part of the jokes made at his expense.

When he shows the premier of an actual TV commercial, he filmed with State Farm on the

stream at the 1:33:00 mark he makes a joke about his lazy eye showing up on-screen. Another

aspect that makes Tim's streams unique is the interaction with his

moderator/technician/editor/assistant named Wipz. Wipz is often making jokes in the chat as

almost a third party who teases Tim on behalf of the chat but also from the content creator side

of the community. Wipz often plays the role of an active intermediary. For instance, at the

2:50:00 mark Tim gives control over the stream to Wipz, who can control Tim's computer

remotely, while Tim takes a small break.

Wipz then turns the stream into a Jake from State Farm stream, as if Jake took over. Wipz

uses video clips and zooms the camera in on the cardboard cutout of Jake. The chat responds to

Wipz as if he is one of them who has taken over by suggesting that he make the video game

character dance or jump off a ledge to reset Tim's progress. In this stream, as in the others

viewed for this study, Wipz is communicated directly to by the chat through the chat box, as if he

is almost a co-streamer, and actively present with them. They will ask Wipz to mess with Tim

while he plays (by playing sound alerts or taking control of Tim's computer) or to make a joke

about Tim when he posts clips of Tim's streams on social media. One other moment of note

during this stream is when a community member donated money to get their message highlighted

just so that they could say how much they loved the community. The relationships built in this

virtual space often bounce between valid connections and parasocial ones.

Tim and Doc Together

On August 23rd Tim the Tatman and Doctor Disrespect played a game of Madden (a

football video game) together in a co-stream. That is where both streamers join the same Discord

voice chat server and talk to each other so that viewers from both streams can hear both

streamers at the same time while watching the camera and in-game perspective of whichever

channel they are watching. So, both channels were showing the same stream from each streamer's perspective. To start with, both streamers play a warm-up game against the in-game AI. While this is going on Tim simply talks with chat about a variety of topics including his fantasy football league choices at 1:05:44, "I picked Mike Williams on my fantasy team, but everyone said it was a bad pic." The chat is responding to players he is getting for his team saying that Cee Dee Lamb was either an overrated player or an elite receiver, with some simply wanting to joke with the comment "Cee Deez Nutz".

However, the real aspect to focus on with this stream is how the streamers react to one another as well as chat when they finally join together around 1:44:00 of Tim's side of the stream. Right off the bat, Doc presents his persona/character when he enters voice chat saying that Madden is the worst sports game he has ever played. Tim starts laughing at the statement and relates with Doc by saying that he too is tilted because he just got beat badly in his warmup game. Their focus is on each other at this point more than on chat. They are building their co-streaming identities and developing the environment so that they adjust their focus from a single-streamer focus to a dual-streamer communication environment. To this point, Doc tells Tim in a frustrated voice that he has been ready for 45 minutes and then asks if Tim saw the chat tell him to back out of his last game. To which Tim jokingly replies "I never read chat so…" "It's just one of those days I had to turn them off. You know? I am just reading alerts." Again, Tim's statement is meant as a bit of a jest, but it does show that when the gaming begins, the focus shifts from being entirely on the chat to a divided focus which can more easily miss their comments.

Game On! Once the game actually starts between the two, beyond the setup and loading of the match, the conversation sounds much like what you would hear between two friends sitting in the same room playing a game against each other. During the whole setup process, the

chat gives the streamers grief about their in-game settings, rules, and uniform choices. Prompting both streamers to jokingly say that they are turning off their chats for the day. As the game commences, they discuss the on-screen action like when Doc says at 1:57:00 "Alright I will give you some credit for that run. Even with the little jump at the end." The chat starts to chime in on the gameplay and tries to give advice on how to play the game properly as well as just teasing the streamers about how bad they are. Tim is lost to laughter at the thought of how silly the whole process is. In this moment, Doc is complaining every time a play goes against him, combined with the absurdity of how poorly he is playing, alongside Tim also playing poorly himself. The whole situation simply made Tim lose it and laugh uncontrollably.

The content has totally shifted to a focus on the humorous social environment filled with fun and community involvement rather than a focus on good gameplay. The two streamers play off of each other's on-screen personas while enhancing their individual identities. Doc plays the role of the aggressive gamer focused on winning, while Tim plays the role of just enjoying the process of playing, basically winning while not trying to counterbalance the Doc persona. These two streamers work well on-air together because both Doc and Tim have similar styles of interactions with their chat. Examples of this communication dynamic the two streamers have with their chats can be seen during their other streams as well. In all of their streams observed for this study, they describe what they are doing and the emotions they are feeling while laughing about in-game actions. The chat responds to the streamers' comments and then teases the streamers about their gameplay or encourages them to play well.

Plyrock Gaming and MenziesxMedia

The next streamers to be discussed are the two smallest streamers being studied. One thing that sets Plyrock Gaming and MenziesxMedia, apart from the larger streamers, other than audience size, is that during their gaming content, they still focus the larger portion of their

attention towards their viewers. For small-sized streamers like Ply and Menzies, the need to

retain the approval and attention of all of their viewers dictates that they reserve more of their

attention for the chat.

Plyrock. A great example of this would be when Ply was playing a two-player game with

a friend, moderator, and fellow streamer gtafoxxx (Foxy) on August 6th. When Foxy was brought

into both the stream and the Discord voice channel, the chat caused a sticker party which comes

with loud sounds, music, and a cluttered screen (Figure 4.27). Normally, when a new guest

enters a stream they are given primary attention by the streamer for a little bit, especially when

playing a game with the guest. A chat member even jokingly commented on Ply focusing on the

chat and the sticker party more than Foxy, "This is how you welcome Papa Foxy back?" To

which Ply replies "Yeah, it is. Is this what you want to do? Do you want to throw more sh*t at

my face?" trying to turn the situation into a chance to further lean into his on-air identity as well

as evoke more spending and donations from viewers.

Figure 4.27

Plyrock Sticker Party

After the chat settles down a bit, Ply goes back into the game around the 38-minute mark. Ply continues reading chat and responding throughout the stream, while also telling Foxy about some of the game's mechanics. Ply's focus slides back and forth between Foxy and the chat fairly smoothly, but the chat is still the main focus. For instance, Ply was trying to figure out how to get Foxy into the game with him but still responded to a comment by saying "This is a serious gaming channel and we are doing serious things right now" in his Ply character's voice. The intended effect of this comment is to be facetious and rile up the chat even more. This strategy to rile up chat clearly worked because as Ply and Foxy were discussing the controls for how to join a game together someone shared a sticker that came with audio. The audio clip said "three hours later" in a French accent and is from Sponge Bob Square Pants clip. Just like with the other streamers who got teased by their audiences, playing the Blerp was a way for these chat members to tease Ply about how long the whole process of getting into the game was taking. This is the standard for Ply's chat, sending Blerps and stickers to playfully disrupt Ply or comment on the on-screen action. Ply almost always responds to the Blerps and stream stickers with recognition and a personal statement to the person who sent it. In the observed streams, Ply's focus seems to be more centered on personal interactions with the chat than on perfecting the gameplay or doing well in the game.

MenziesxMedia. Menzies is another small streamer who also takes a similar approach to his interaction with his community during the gaming portion of the stream. However, differing from Ply a bit, there are times during certain games, usually Call of Duty, when he will become exceptionally focused on the game almost to the exclusion of chat for a while. You can see the focused look on his face in Figure 4.28 (1:47:38) and compare it to Figure 4.29 (1:06:50) to really understand how his attention is captured while playing Call of Duty on October 13th.

Figure 4.28

Focused Menzies Gaming
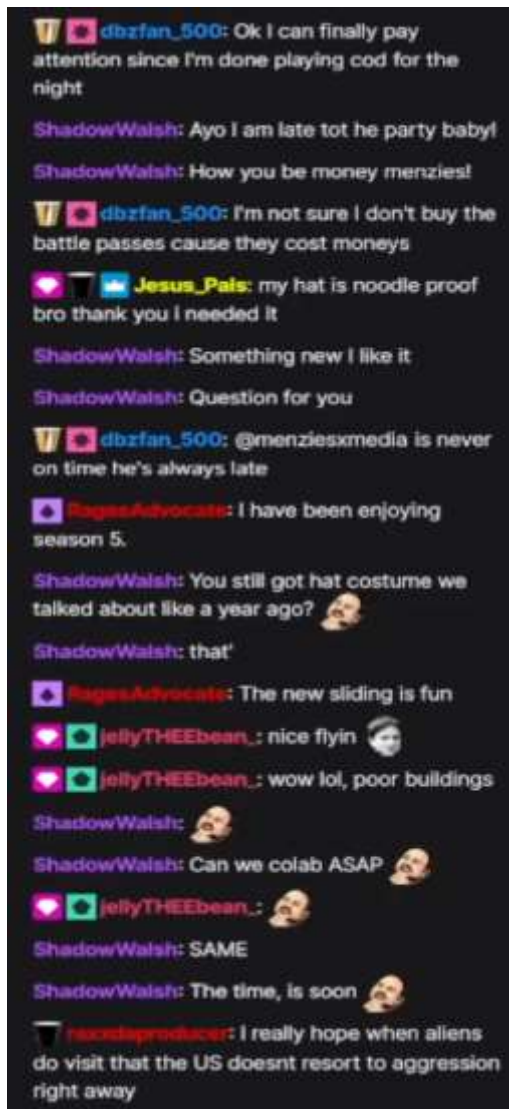

Figure 4.29

Menzies Pre-Gaming

Even when Menzies is focused on the game, he still tries to engage his chat by talking out loud to the game in statements like "You're not getting away. Not today!" when he shoots other players, or even singing "He'll be coming 'round the corner when he comes," while waiting at a corner for an opponent to run into view. When playing competitive high-focus games like The FPS Call of Duty, Menzies doesn't usually read chat except for in between rounds or sometimes when he dies. He will periodically take breaks from the game to have something like a "chatting with the community" intermission. His communication method is a bit different when playing a less competitive game, like a single-player story-driven game, or a role-playing game instead of a game where he is actively playing against other humans. The change in-game genre allows him the freedom to break gaming focus more often during the streams because non-competitive games give him control over when the in-game action occurs. This is when he more closely resembles the style of Ply's in-game communication. Menzies is still a bit more game-focused than Ply, but he will still regularly read chat, and perform some of the same actions as in his pre-gaming portions.

Interaction During Games. For instance, during an August 9th stream Menzies was playing a comedic cartoon aliens-on-earth game and a community member entered the chat, prompting Menzies to pause the game and say, "Yo Raggio what's up!" then hit a sound alert button that played a "Welcome to Menzie Media" voice line. He then threw a pile of fake dollar bills in the air to further make that community member feel welcomed for joining the stream. Menzies then responds to a comment in chat that said "I really hope that when aliens do visit that the U.S. doesn't resort to aggression right away" by jokingly saying "I agree. Like maybe they want to come down and just say 'Wow those are some dope ass video games you guys have." This balance between gaming and communication with the viewers leads to the chat becoming engaged in both their conversations with Menzies as well as the gameplay, as can be seen in

Figure 4.30. Examples of the viewers feeling a presence in the stream and a closeness of relationship with Menzies are when one chatter asks Menzies to collaborate with him, then another community member discusses a new season of a show they were watching just providing small talk, while other viewers were having conversations with each other. The overall environment of the stream and viewer chat box is that of attending a house party with some friends.

One other way that Menzies engages his community during the gaming portion of his streams is to have a community night where he plays the games with a certain number of them. People who sign up through a text post on his Discord server get to join Menzies in playing certain games that allow for larger multiplayer parties. For instance, on August the 4th Menzies played Splitgate (another FPS) with nine of his community members, all of whom were also in a voice chat with him. Their voices can be heard over the stream, and Menzies is directly communicating with them as they play, giving another avenue for social presence to increase. The chat box was filled with community members who weren't playing but cheering on the other community members who were playing. The viewers also engaged in conversation with the on-air community members (Figure 4.31).

Figure 4.30

Menzies In-Game Chat

Figure 4.31

Menzies Community Night Chat
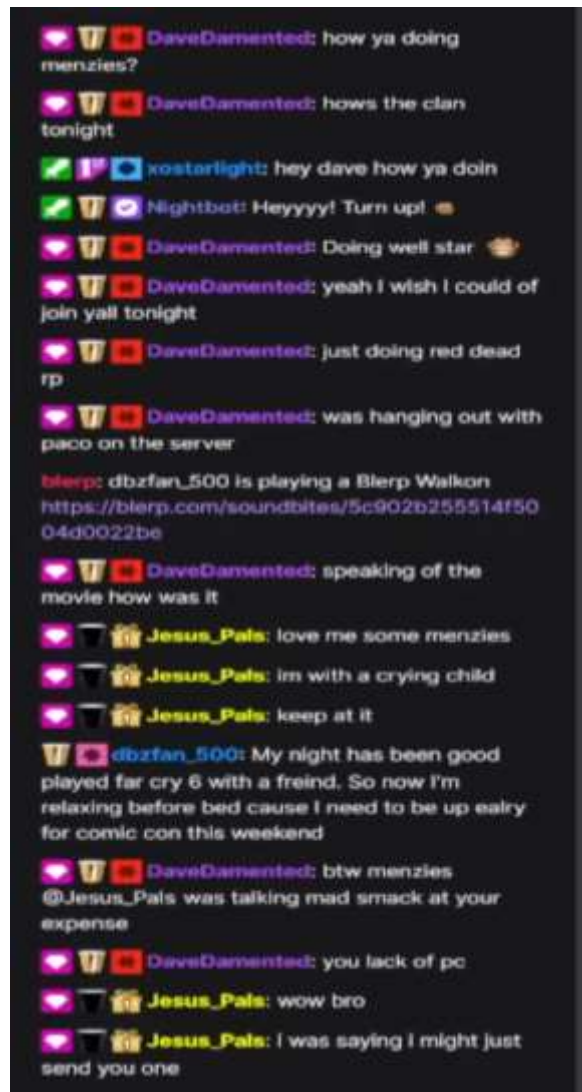
Average Dad and Spartakus

The two streamers Average Dad Gaming and Spartakus are similar in size (1k-2.5k concurrent viewers and 350k-450k followers) and content, and as such will be categorized together. They both specialize in Call of Duty: Warzone and both basically jump right into gameplay at the start of their streams. Average Dad (Dean) is rather chatty with his community.

To this point, the very first thing that occurred during the observed portion of his August 16th stream was Dean getting shot and killed in the game (COD) with him then muting his in-game mic and only talking to the viewers/chat saying "It's every f*cking game bro. Isn't it? It's every game just dying to some people just sitting on a head peek or just sitting on a rooftop thinking they are some kind of demon." He grunts and adjusts his seating angrily then reads the chatbox and sees someone say, "Why are you being so sweaty?" To which he replies "Who me? Why am I being so sweaty Connor? I'm trying!"

As Dean joins back into the action of the game, he is reading aloud the messages from chat telling him about the housing prices in the various U.S. regions because he is from England and is considering moving to the U.S. (Figure 4.32). He also asks chat to tell him about the living environments, cool cultural features, schooling, and other similar aspects of various regions in the U.S. This entire conversation takes place while Average Dad jumps, runs, and shoots frantically in the game. When he does die in-game he squeals and then complains but in an upbeat and excited manner. He discusses the death with chat claiming that he should just start the game at a different spot on the map. After this Dean had to get up from the chair and leave the room for a bit. The chat then shifts to joking with each other and talking to the empty chair as if it were the star of the show. When he got back he explained to chat that he had a lot going on that day and that he was "distract-Dad". The whole time Dean plays he is exceptionally communicative, constantly describing and reacting to what is happening on-screen.

Figure 4.32

Average Dad Chat
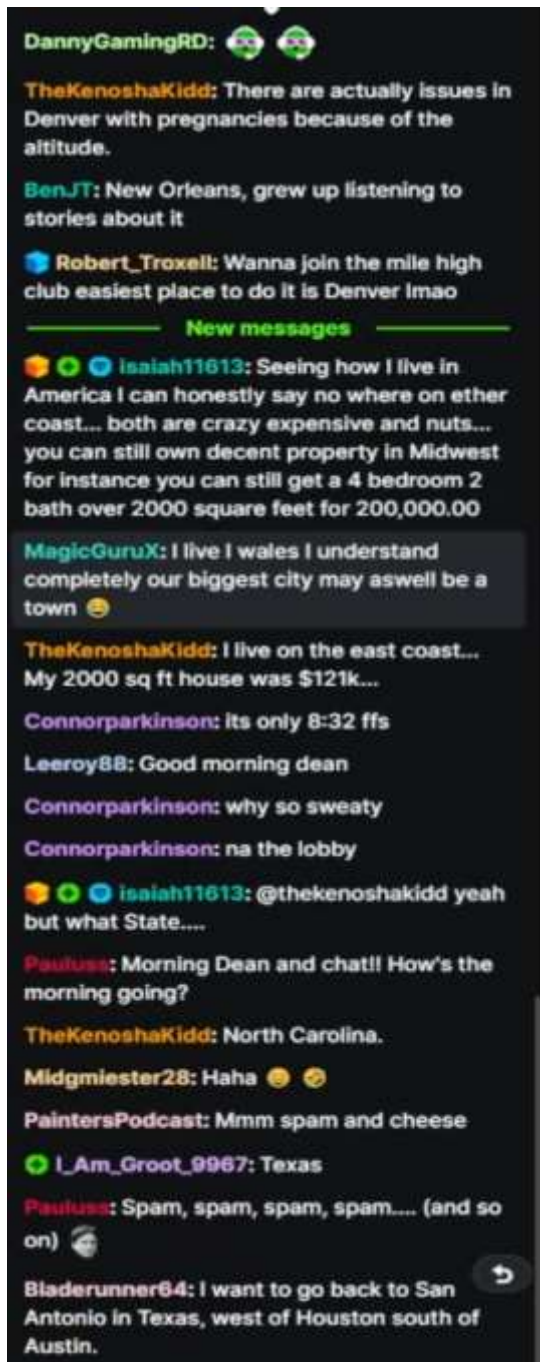
Spartakus Gameplay. Spartakus on the other hand is a bit more gameplay-focused and though he does make comments about what is going on in the game, they are more sparse and somewhat less energetic than Dean. Spartakus has a more reserved energy about him, almost a business-like vibe. He is very into the competitive side of online shooters and often plays in cash-prize tournaments. Another aspect of their gaming and streaming presentation that Spartakus and Average Dad share is that they are often playing Call of Duty: Warzone solo. In a game that can have parties (groups of players that are playing together) of up to four people in servers filled with over 100 other human-controlled enemies, choosing to consistently play solo is a distinct strategy on the part of the streamers. It seems like this choice allows them to split their focus more evenly with their chat rather than having to also include other teammates in their conversation.

Solo Yolo. An example of Spartakus using solo play within a multiplayer game can be found in his August 5th stream where, again, the show is joined mid-session and Spartakus can be immediately found in-game driving an amphibious vehicle alone out in the ocean off of the coast of the landmass. While he is doing this he is calmly saying "This is a pretty nice vehicle isn't it?" and then "Captain Sparty sailing the high seas" in a pirate accent. He then stops when he is far enough from the land mass and says "I need to reserve my fuel. I also need to catch up with chat a bit." He then goes into reading comments and thanking the chat by individual names for donations. His viewer chat especially responds to the pirate talk (Figure 4.33). However, after only a couple of donations were recognized and announced, Spartakus' focus immediately shifted back to the game as he asks, "Did you guys hear that?" (Figure 4.34). He then tries to find the source of an audio cue he swore sounded like a seal while describing what he is doing in a voice like Shaggy from Scooby Doo. He also discusses, in his normal voice, how the waves are

affecting his in-game camera view and says, "I guess this is to make sure people can't just snipe from out here."

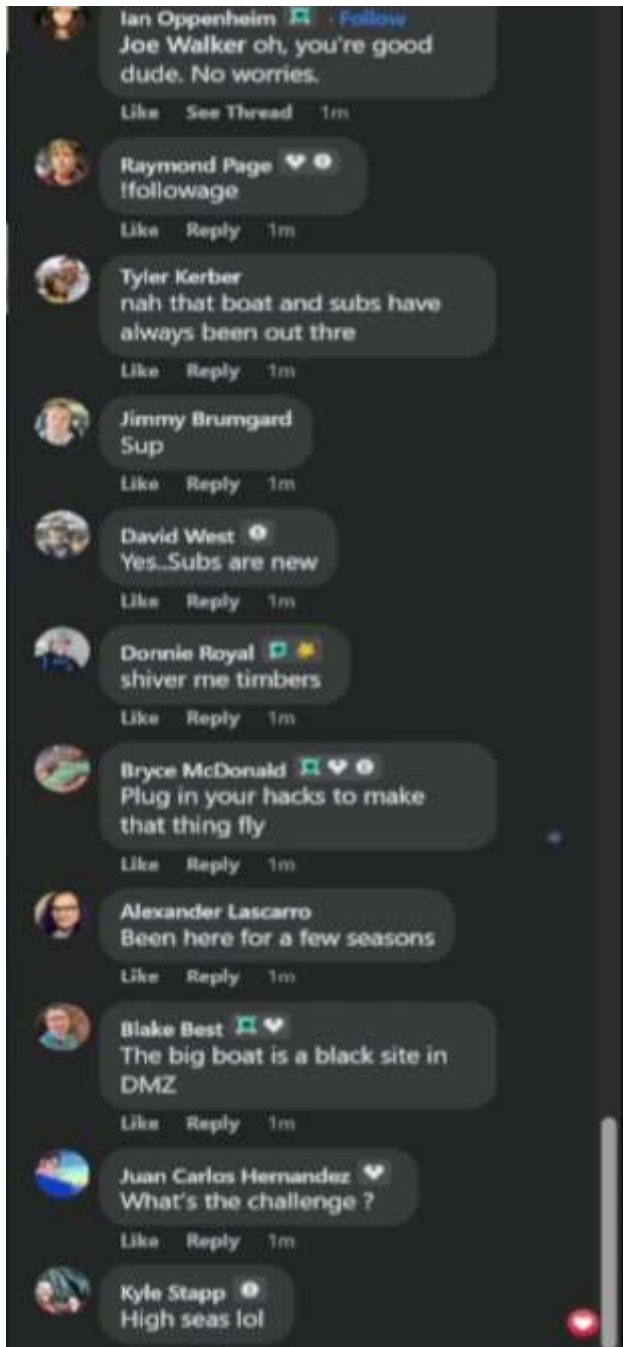**Figure 4.33**

Spartakus Pirate Chat

Figure 4.34

Spart Focused Face

Having Friends Is Nice. Though Spartakus does often play Warzone by himself, he doesn't only play solo. During his August 19th stream he was playing with two other people in a squad of three. Another important factor impacting this stream is that he is playing in "ranked mode" where the results of the match affect the player's in-game rank depending on the results. So, his rank could go up or down depending on if he has a good game or not. This, along with having teammates, impacts the amount of focus he puts into the community chat during the gaming portion of his stream. His reading of comments and donations becomes almost entirely isolated to in-between-rounds moments. His in-game chat is dedicated to communicating with his teammates and describing strategic information. The audio of all the team members is also streamed so that the audience can hear the chatter and communications which is helping the team perform well. The interesting thing that occurs is that the content of the chat box also adjusts to

the new focus on in-game performance. One community member says, "TeeP and Nio in the same lobby" letting Spartakus and his team know that two other professional streamers and players were in the same game as them and that the game lobby was especially difficult. Another community member says, "That's the same team that won the last round" as a warning to Spartakus and his teammates.

One other interesting event that occurred during this stream, and also during all the other observed streams regularly, initiates at the 4:33 mark of the recording. Spartakus mutes both in-game chat and his community-focused stream audio so that he can have a conversation with another person who is physically present with him (presumably his wife because she is the only person who lives with him). Even the most focused and dedicated streamers have real-life interruptions, and many often eat on stream because of the four to twelve-hour run times. This type of activity, though disrupting the normal content, can have an enhancement effect on the sense of presence for the audience as if they are included in the streamer's real life a bit. A peak behind the curtains.

CourageJD and StoneMountain 64

The final two streamers, CourageJD and StoneMountain64 both share similar sizes of audiences and both also tend to have very short pre-gaming portions. To start with, CourageJD (Jack) is a very chatty in-game streamer. He was able to consistently discuss topics with his chat while also staying alert and active in the competitive third-person shooter game Fortnite. On the CourageJD stream observed on August 21st, after about a 10-minute pre-game conversation, Jack boots the game up and jumps right into the action. As he is dropping into the game map from a floating bus (how the game starts for all the players), he is answering questions about what type of monitor they should buy and discussing the struggles he had with strep throat earlier in the summer. The conversation is similar to what would occur between friends sitting in a room

together. At the 11-minute mark, he states that he can't wait for the new season of content in the game and then responds to a chat member by simply saying "I see what you are saying Fizzy. Maybe. Maybe." This shows that while he is jumping, shooting, and picking up items, he is also still reading comments at the same time, but also that he expects the viewers to also be reading the chat box. Right after this comment, Jack launches into an announcement telling those watching to make sure they are subscribed if they are excited about the upcoming new content because he is having a giveaway sponsored by Corsair which includes new gaming mice, keyboards, and headsets. This "launch celebration" is another way for the community to be included in the streaming action and develop a sense of relationship.

Fun With Others. Jack usually plays with a squad of other streamers, but since this is early in the stream, he is playing solo at this point, which allows for more concentration on chat being his conversational partner. Later in the stream, Jack joins forces with another streamer named SypherPK. Once Sypher joins Jack does focus significantly more on him than chat. For instance, at the 2:03:00 mark, Jack describes what just occurred in the game and says, "My other backup plan was that I had three 'nades in my back pocket and I was going to try to drive the car down in there and then throw the 'nades and have the 'nades light everything on fire." After Syper asks about there being a gold pistol in the building they are entering Jack says "Should we rotate to zone? Yeah, here I come." This conversation is now geared towards Sypher and describing the in-game actions to Sypher rather than being a conversation with chat. However, these statements do still serve the purpose of informing the audience of his thinking and keeping them engaged, while not directly addressing them. The biggest difference seen in Jack's content when he plays with other people compared to when he is playing the game solo is that Jack's focus is more so on the gaming content, and the conversations revolve around the game and his partners rather than a consistent mixture of game discussion and chat comment response. To be

clear, the discourse with chat does not end, it simply lessens. For example, at the 2:04:43 mark,

right after the previously presented statements, Jack says "Oh, Before I retire from content, chat,

I will almost certainly have a full-fledged MMO arc." This is in response to a comment that said,

"When Jack and Sypher 'retire' I'd love to see them play MMOs." So, even though the focus

shifts to in-game content, that does not mean that Jack excludes chat, even during the gameplay.

Behind The Curtains. Another interesting occurrence that the other streamers also

engaged in, was discussing some of the business side of streaming with their chats. Jack did this

during that same stream on the 21st of August. Jack puts the chat in "member-only mode." This

is a setting the streamers can use to reduce chat spam from random viewers, and it only allows

people who have become "members" for a paid amount (usually $5-$6 a month) to be able to

post comments in the chat box. Jack explains this decision on air and then begins to wax on a bit

deeper about the data. He says that younger kids spam more comments but are less likely to be

paid members. He clarifies that 80% or more of his paid members are over the age of 18.

Then, around the 2:23:00 mark, Jack starts to discuss streaming strategies with Sypher.

Syper says "You know, the start of a season is so important," in reference to streaming when a

new content season releases for Fortnite. Jack responds by agreeing that people want to see if the

new content is something they like, and if it isn't they tune out quickly because the game has

been around a long time, and if the new content isn't engaging then people already feel bored

with the game. This mini-streamer strategy meeting is held live on air for the audience to see. It

gives a glimpse into how streamers produce their content and thusly gives the viewers a sense of

closeness with the streamers. Once again the viewers are being allowed behind the veil of their

favorite streamers, giving them a sense of relationship and presence in the community.

To further provide a sense of connection with his chat, about fifteen minutes later Jack

asks them if they want to see a video. It is clear that he is going to play the video no matter what,

but simply asking the chat first provides that sense that the stream is being conducted together. He asks the chat after the video if they thought the new map "looks sick." Still goading the chat to continue to stay involved in the stream after about two-and-a-half hours of gameplay. The chat responds by saying they thought some of the people who shot him and Sypher in the last round were probably hackers. To which Jack replies that he doubts it because they would have shown similar traits in the round before. In conclusion, Jack does an excellent job engaging the chat throughout a four-and-a-half-hour-long stream, while also providing top-quality in-game content as well.

StoneMountain64. StoneMountin64 is very similar in that he does a great job of conversing with chat even while playing the games with high focus and in-game success. Similar to CourageJD, Stone (as he is referred to by those who play with him on stream and by his chat) runs both solo and co-stream content. On the 21st of August (StoneMountain64, 2023), the stream was joined in progress to him playing Warzone solo and talking about the writers' strike while he sprinted up a hill in-game. His comments were in response to a chat statement saying "Shout out to the cool actors. Break the strike to help out Stone 😂." Even while highly focused on the game Stone did find the time to peek up at the chat box and respond to this comment.

As the play continued Stone began to shoot at another player and when the player got away, he said, "Why didn't I just stick with the SMG and finish him off?" as if asking chat their opinion. Then he also asks chat if a different player he just sniped "was the real T-Dog" which is assumed to be another popular streamer. Throughout his round of the game, Stone consistently keeps the viewers feeling present and involved by describing his thinking and actions to chat as if they were in the room with him. For example, if he looks around the left side of the building he says, "I thought I heard him around the left, but maybe he got away." Stone is exceptionally good at communicating his in-game thoughts and strategies audibly to chat when he plays solo.

He even breaks into a military character at times and talks like he is an actual commander in the

Military while playing. This usually causes the chat to respond to him in real-time as if they are

giving immediate advice, but this process also allows for them to have conversations with each

other, developing a sense of community and social presence within their own ranks. For instance,

during the above sequence of events, one chat member asked if he had served in the military, to

which the other more knowledgeable members of the chat answered that no he wasn't an active

military member himself, but he does heavily support the military members (Figure 4.35).

Figure 4.35

Stone Mountain Military Conversation

When Stone is streaming with other streamers and players in his in-game party, his

communication does focus a bit more on the active players he is playing with, like most all the

other streamers. However, Stone never ceases to regularly check back in with chat and explain a

particularly complicated strategy or game result. An example of this can be found during his

August 23rd stream. He was playing with four other streamers and even shared his screen space

with one of them (Figure 4.36). All the while he was engaging the chat enough that they were

replying with suggestions in the hopes of him reading them in real-time and helping him as he

played (Figure 4.37)

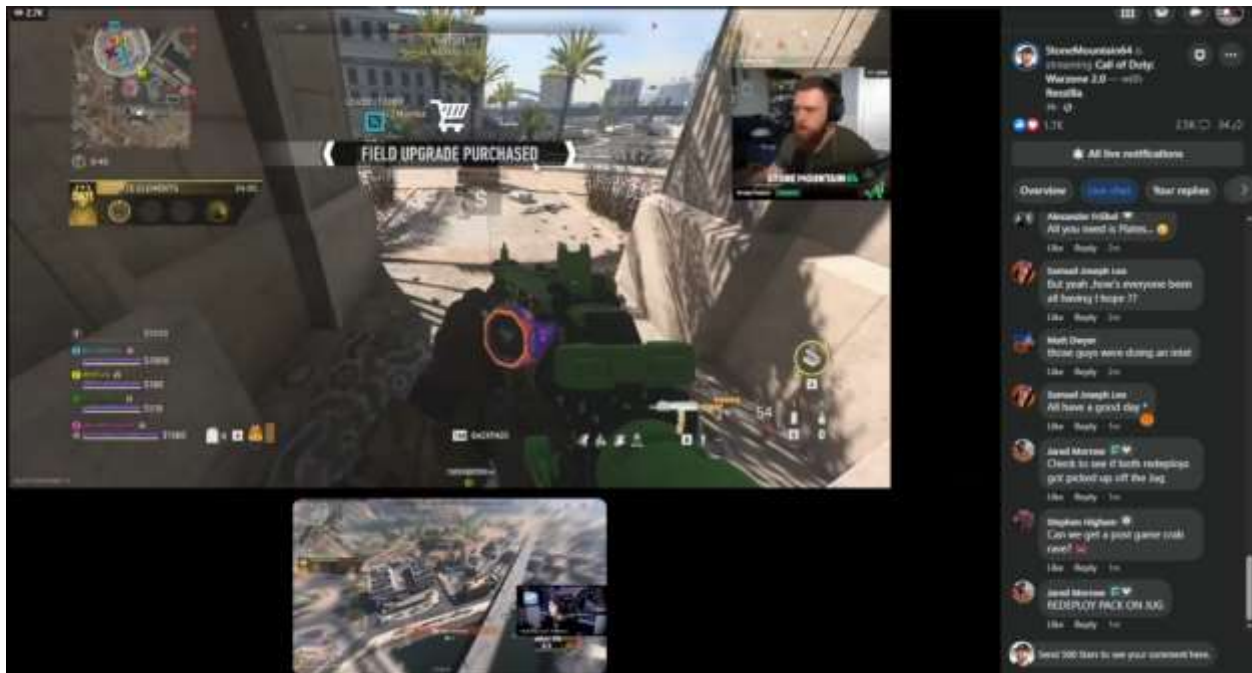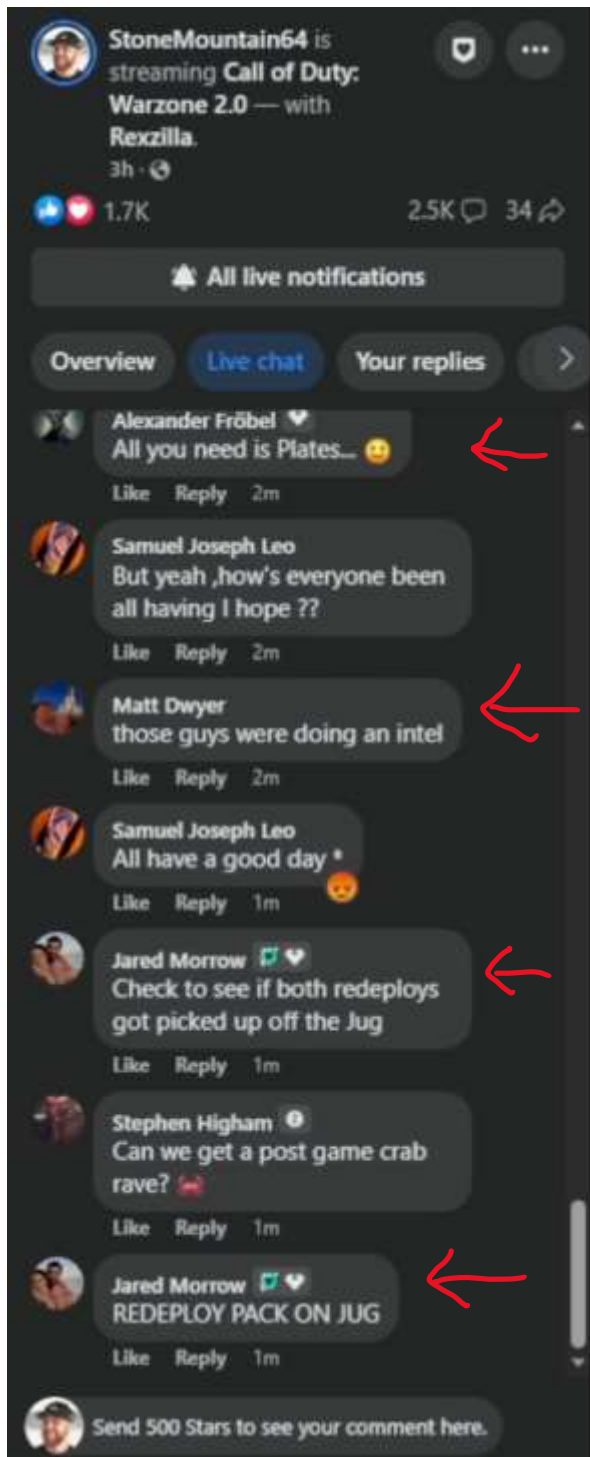**Figure 4.36**

Stone Mountain Co-Stream

Figure 4.37

*Stone Mountain Helpful Chat*

Talking To Teammates. Also, during this same clip, Stone is heavily focused on the in-game action by telling his teammates where the opponents are located, calling out their positions, and then asking for the teammates to keep the opponents busy so he can cross the street safely. The conversation was a back-and-forth affair with one teammate saying, "Just go for the rez Stone" giving Stone directions, then one of the other teammates calls out, "They are stacked together" giving the team an idea of the enemy formation. After resurrecting a teammate (a game mechanic of bringing back a dead teammate), Stone says "These guys are watching me. If you could hit a snipe on the second-floor balcony. Easy shot." The teammate replies, "Got him." Confirming the instructions are being followed. To which Stone immediately replies "Thank you. Crossing the street." Thus, completing that sequence of events.

The chat gets to hear this entire communication alongside seeing the action on the screen, giving them the feeling of being in the action with the streamers and being able to learn what really good players' communication sounds like and how they strategize. The viewer gets drawn in by the intense communication and frantic action to where they too feel like they are a part of the team playing. When Stone and his teammates completed a very difficult challenge to win the game by arming a nuclear bomb, the chat was full of congratulations and GG (good game) emojis because they too were excited by the results (Figure 4.38). This type of communication continues for the entirety of the stream, with Stone taking breaks in between rounds to read donations, subscriptions, and top comments.

Figure 4.38

Stone's Excited Victory Chat
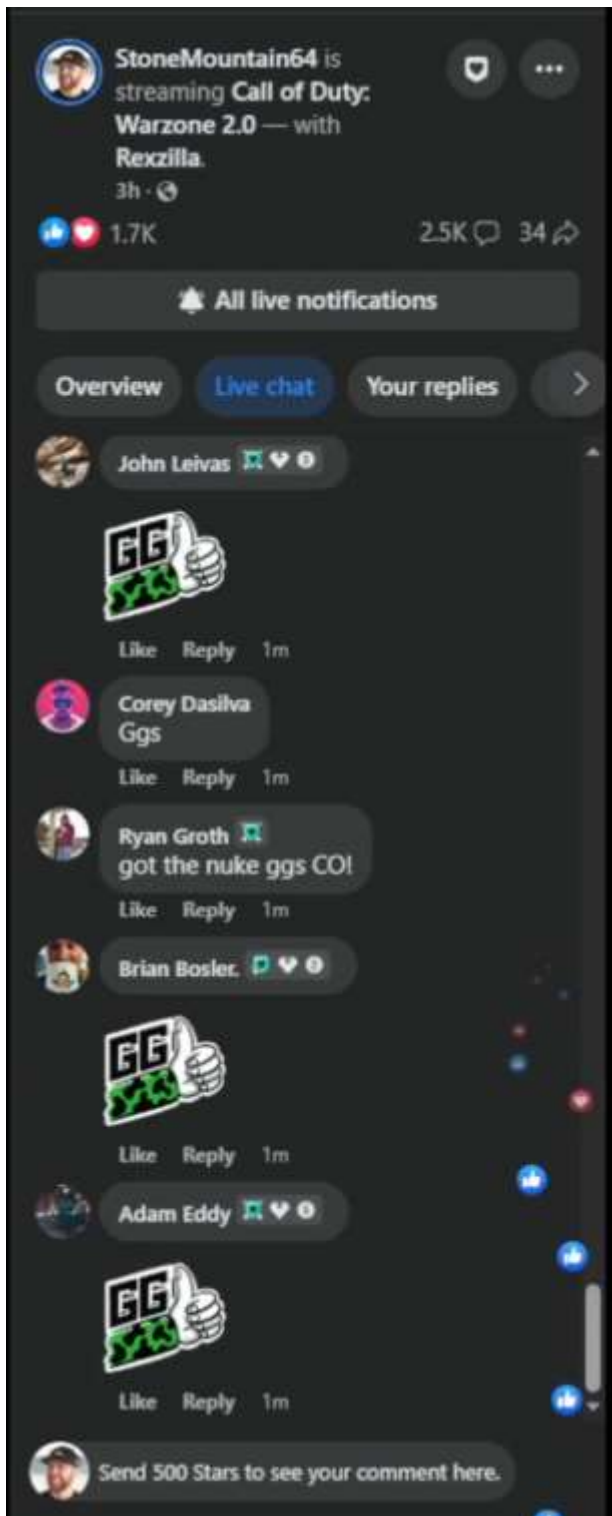
Cybernetic Impacts

Cybernetics, as presented in Chapter 2, focuses on how a system, whether digital, mechanical, or biological, processes information, responds to it, and changes the system for better processing, including control and communication. How that applies to streaming, the online communities that form around them, and the cultures that develop within these communities, stem from technological additions to the streams. The streams presented in this section will make use of various forms of cybernetic applications. Some are on-screen extensions from third-party companies, and some are built-in mechanics by the various platforms. This section will present observed examples of the roles various technological tools within live video game streaming platforms seem to play in the communication culture. Since the extensions and apps change based on the platform, the streams will be organized by platform rather than size.

YouTube

The YouTube streamers are Tim the Tatman, Doctor Disrespect, and CourageJD. These streamers don't use many third-party apps or extensions but rather take advantage of the platform-provided widgets which will be explored further. For example, if an audience member in the chat wants their comment to be highlighted (so it stands out), the YouTube widget will advise them to pay a certain amount (decided on by the streamer) to have the text highlighted. This process is offered through a chat prompt with a coinciding color-coded highlight (see Figure 4.39). Also, these paid actions will be listed at the top of the chat box with the amount and corresponding color. For instance, a paid membership message is colored green in the chat box (Figure 4.39 & 4.40). Then the money symbol below the chat box will flash green while the comment is on screen, or it will flash orange for a paid Super Chat (Figure 4.41). The colors can be changed by the streamer so not all streams will have the same color. For instance, Doc used

variations of green for his (Figure 4.42) and Tim used a bright red for a Super Chat in a different

stream (Figure 4.43)

Figure 4.39

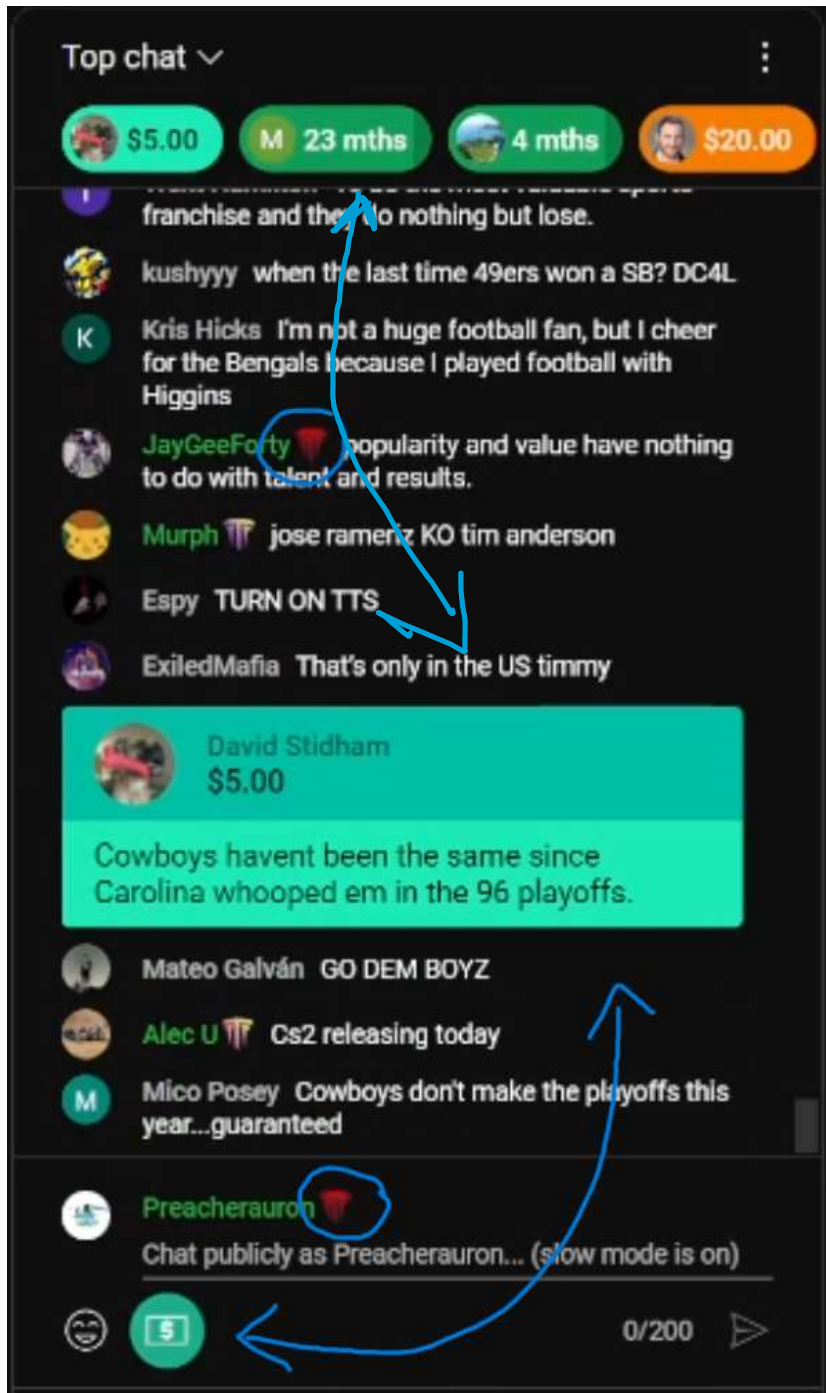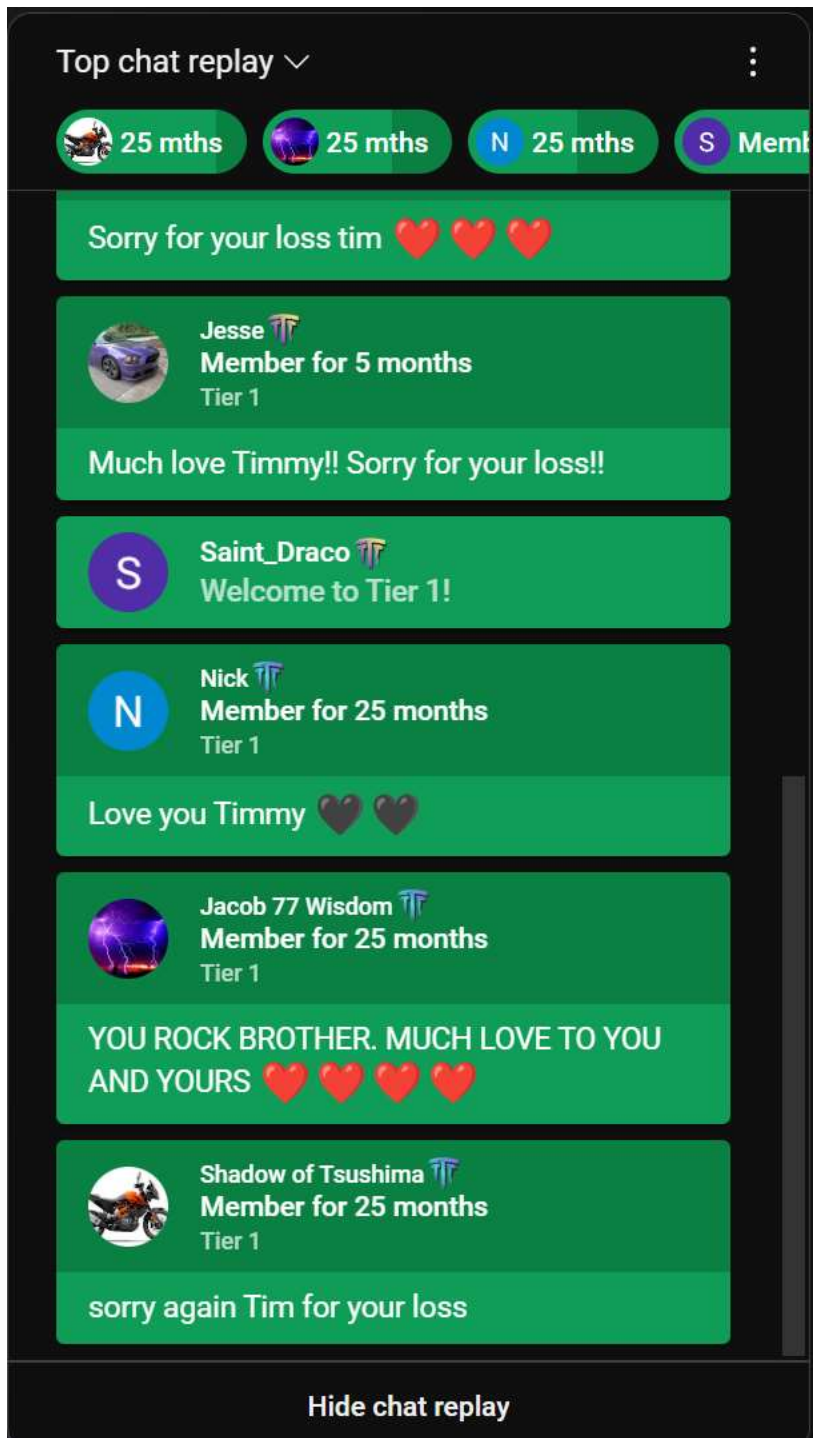*Tim's Green Highlighted Chat and Icon*

Figure 4.40

Tim's Green Memberships

Figure 4.41

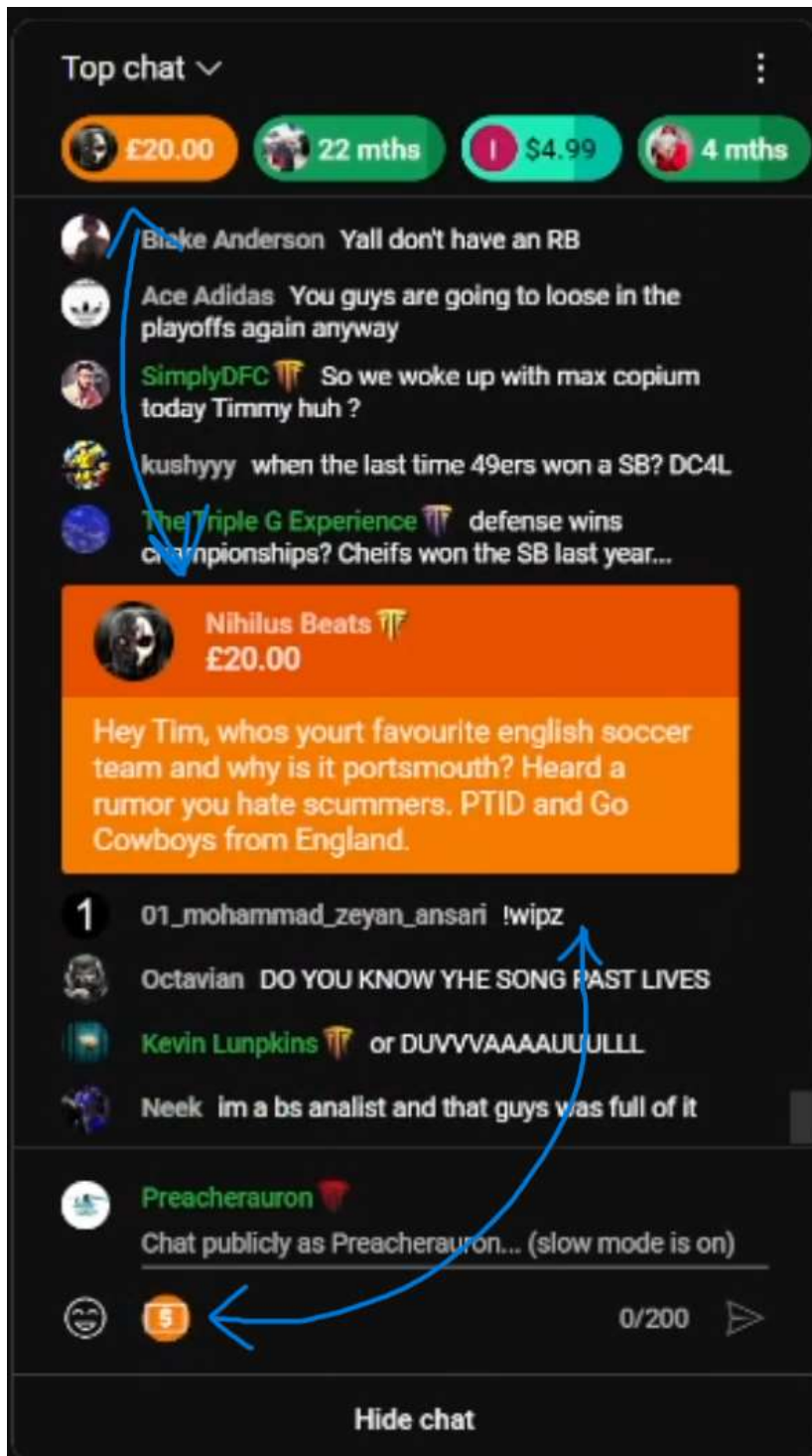*Orange Paid Tim Super Chat*

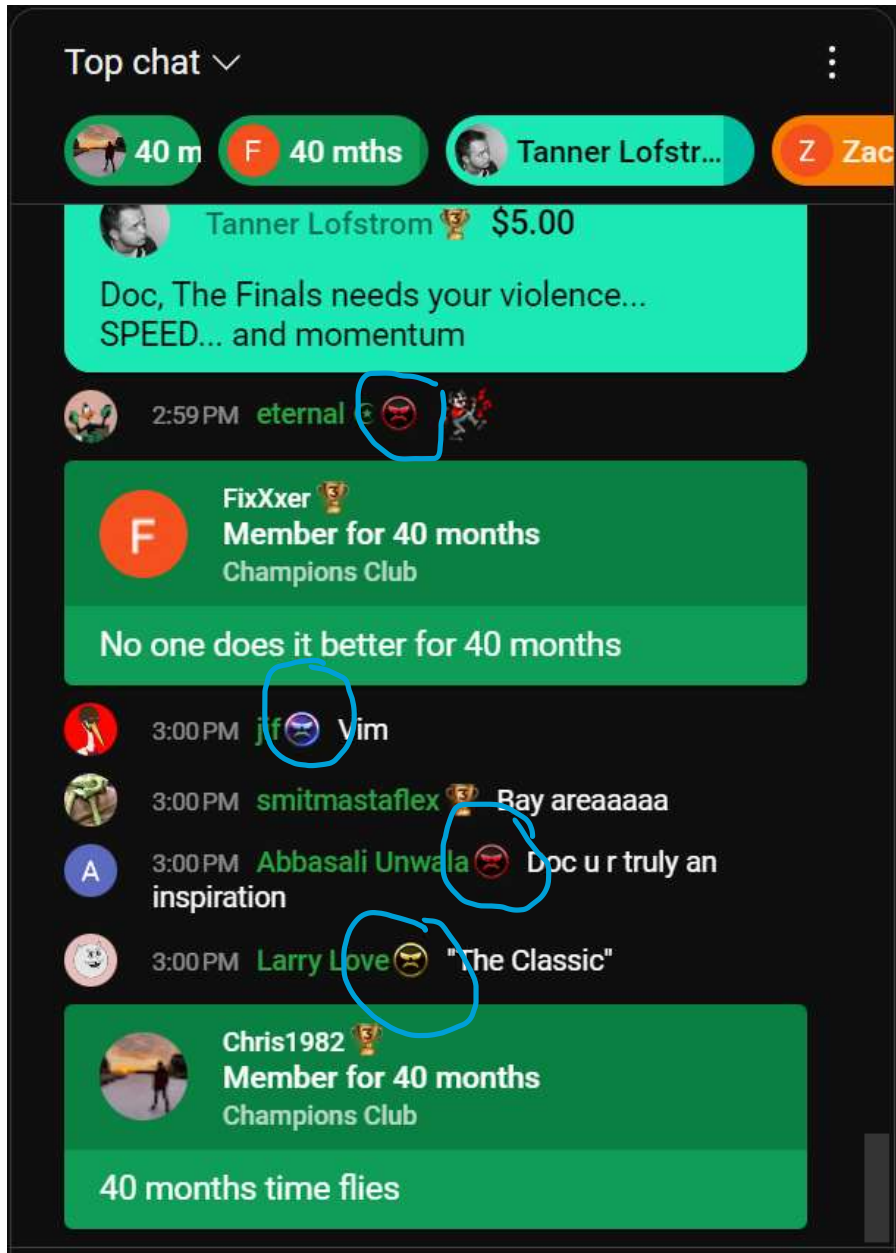**Figure 4.42**

Doc's Green Chat Alerts

Figure 4.43

Tim's Red Chat Alert
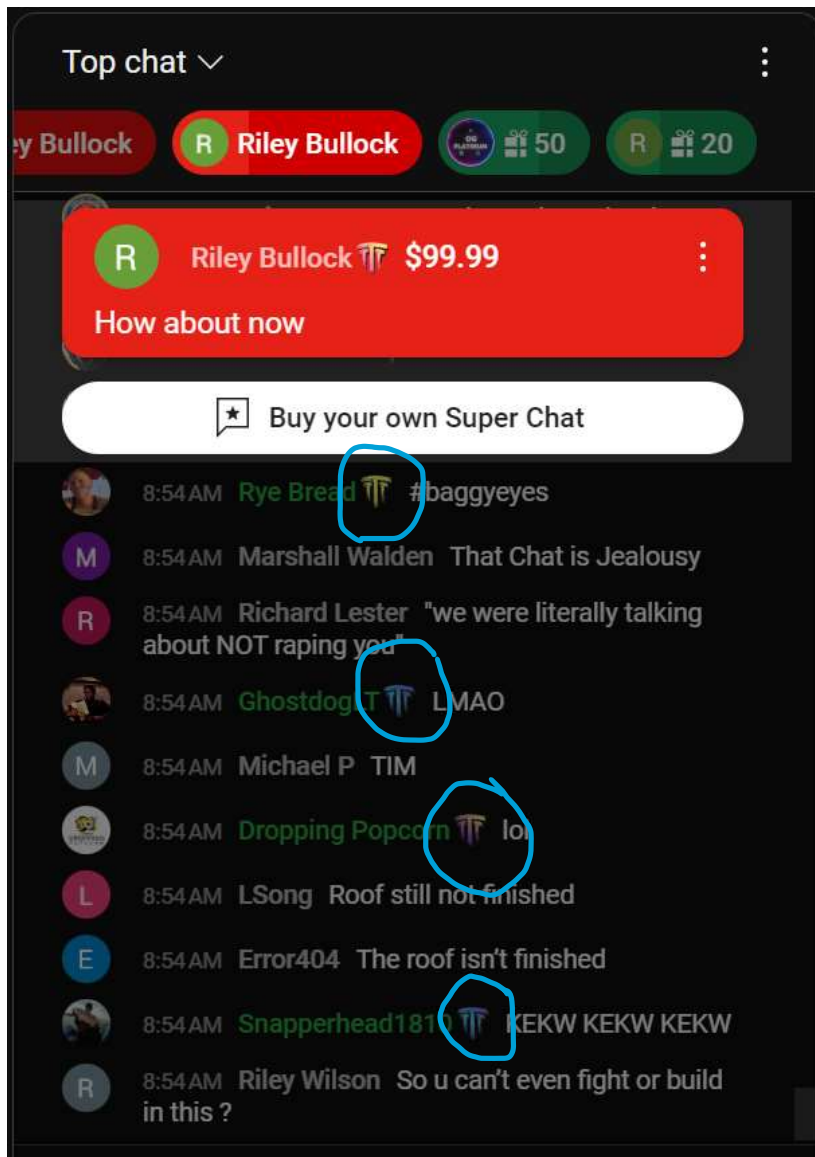
YouTube also helps fellow chat members learn how to participate in the SuperChat function. As shown in Figure 4.43, when the posted Super Chat comment is clicked on, YouTube provides an on-screen prompt to "buy your own Super Chat." Also, in Figures 4.39, 4.42, and 4.43 people who are paid members get a small channel logo of varying colors to appear beside their name when they comment in chat. These colors correspond to the various amounts of

months that the chatter has paid for the membership. This can become a sign of seniority as well as a goal to achieve for the viewers. CourageJD uses these same core cybernetic mechanics in his stream too since he is also a YouTube streamer.

Cybernetics Help Connect People. However, that is about the full extent of in-stream cybernetic mechanics this set of streamers use. There are external notifications like X (formally Twitter) posts that get made about thirty minutes before they go live and then again when the stream is live and actively joinable. These external factors can lead to a breadth of community homogeny connecting different realms of online social environments and communities. Beyond that, these streamers post daily content under different lists on their recorded video channels, like short clips of the previous streams, or 20-30-minute videos that keep the community engaged with the channel, the streamer, and each other when the streams are not live. Some shorter clips get posted to apps such as Instagram and TikTok as well. This keeps the sense of connectivity and presence constantly active in the viewer community.

There are also a few on-screen cybernetic elements that help increase the sense of community and social presence that these YouTubers use. There aren't as many options available as the Twitch streamers have, which will be discussed in the next section, but they are still present and serve their intended purposes. For instance, Doc uses a pop-up alert in the upper right-hand corner of his stream any time someone donates money (Figure 4.44). A robotic Doc pops out onto the screen with an electric scrolling ticker that says donation and the name of the viewer who donated. It also comes with an audio cue of a robot talking letting the stream and Doc know that someone donated. Tim The Tatman has a similar cue that will pop up in the middle of his screen when the camera is full-screen on him (Figure 4.45), or at the bottom of his camera square when the game is on the main screen (Figure 4.46). From the streams that were viewed for this study, CourageJD had no such on-screen alerts. It is possible that his stream has a

certain spending requirement to trigger the alerts, and those requirements were not met, but there

were no on-screen elements triggered by donations or subscriptions during the viewings

conducted for this study.

Figure 4.44

Robot Doc Donation Alert

Figure 4.45
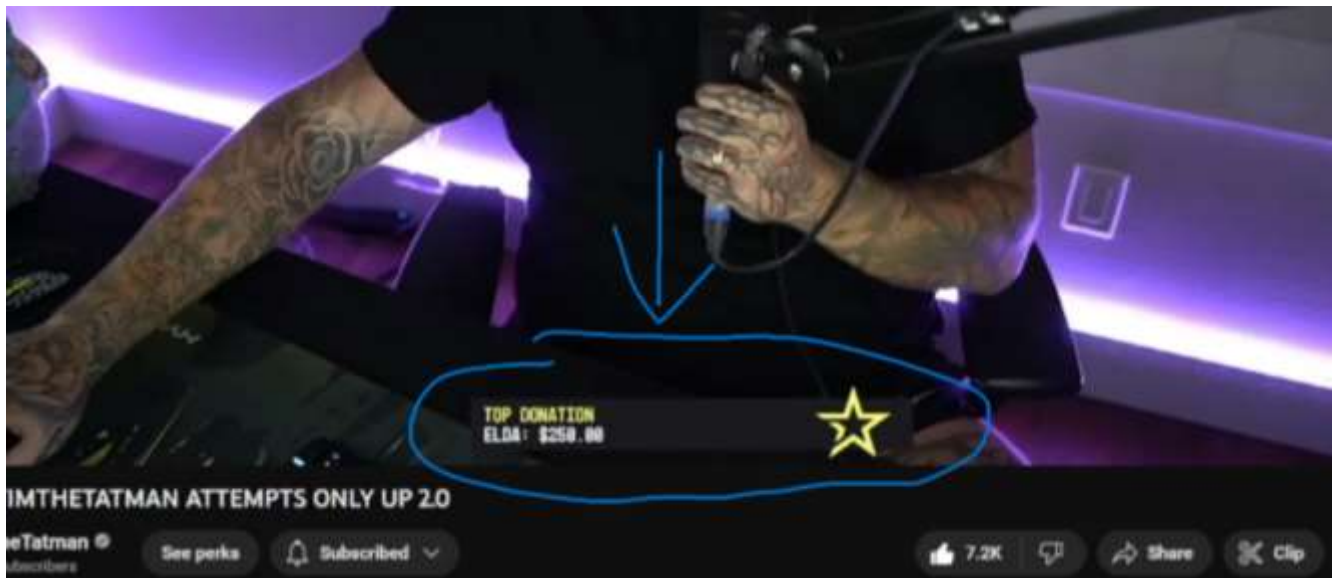
Timmy Center-Screen Donation Alert

Figure 4.46

Timmy Right Side Donation Alert

YouTube also provides LGS viewers with handy tools and interactions as can be seen in

Figure 4.45. Bottom right under the main window, not only are there the thumbs up and thumbs

down interactive elements but there is a share icon, which allows the viewers to easily share the

stream with their friends on other social media sites if something interesting is happening, as

well as a clip and save icon. The clip icon allows the viewers to create short recordings of what

just occurred in-stream which they can then post to other platforms to share with friends and

others. The save function simply allows the viewers to save this video onto their YouTube

profile for later viewing. All of these elements are present in all YouTube gaming streams.

Twitch

As presented in previous chapters, Twitch is the largest and oldest live game streaming

platform. With this being the case there are quite a few third-party apps and extensions available

for use to increase the cybernetic impact on the culture of communities that develop around these

channels. The two primary channels in this study that use Twitch are Plyrock Nation and

MenziesxMedia. These two channels are also the two channels that use the most extensions and

applications as well as on-screen visual elements.

Starting with Plyrock (Ply), taking a look at his camera and gaming window gives the

community members a lot of visual stimulation and information (Figure 4.47). When just his

full-camera screen is up, as he is talking to chat, there is a cute cartoon character in the bottom

left corner which represents the costume goal that the chat is trying to reach along with a bar

graphic with the numbers that represent how close chat is to earning that goal by spending

money on the channel. These goal points are gained by taking actions such as purchasing and

using Blerps, purchasing and using Stream Stickers, purchasing paid subscriptions for

themselves or others (the same thing as purchasing a membership on the YouTube channel,

Twitch just uses different terminology), or straight up donating through the channel's webpage.

Also, in Figure 4.47a, there is a solid example of a Blerp notification, because someone had just

played a Blerp sound effect when the screenshot was taken. This notification tells the title of the

sound clip and the screen name of the person who played it along with their profile picture.

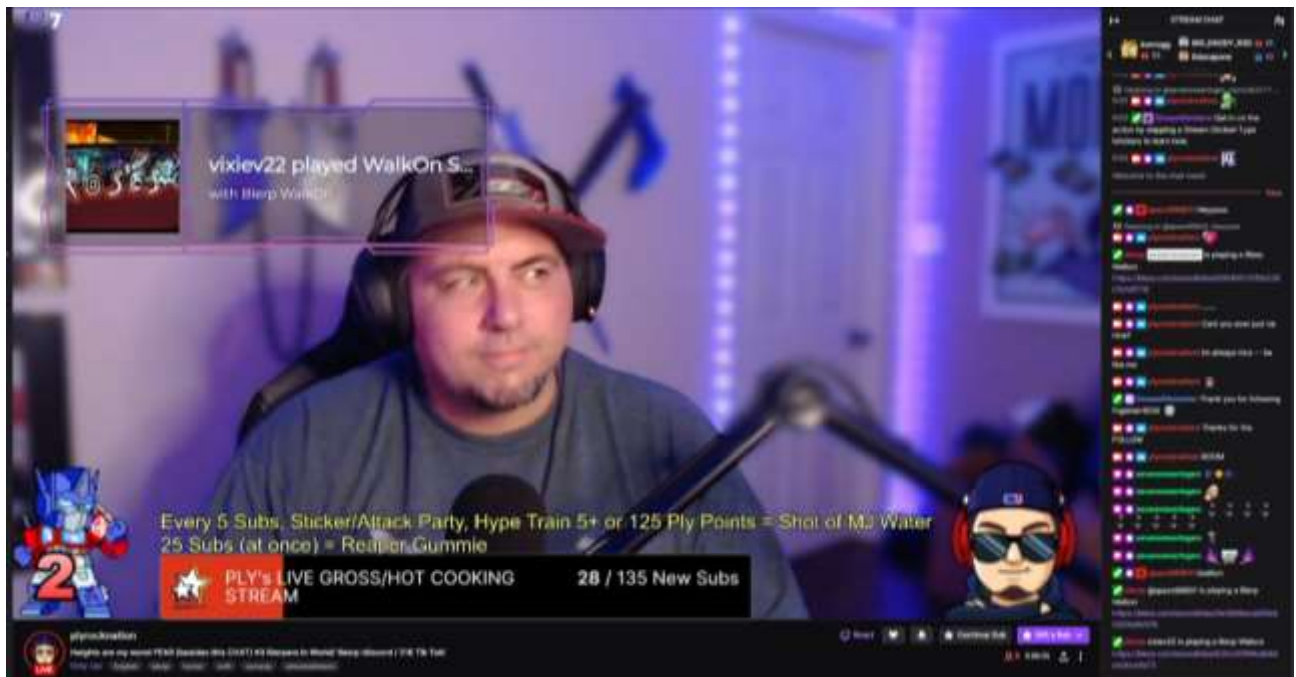**Figure 4.47a**

Ply Screen Elements- View #1

Figure 4.47b

Ply Screen Elements – View #2
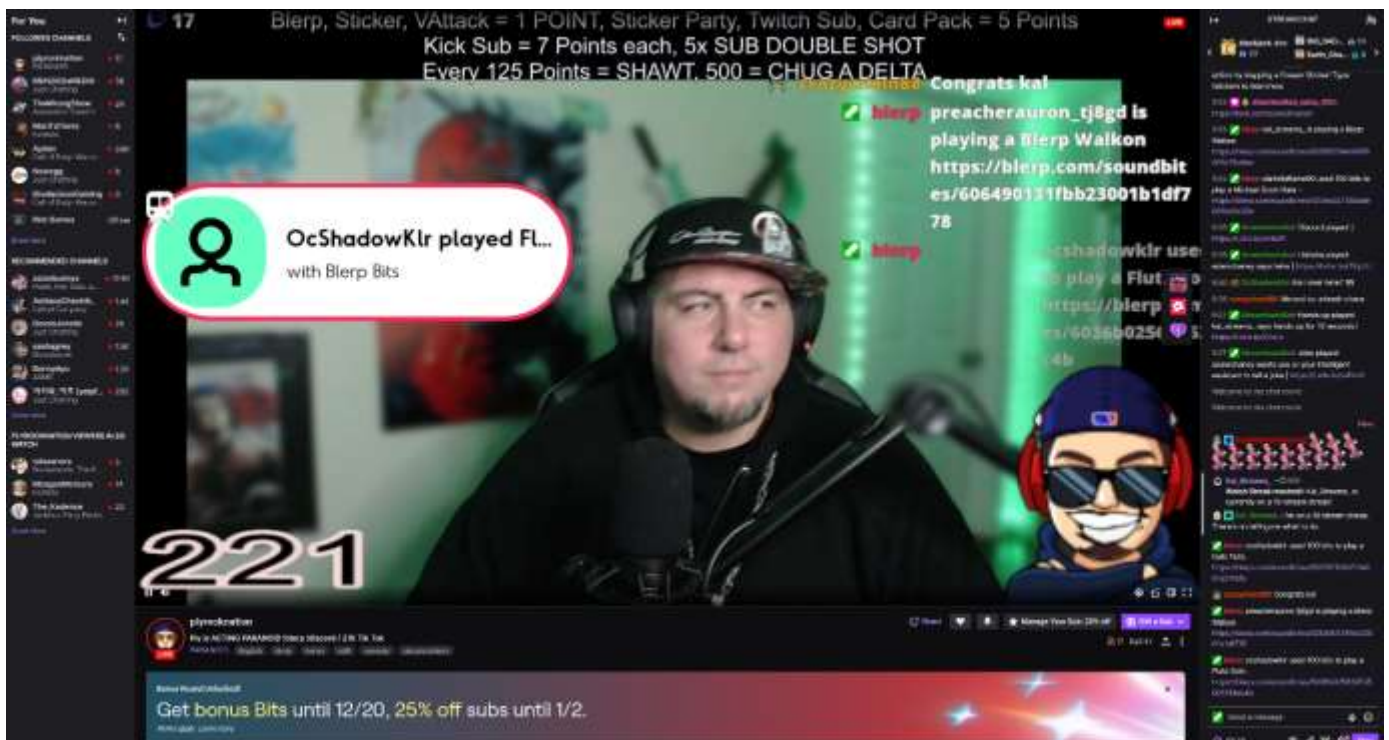
Ply also likes to change up his formatting from stream to stream as can be seen in Figure 4.47b. The instructions for channel point usage and rewards are located beside where the cartoon character is positioned on the screen. The other visual elements located around the stream window also changed from the previous stream presented in Figure 4.47a. There are also the elements of what the "Stream Stickers" look like. There are single-use digital stickers that the viewers can pay to put on the screen, but when enough people have purchased and used these stickers (Figure 4.48a), a "sticker party" gets unleashed and everyone in the chat watching the stream can place as many stickers as they want for free for about 30 seconds (Figure 4.48b).

Figure 4.48a

Stream Stickers

Figure 4.48b

Ply Sticker Party Example

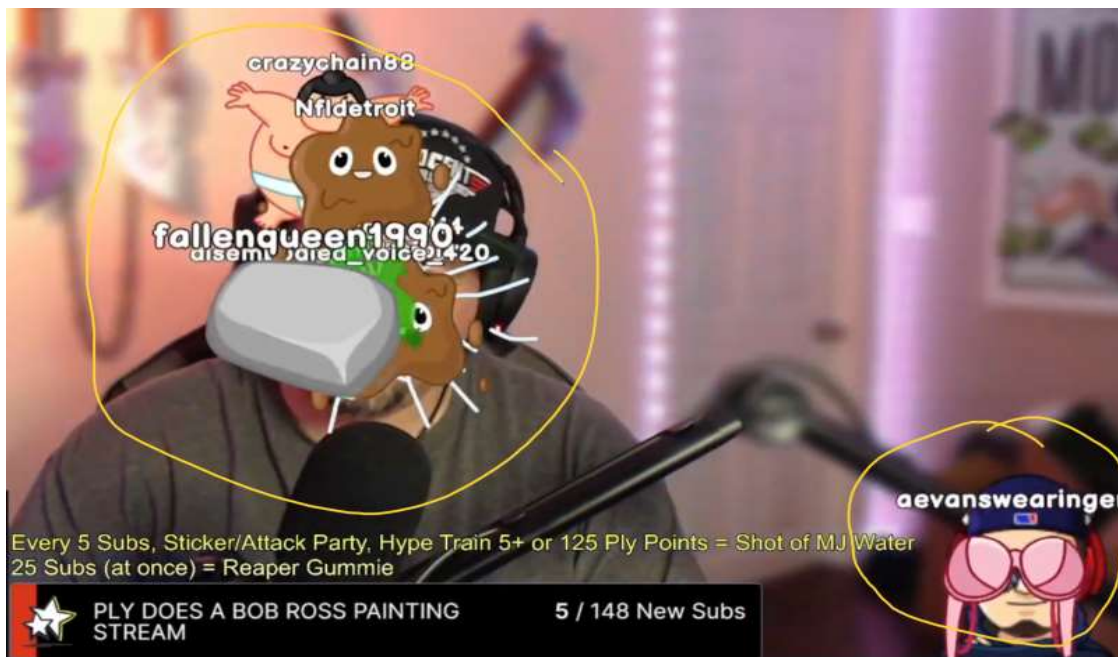There are also different digital items called Stream Loot sticker packs that allow the

community to dictate Ply's actions during the stream or in the game after the viewers purchase

and choose to use them (Figure 4.49). A different on-screen element seen in Figure 4.49 is the

chat's comments that get enlarged and presented beyond the chat box on the main viewing

window of the stream for three seconds or so. Furthermore, there are links to the channel's

Discord server, a list of top subscribers, a description of the channel, and links to other channel-

related extensions below the main window of the stream (Figure 4.51). These stream extensions

and engagement elements appear to be intended to lead the audience into an increased sense of

presence and identity management. These interactive elements could be used to allow the

audience to feel like they are an actual part of the stream and can directly impact the content as

well as directly impact the streamer. It did seem like the community became more active, more

interactive, and more communicative the more they used these elements. The audience also gets

to express their sense of humor and their personality individually through these stream

extensions. For instance, in Figure 4.48a, a user named Avenaswearinger used a sticker to throw

a virtual bra across the cartoon version of Ply in the bottom right-hand corner. She did this many

times to Ply throughout the stream and would often follow the use of the sticker with a comment

about him being afraid of breasts, or that it was Titty Tuesday. This was kind of like her calling

card. It allowed her to show her sense of humor that was unique to her, whereas other people

were throwing poo stickers and rock stickers on Ply's face at that same moment.
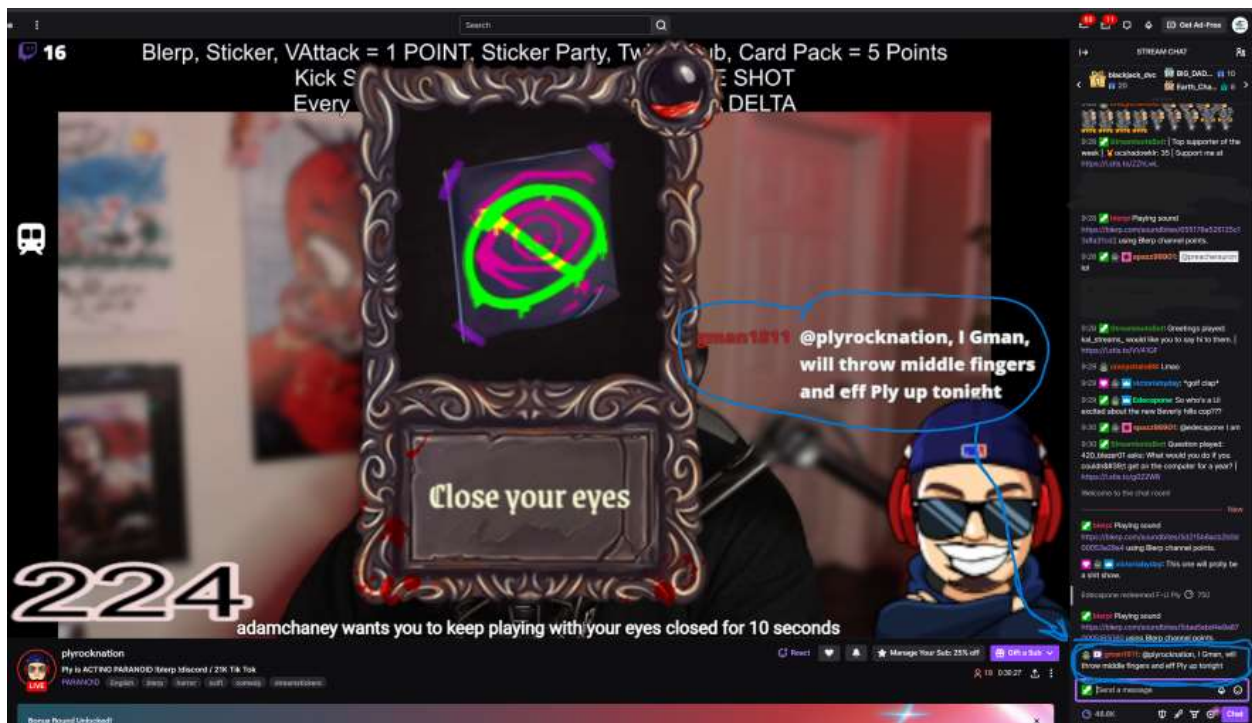
Figure 4.49

Ply Receives Instructions Stickers From Chat
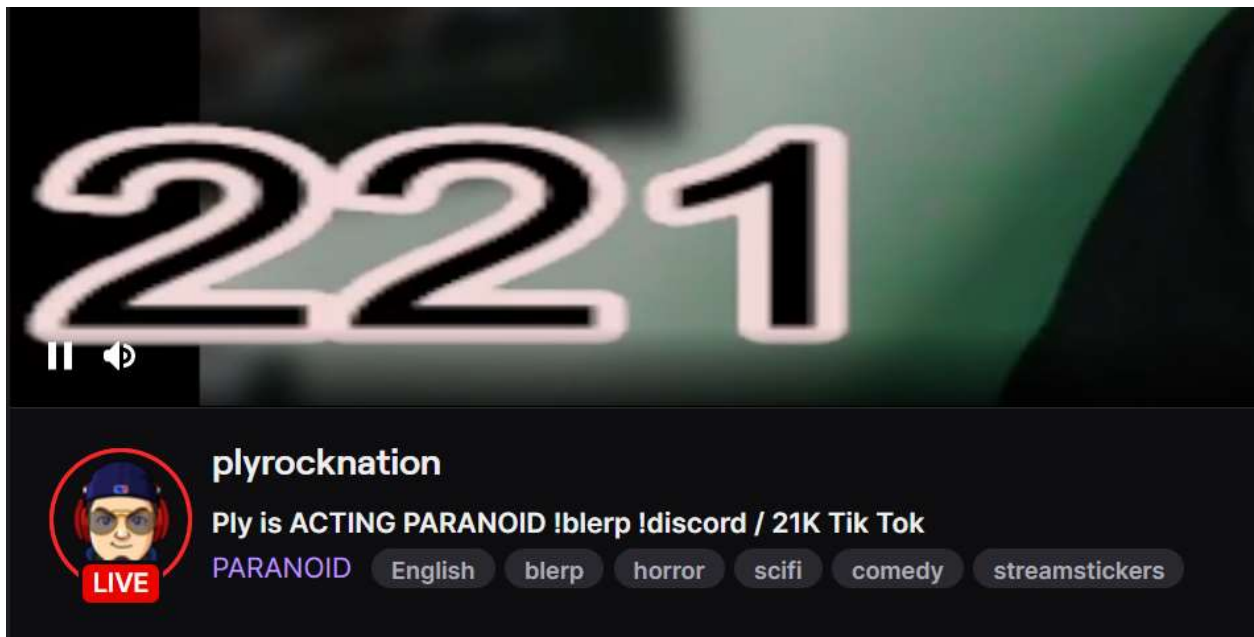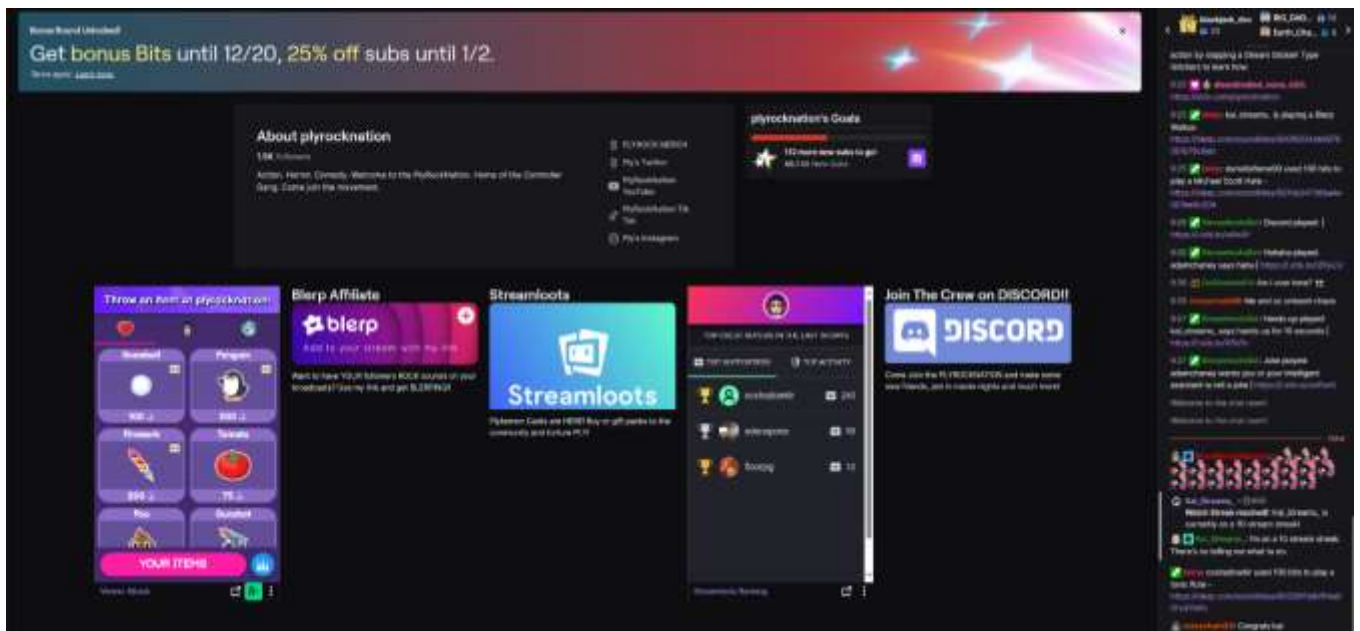
Figure 4.50

Plyrock Nation Keywords

Figure 4.51

Ply Lower Screen Elements

These on-screen cybernetic elements like Stream Stickers, Blerps, and Stream Loot cards provide the viewers with a way to interact directly with the on-screen content, thus providing a deeper sense of connection to both the streamer and the community. Also, at the bottom left of the stream screen next to the live icon, Twitch presents a list of tags or keywords the streamer has chosen to describe their stream (Figure 4.50). These terms show up when people are browsing streaming channels on the platform. For Ply, he has listed the terms "English, blerp, horror, sci-fi, comedy, streamstickers." This feature can also filter the community into a more homogeneous group as it expresses to potential viewers if the stream is in a language they understand, if it has extensions they like to use, and if the content of the stream fits their preferences. So, by the time viewers enter the stream, they are often already similar in disposition to the other viewers watching.

MenziesxMedia. The other Twitch streamer included in this study is MenziesxMedia. Coincidentally, he too runs a similar style of stream to Plyrock, in that he has a smaller concurrent viewership count, has a focus on communicating with the community, and uses many cybernetic elements with the intent of creating a sense of closeness with the community. It can be noted that just like with Ply, Menzies makes use of both Blerps and Stream Stickers as well. As was shown in Figure 4.52, the flashbang is another cybernetic element where the viewers can use channel points that are accrued by watching and typing in the chat box to then use that "flashbang" and blind Menzies at any time during the stream. Other similar elements use channel points, a Twitch feature, like one which offers to make Menzies shoot three shots of a mini basketball into a mini hoop, and for each shot he makes he has to gift a paid subscription to someone in the community. These options are accessed by clicking on an icon of the MenziesxMedia logo right beside the chat entry box.

Figure 4.52

Menzies Cybernetic Flashbang

Unfortunately, this particular feature is only available when the stream is live and not available on the recorded versions of the stream. This is the case with most of the cybernetic features like Blerps, Stream Stickers, and streamer action command packs, they are only available for use by the viewer during the live streams and not while viewing an archived version of the stream. However, two other cybernetic elements were captured in screenshots. These elements were the subscriptions and donations leaderboards. These leaderboards are located across the bottom of the streamer's window (Figure 4.53) as well as above the chat box (Figure 4.54). They list the members of the community who have gifted the most paid subscriptions to other members or those members who have donated money to the stream. This encourages participation, competition, gratitude between community members, and more active viewership. Platform users who get gifted a subscription will get notified on their phones and through emails sent to the email addresses they used to sign up for a Twitch account. The subscription

leaderboard is a feature inherent in the Twitch platform so both Menzies and Plyrock have this

visual element present in their streams natively.

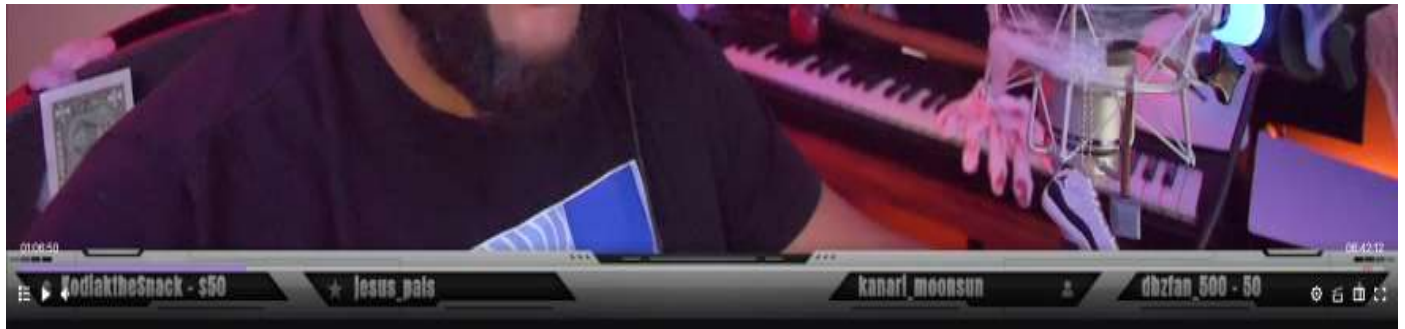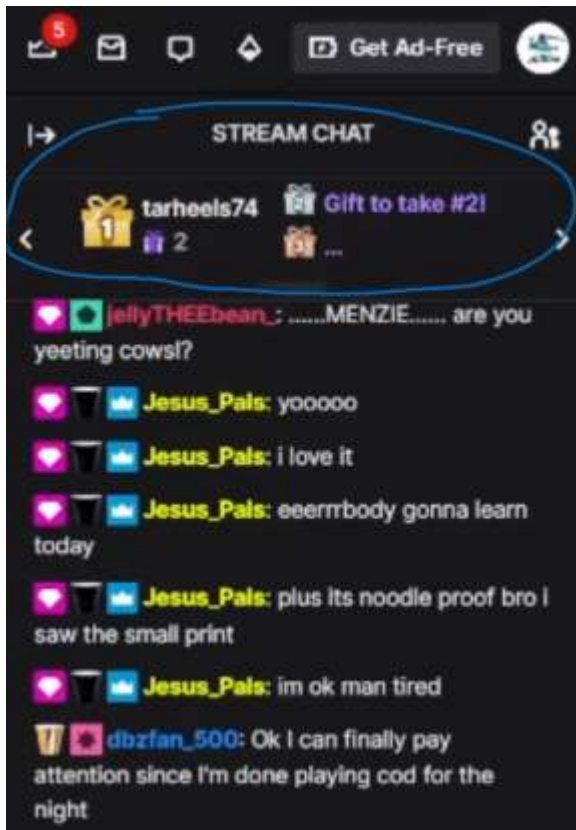**Figure 4.53**

On Screen Community Leaderboard

Figure 4,54

Chat Box Subscriber Leaderboard

Facebook Cybernetics

Facebook is similar in its cybernetic elements to YouTube Gaming in that there are fewer third-party extensions, and the platform-specific elements are simplified and focused on subscriptions and donations. The streamers Average Dad, Spartakus, and StoneMountain64 do not have a heavy load of on-screen interactive features, but there are a few that help enhance the sense of social presence, community, and connectivity with the streamer. First off, all Facebook Gaming streams have "stars" as the platform-specific monetary donation mechanism (different from a third-party website donation). YouTube just uses regular currency and Twitch uses "Bits".

In Figure 4.55a, a screen grab from one of Spartakus' streams the reader can see these cybernetic elements universal to Facebook stream. These elements are then zoomed in for Figure 4.55b and Figure 4.55c. In the center of the screengrab, there is an introductory survey that mostly serves the purpose of initiating interactivity with the viewers. There is also a line of emojis that can be chosen to use in the chat box. This emoji line is located below the survey which creates a different avenue of interaction. In the chat box section of the screenshot, there are links to the streamer's merchandise website and to donate 500 stars right located above the chat entry box. Below the chat entry box, there are icons for gifting different amounts of stars, entering emojis, and placing stickers in the chat. The most immediate comment above the chat entry section shows what one of these stickers looks like. To the right of the chat entry box are icons that allow the viewer to "like" the stream and share it with others.

Figure 4.55a

Spartakus Cybernetic Elements

Figure 4.55b

Spartakus Center Elements
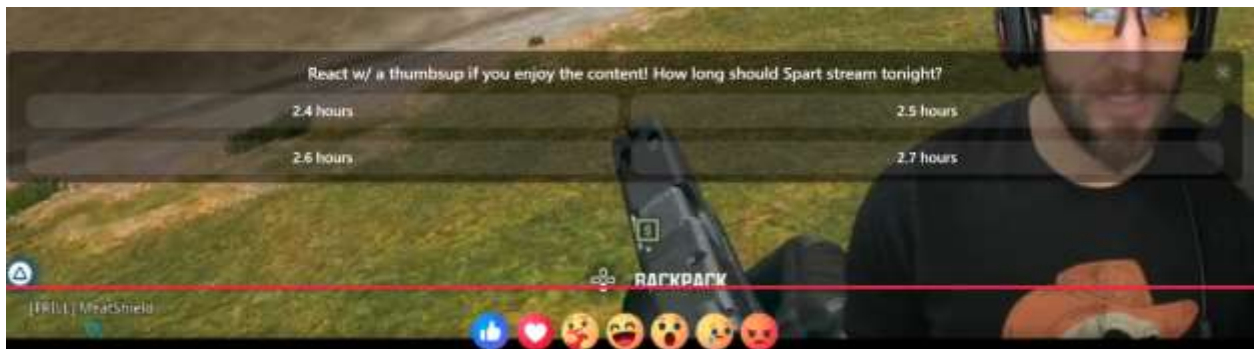
Figure 4.55c

Spartakus Chatbox Elements
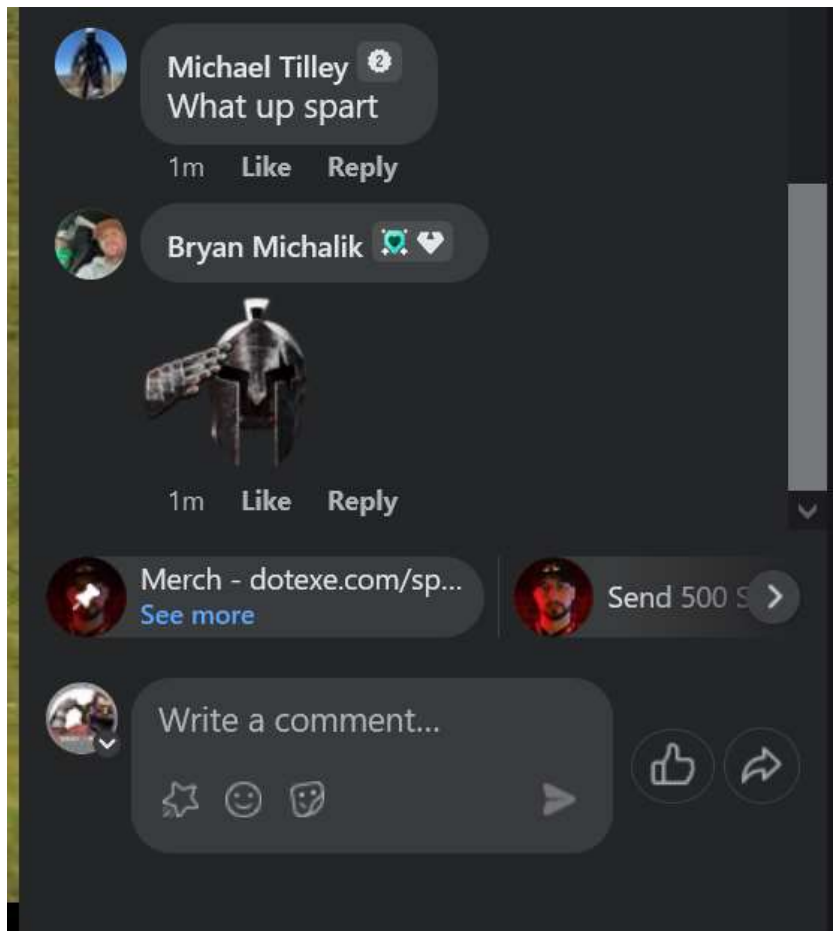
All these elements are available to all Facebook streamers. Other than brand icon differences, the visual presentation of all these cybernetic elements remains the same across all streamers on that platform. Just to prove the point Figure 4.56 shows how StoneMountain's stream integrates Facebook Gaming's interactive elements.

Figure 4.56

Stone Mountain Cybernetic Chat
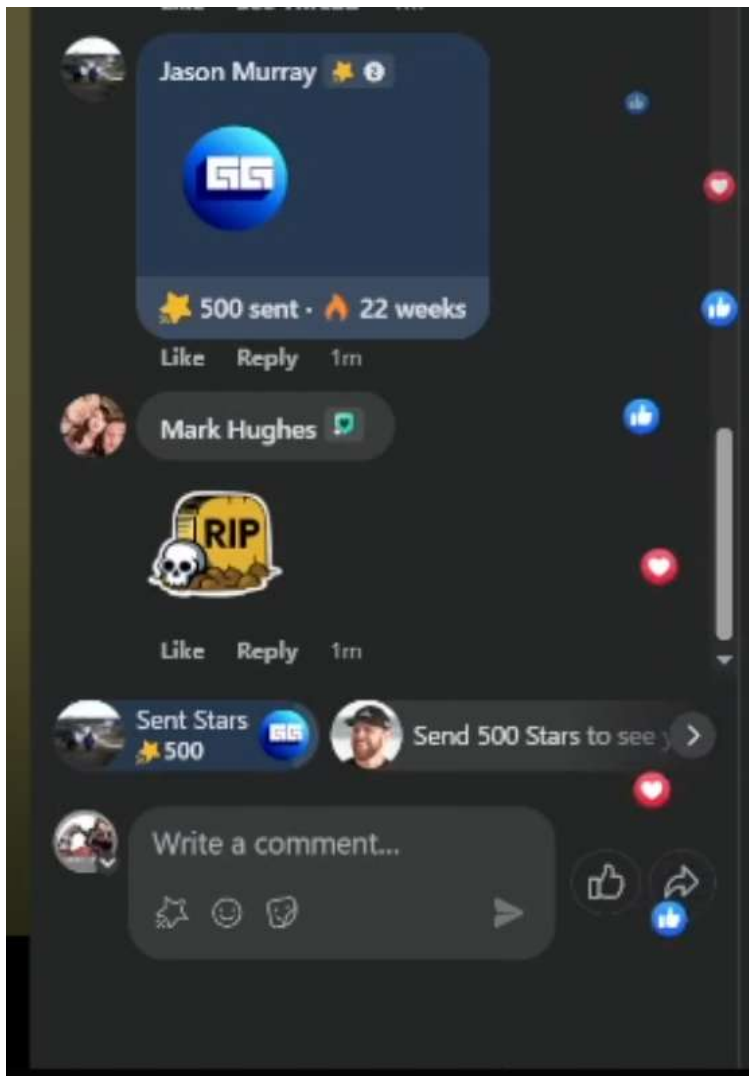
Finally, there is Average Dad, who is also a Facebook Gaming streamer, but his streams were viewed and recorded on Kick for this study to add further platform diversity. While Average Dad does not have as many cybernetic elements on his primary window as the Twitch streamers highlighted in this chapter, Kick's platform-based cybernetic elements are similar to Twitch's as can be seen in Figure 4.57a which shows his chat box.

Figure 4.57a

Average Dad Kick Elements
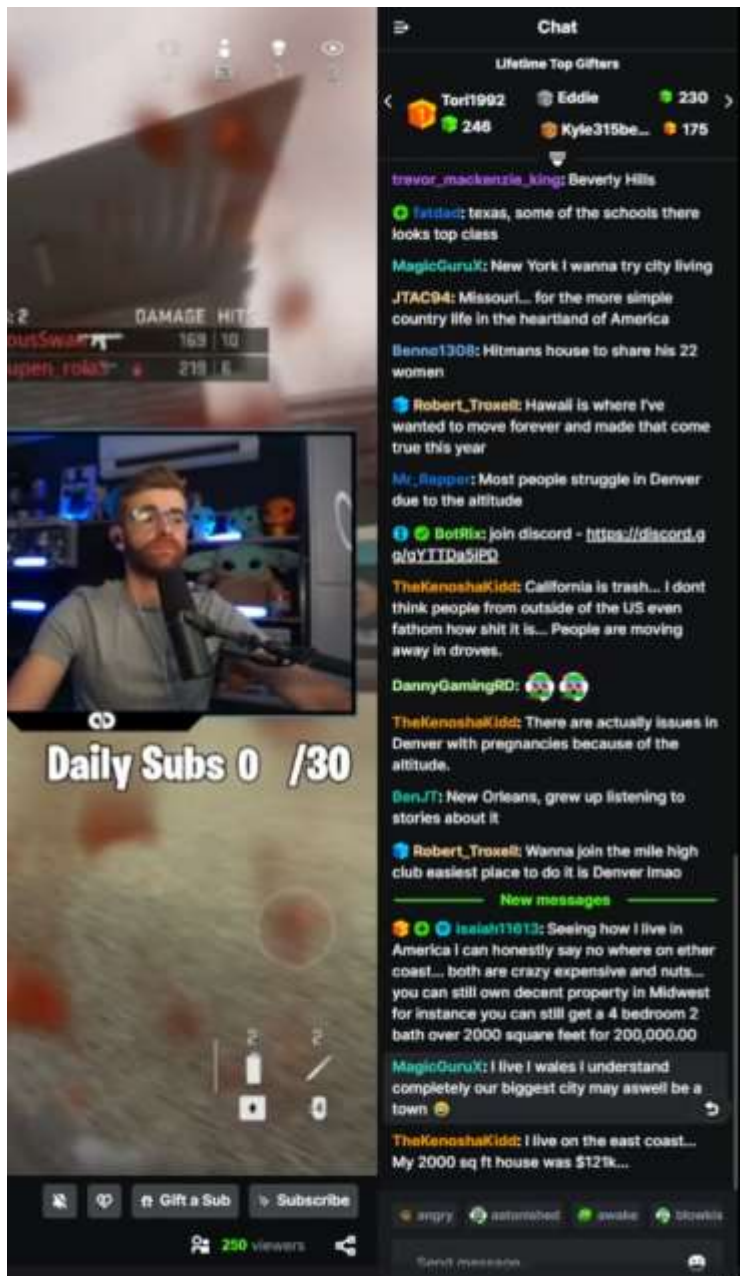
Similarly to all the other platforms Facebook and Kick allow for gifted subscriptions. This option for subscriptions can be seen on the left half of Figure 4.57a. In this same portion the image, at the bottom of the primary window, the option to gift subscriptions to others, as well as

the ability to pay for a subscription themselves is presented to the viewers. In Figure 4.57b the

reader can see the icon to mute the sound of the stream and how many other viewers are

watching is presented here as well.

Figure 4.57b

Average Dad Social Visual Elements
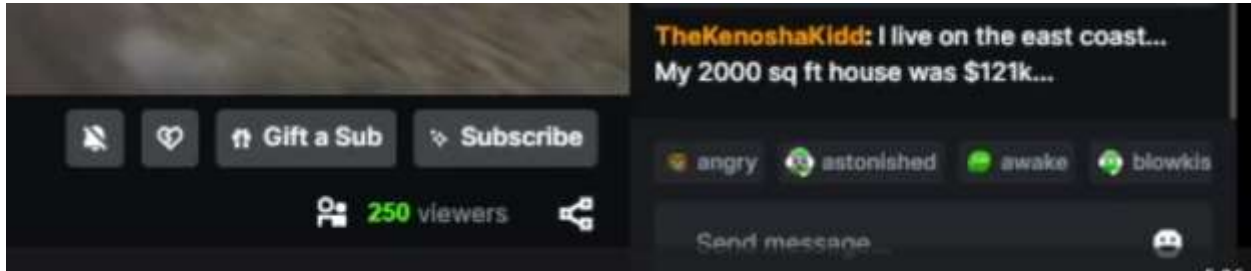
Knowing that others are watching can increase the desire to be socially recognized and

interact with the chat more than just sit and watch in silence. On the right side of the image, the

chat box is visible. It has the chat entry box at the bottom, emoji choices right above that, and at

the top of the chat box is a top three list of lifetime subscription gifters. Almost all of these

elements mirror the positioning and purpose that is present with Twitch, which was already

covered. If the reader will note, Average Dad chooses to include a visual element for daily subs

right under his webcam window, letting the viewers know how much of the stream's daily goal

for subscriptions they have fulfilled and encouraging active engagement in that mechanism.

<div style="text-align:center">Summary</div>

This qualitative content analysis of live video game streams identifies and explains

common themes and elements found throughout the study's sample. Aspects such as individual

streamer personas, audience interactions and community, platform and third-party tools, and

cultural cues, have been presented to help explain and describe the unique and meaningful cultures that develop around these streamers and their communities of viewers.

Chapter 5 will explore how the findings presented in this chapter, when viewed from a theoretical perspective of parasocial interaction, identity management, social presence, and cybernetics, may contribute, both knowingly and unknowingly, to building online identities, a sense of relationship, a sense of active presence in a digital space, and a sense of community with other viewers sharing that same digital space.

The viewers speak to the streamers through text chat as if they are friends, or at the very least, are familiar with one another. The streamer presents an identity to the chat that is engaging and personable, sometimes intentionally being outlandish, yet consistently retaining a relatable and approachable persona. This consistent relatability seems to further develop a sense of relational development between the community and the streamer. There is also the sense of socially being present in the chat with other like-minded individuals. It seemed like the ability for the viewers to speak to both the other viewers and the streamer in real-time could be an indicator of a sense of social immediacy which is often present in physical interactions. The use of cybernetic elements that increase interactivity appears to have further increased the sense of social presence and emotional connectivity to the community in which they are participating. The ability of the viewers, given by the streamer and the cybernetic elements of the streaming platform, to actively participate in the stream with the triggering on-screen events further provides that sense of presence, identity, and immediacy.

Inside jokes and the streamer's reaction to consistent themes in the chat box also provide a sense of relationship, community, and social presence. The anonymity of the viewers allows them to become whatever identity they want in this digital space by sharing their personality through cybernetic interactions and chatbox text communications. The streamers match pace by

providing personalities that bring out the most activity and re-engagement from the viewers. The

interwoven web of the manifestation of the three primary communication theories and one

secondary theory definitively brings about unique cultures and social environments within these

online communities. This process can fulfill the social and psychological desires of both the

streamers and their viewers, and thus the cycle continues and builds as time passes, just like with

"real-world" communities. There is, no doubt, a quite potent social effect present in these

streaming communities.

CHAPTER 5: DISCUSSION

Chapter One summarized salient background information on the theories of parasocial interaction relationships, identity management, and social presence theory, along with how these theories apply to the topic of live video game streaming. Chapter One also provides further information demonstrating how the research is grounded in the sociocultural tradition.

Chapter Two provided a comprehensive analysis of relevant background literature. Chapter Two also details the progression of live streaming (focusing specifically on live video game streaming) as a medium, current statistics and historical trends of the medium, and further information explaining the foundational theory and tradition utilized within the research.

Chapter Three outlined the methodological approach of this qualitative content analysis. It provides a justification for this study's approach, as well as a restatement of the research questions. Chapter Three also reviews the data collection and analysis procedures, followed by a section explaining the reliability of the methodology.

Chapter Four detailed the results of data collection through the prism of the research questions. It discusses the detailed findings of common themes within varying tiers of live game streams and an analysis of the community and culture building found within these streams. This chapter also details a comparative analysis of content structures between large live game streaming channels and smaller streaming channels, as well as an assessment of what content, software extensions, and communication avenues create the closest personal attachments between the community and the streamer.

Chapter Five summarizes the findings and provides a comprehensive discussion of the research. This Chapter will also discuss implications for the research, delimitations, limitations, and recommendations for future research. A final section will summarize the Chapter, expanding on the implications of the research.

Summary of Findings

The summary of findings will be provided through the prism of the guiding research questions with the final conclusion being found through the central research question. There are many intertwining concepts and theories. For instance, the foundational actions and environments that evoke parasocial interactions and relationships are also what drive a sense of social presence, and identity management. The three research questions will be discussed separately but they are much like ingredients that make a final product when combined to answer the central research question. As such, the discussion section presents these moments of crossover as the culmination of the answers to the individual research questions. To categorize this, the answers to the research questions will focus on the primary topic of the question, but there will be later sections that discuss how the theories of parasocial interaction relationships, identity management, and social presence often co-exist and even build off of one another during streaming events.

Central Research Question – What cultural and communication themes emerge from the observation of live game streams?

This central research question will be answered through the culmination of answering the research questions and the following discussion section where the concept of how the three theories intermingle with each other is presented. The central research question is more of a guiding principle that allows for its answer to be manifested through the exploration of the three communication theories of parasocial relationships, social presence, and identity management.

Research Questions

RQ 1 – What observed interactions indicate parasocial relationships between the live game

streamer and the audience?

The most obvious example of possible parasocial relationships developing from the streaming communication environment listed in Chapter 4 was the October 14th stream from Tim the Tatman. In this stream, Tim discusses a real-life tragedy of his stepmother suddenly dying with the audience. The very act of discussing a very personal and traumatic event like a death in the family shows a genuine sense of deep relationship between the streamer and the audience. For instance, during this same stream, Tim tells the audience that he knows when things get tough for him, all the teasing jokes they make towards him are just for fun, and that the community will be there to support him.

Parasocial Is a Two-Way Street. The sense of relationship clearly goes both ways as can be seen in the previous chapter with Figures 4.7 and 4.8 when the chat responds with comments and emotes expressing care and love towards the streamer. In these comments, the community members are offering "anything you need" to Tim. This is an offer that only close friends who are present and willing to act on the relationship would make. Yet, the viewers are from all over the world. These reactions by both streamer and audience seem to suggest that the relationships being experienced are some combination of real/genuine and parasocial. There are acts of genuine care, appreciation, and concern manifested, but also references to actual physical presence, and offers of aid which would be only possible if physical proximity and intimacy were real. This conundrum of authenticity and parasocial intimacy becomes especially muddled with the ability of the audience to give financially to the streamer. There is some genuine aid that can be given through digital portals, and yet there is still a very real distance, both physical and psychological, between a viewer in South Korea and Tim living in Florida.

Behind The Curtain: A Parasocial Factor with Boundaries. Furthermore, there is the example of Tim talking with Dennis (Cloaksy) later during the same stream about their plans of possibly going to a sports bar to watch football games, but they keep the name of the exact location hidden. This would suggest that the closeness of the relationship between the streamer and the audience has its boundaries which would not occur if they were truly in a deep close-knit friendship. So, while some members of the audience may feel like they are close enough to hang out with Tim in real life, there is a boundary set up by Tim to prevent that from happening in an impromptu manner. Tim lets the audience into his personal life enough to provide a sense of closeness, while still maintaining a boundary between real-world friendships and streaming friendships.

Even during the Saturday stream where Tim discusses his stepmother's death, there was a comment from the community that ended with the statement "…we love and appreciate you Tim and you help us with our own struggles." This was followed by Tim reiterating that he thinks of the jokes and teasing as "family banter." Yet, there is an obvious gap between the closeness in the relationship with his real family members, people with whom he will travel to visit and be at a funeral with, and the people in the stream chat whom he doesn't even want to physically show up to his recreational activities. This is the contradiction that leads to the sense that there are indeed some form of real relationships being established, but the exact depth of the relationship is where the parasocial elements show themselves.

Other Parasocial Elements. That October 14th stream where Tim shared the news of his stepmother's death was the clearest of this constant dichotomy between real-world relationships and streaming relationships, but parasocial elements are also very present in every other stream. The viewers consistently type in comments and conversations as if the streamers are their close

friends, sharing inside jokes and understanding their particular social cues. Doctor Disrespect's chat participants faun over him (see Figures 4.2, 4.4, 4.23, and 4.26), and Doc's audience seems to believe that they have a meaningful relationship with him and have access to interact with the character Doc presents on screen. Yet Doc is a made-up identity for the sake of streaming. The mannerism that people love to interact with and joke with is a non-real person. However, the connection those viewers who type in chat have with that persona seems to be effectual and real to some level for them. Also, knowing that the character played on screen is not the real personality of the streamer seems to provide a sense of connection as well. This knowledge of the difference between the persona of Doc presented during the stream and the real person Herschel "Guy" Beahm is another inside joke that provides a deeper sense of social connection, both with other audience members in on the joke and with Doc himself. With inside jokes being a form of humor held between members of a social group with familiarity and closeness with each other, these types of interactions provide the foundations for parasocial interaction relationships.

Parasocial Relationships and Cybernetic Interactions. These same types of interactions were witnessed during all the other streams observed during this study. Perhaps these other streams did not have interactions that rose to the same degree of social intimacy as TimTheTatman having an intimate conversation about a family member's death, but the tone coupled with audience interactions and other cybernetic activities would suggest the existence of a parasocial environment. Take for example the Blerps, Walk-On sounds, Stream Stickers, and instruction cards seen in the streams of Plyrock Nation and MenziesxMedia. These interactive elements give the users a sense of relationship as sounds and visual cues specifically intended to represent their personalities and inside jokes are sent to the streamer for the streamer to react to. The streamer can then say things like "…my number one fan!" or "Athena! You are first!

Welcome in! The queen of snacky happiness is here!" There is an emotional connection that comes from the streamer reacting in a socially positive manner to an audience member announcing their presence in a personally expressive way. The encouragement and acceptance of expression as individuals allows the depth of dedication from the viewers and their sense of relationship with both the streamer and each other becomes engrained.

Game-Focused Audience Interaction. Even the streamers who are more focused on the gameplay than others still have these types of interactions and conversational tones in their dialogue. For example, Average Dad replies to a comment "Why are you being so sweaty?" by saying "Who me? Why am I being so sweaty Connor? I'm trying!" A different streamer Spartakus would say things like "This is a pretty nice vehicle isn't it?" and then proclaim "Captain Sparty sailing the high seas" in a pirate accent. He stops his in-game vehicle when he is far enough from the land mass and says "I need to reserve my fuel. I also need to catch up with chat a bit." Showing that Spartakus knew communicating with the audience was important enough to take a break while still in the game to make that communicative connection. StoneMountain64 says things like "Why didn't I just stick with the SMG and finish him off?" as if asking chat their opinion. The underlying communication environment established by all the streamers in this study is one of familiarity and friendship. The emotional cues evoke a relationship experience response from the audience members and thus lead to possible parasocial interaction relationships for both the streamers and the viewers.

RQ 2 - What role does social presence seem to play in the live game stream communicative
environment?

As previously noted, social presence is the degree to which people feel present and feel the presence of others in a social environment. Thus, communicative actions that reflected this

feeling of presence and togetherness in the streams were identified as having social presence themes. As to the role that social presence plays in the communicative environment, it seems to be quite a large one. In fact, it could be the foundational building block that LGS relies on to develop a deeper communicative environment and meaningful online communities. This sense of presence leads to the perception of friendship, and from that friendship sprouts viewer-based in-stream spending habits which then keep the streamers streaming and the industry existing.

      "We" Are Together. One of the "tools" used by streamers to develop this sense of presence in their audiences is referring to the viewers, especially those active in the live chat box, as both individuals and as a single intellectual unit. This communication technique creates a sense that the audience and the streamer are just a group of friends playing games together. For example, Ply used language like, "we gotta be careful" in his communications with the viewers. Another example found in Chapter 4 is Ply pretends that he wants chat to stop sending Blerps and using stickers again using language like "we don't want" knowing that the chat will do the exact opposite of what he is asking. When Ply says we, he is presenting the concept to the audience that they are there together, acting together. It's not "you" have to be careful or "I" have to be careful but "we need to be careful."

      Another example is Tim The Tatman's during his Saturday, October 14th stream saying "I appreciate you all being here. Thank you for tuning in already. Starting off on a little bit of a somber note here." The phrase "I appreciate you all being here" shows a perception of closeness with the viewers, providing an atmosphere of social presence and perceived emotional connection (parasocial). This sense of being present adds to the perceived closeness of the relationship. Tim leads the stream to present the idea that the audience is actually there with him. Similarly, Stone Mountain asks his chat "Why didn't I just stick with the SMG and finish

him off" establishing the sense of presence by including them in his in-game decisions as if they were there with him, and their response would be conversational the same way as if they were in the room with him or in the game with him.

Hey Chat! As can be seen all through Chapter 4, streamers engage with their viewers by discussing in-game events, the stream itself, and their personal lives. They often address the audience collectively as "chat," creating a strong sense of social presence. This interaction places the audience in a shared digital space with the streamer, both as individuals and as a unified group. For instance, CourageJD exemplifies this when he says, "Oh, Before I retire from content, chat, I will almost certainly have a full-fledged MMO arc," in response to a question from the chat box. Here, "chat" refers to the entire audience, even though the question was posed by a single viewer. This practice fosters a sense of community, making each viewer feel personally addressed. Similarly, Plyrock frequently uses this technique, engaging with his audience as if they are a single entity competing against him in his role-play. These examples illustrate how streamers use dialogue to enhance community and social presence.

The Monetization of Presence. However, the opposite approach is also used effectively to heighten a sense of social presence in the communication environment. As mentioned previously, audience members can get their individual written comments highlighted and sometimes read by the streamer by paying a fee. They also can have their name highlighted and shown on-screen and in the chatbox when they pay for a subscription/membership to the channel. Often the streamers in this study would mention chat members by name. For instance, Ply calls out some of his viewers at the beginning of his stream by name and then by a personal description, "Let's see who's here. Let's make some f*cking noise! Athena, you are first! Welcome in! The queen of snacky happiness is here!" and "Kornogg is here! He's my number

one fan!". MenziesxMedia also applies this approach when he talks to a member of his

community saying "And listen Star. I do *not* hate you, but listen, twenty lashes with a wet noodle

for saying that." Beyond this every streamer watched during this study called out the individual

names of people who gifted subscriptions to other people or donated money.

       Cybernetic Tools. Another way in which this sense of presence is manifested through

the communication environment is through the app extensions and cybernetic aspects of the

stream. For instance, the Stream Stickers used to place various virtual stickers on the screen

showing the streamer or the game. The viewers can choose from a list of stickers, some curated

by the app and some created by the streamers themselves, and then place those stickers

somewhere in the digital space on the screen. These stickers often come with a sound effect that

plays along with their placement (Figures 4.27 & 4.48). The whole streaming community can see

and hear these stickers. Ply often played along and would ask chat not to put the stickers on his

face etc. The viewers can physically move their hands which control either the touch screen of a

smartphone or the mouse of their computer to cause a sticker to show up on the screen, thus

interacting with the streamer in a way that heightens the sense of presence in the digital space.

This process somewhat simulates a physical proximity. Physical actions taken by the viewer

immediately affect the streamer and cause other viewers to recognize and react to those actions.

An example of this can be seen in the sticker parties seen in both Plyrock Nation's and

MenziesxMedia's streams.

       Other similar cybernetic extensions seen in this study include Stream Loot and Blerps.

Stream Loot is a digital card system that allows viewers to buy a pack of cards that have

instructions on them. When used the streamer is supposed to follow the instructions typed on the

cards like mute mic or dance. Blerps is a sound-based extension that plays famous or created

sound clips over the stream. It also gives the users who sign up on their website a "walk-on"

sound that will play when the viewer joins the stream. Blerps allows users to interact with both

the streamer and the audience by expressing their individual sense of humor through audio clips.

Also, people can express their personality through the walk-on sound which they can choose to

be something that they feel represents themselves, almost like a personal theme song. Again,

these cybernetic elements were seen in the streams of Plyrock Nation and MenziesxMedia as

mentioned in Chapter 4 (see Figures 4.47–4.54).

There are also cybernetic elements that were seen across the various platforms and

streamers viewed during this study that tend to be more foundational to the experience of every

audience member and stream. Items like subscribe options and icons, donations, comment

highlights, and gifted subscriptions/memberships. When users subscribe or become paid

members (terminology varies per platform but the function is identical), their name becomes

highlighted in the chat box, and usually, the streamer will say a thank you message to the person

who subscribed. The same process occurs when viewers gift (pay for) other viewers to also have

this membership. Payment can also cause a comment to have a special highlight in the chat box

which is intended to catch the eyes of other viewers and the streamer. The streamer will

sometimes read the highlighted message on-air. All of these types of elements are used to give a

sense of presence, interaction, and relevance within the active culture being experienced by that

stream's community.

RQ 3 – What observed interactions indicate how streamers and their audience navigate identity management within the live game streaming environment?

Identity management is an interesting aspect of the streaming culture. While the

individual cognitive aspects of identity management were beyond the scope of this study, the

findings revealed communicative interactions that suggest participants are navigating identity management. Clear actions, engagements, and cultural cues were observed that both streamers and audience members must manage identity in the LGS social and communicative environment.

Screen Names. The first and most obvious streaming element that would impact identity management is the screen names of the audience members and streamers. These screen names provide the option for complete anonymity, complete exposure, or a total change in personality from the real-life person. A user can use their real name, a fictitious name that they feel represents them, one that they feel represents who they wish they were, or simply a name to hide their identity and provide complete anonymity. The chat box presents their comments and in-stream actions for everyone to see. So, the screen name serves a vital role of being the front line to how the audience member chooses to manage their identity within the community of each stream they enter.

Identity management through screen names may have even greater meaning when exploring the screen names of the streamers. For example, the screen name of *Tim The Tatman* creates some identity expectations. His name sets up the expectation that he will have tattoos, which he does, that he is laid back (calling yourself "the tatman" isn't usually the sign of a super serious person), and that he will be presenting himself as the on-air persona. Whereas the name Doctor Disrespect lets his viewers know up front, that there is a chance he will not be using his real-life personality for the on-air persona, and that this on-air persona will be a character who is disrespectful. So when Doc shows up on screen with a mullet wig he calls Black Steel, a crazy outfit, and a personality that is an outlandish exaggeration of a cocky professional video game champion, the audience is prepared to play along more readily than if his presented name was Herschel "Guy" Beahm IV.

The streamer behind Plyrock Nation uses the shortened version of his channel's name as his moniker, "Ply." He then uses this to create a character that is playfully cocky and playfully antagonistic toward the chat. Ply also uses his name to market his channel. This gets the viewers to feel more excited, comfortable, and motivated to engage with the channel and spend money. StoneMountain64 often takes on the personality of a military general to playfully communicate with his teammates while playing military-style shooter games, despite never serving in the military himself. This use of the military persona is what caused some viewers to ask if he had ever served in the military himself (Figure 4.35) He uses the character of Stone Mountain as a way to bring the audience into his fictional scenario so that he can play a person he is not in reality.

Identity Management and Cybernetic Extensions. Also previously mentioned are stream elements like the Blerps, Stream Stickers, and Stream Loots allow audience members to express their identities to the community and streamer. For instance, when viewers placed "poo", rock, and sumo wrestler stickers on Ply's face during his stream (Figure 4.16), they each chose a type of sticker that they personally felt was funny and would represent their sense of humor to the streamer and the group. When the viewers sent Blerps or walk-ons it would further enforce the type of identity they were trying to express to the community. Much of the function of the cybernetic extensions and applications used during the observed streams served the purpose of allowing the community members to express their desired identity and establish it to the community and the streamer. Making the audience members feel like they are seen and accepted seems to be a primary way to build the communities and culture that these streams thrive on.

Discussion

The discussion section will focus on exploring how the three communication theories of parasocial relationships, social presence, and identity management explain actions and events that not only coexist but also enhance each other's impact on the LGS community and culture. It will also help to coalesce the concepts presented by the three theories to provide a more comprehensive answer to the central research question.

The Three Theories in Unison

After answering the three research questions which focus on each of the primary communication theories individually, it is important to recognize that the actions explained and predicted by the theories do not, in fact, impact the LGS culture and communication environment as isolated factors. Rather they are deeply intertwined with one another and enhance each other's impact on the LGS culture.

Screennames. Screennames are a great first example of the three theories working in tandem. The user can choose an identity in which they feel most comfortable and confident. This confidence then encourages engagement. If they choose to highlight their message in the chat box and the streamer reads it, then having their name and thoughts expressed publicly in a positive manner causes them to feel more present and genuinely involved in the social group. This enhanced feeling of emotion then could cause an emotional attachment to the group and the streamer. That emotional attachment could lead to parasocial interactions and relationships. If the one place the audience members feel truly seen and heard in life is in this online LGS group during the streams, then of course their emotions will cause attachments and deeper feelings towards that group.

Blerping Interactions. Blerps are another great example of all three theories being applied, but in this case, they all impact the communication environment and culture at the same time rather than an evolving connection. When a chosen Blerp plays the user feels seen, they are able to express their personality and thus their identity publicly in a way that they are most satisfied with, and the parasocial bonds are deepened when their expression of self is met with positive reinforcement from the streamer and the other chat members. Also, the ability to actively impart themselves into the stream in real-time and get real-time feedback enhances the sense of presence in this social group. That sense of presence could then lead to a further enhancement of the impact of the other two theories and vice versa.

It is the hope of the author that the readers see a consistent pattern throughout the last chapter and this one, of the three communications theories, as well as the very impactful presence of cybernetic elements, working in tandem to guide the culture of the community and the communication environment towards a certain end. It seems as though the very design of the LGS platforms, culture, communication environment, and tools are geared to create a social community that is impacted by the other community members and the streamers emotionally so as to feel kinship and dedication. The LGS communities observed in this study are largely built to develop relationships and a sense of belonging, even more so than creating a focus on watching the games themselves. These theories seem to combine effortlessly to create an environment where communication develops interpersonal communication rather than distant consumption of entertaining media. The difference between LGS entertainment and traditional entertainment is the difference between someone going to a friend's house for a weekend game night with a group of friends versus sitting at home and watching a sitcom.

Anonymity, Moderators, and Culture Control. Just like with the streamers, the audience can also choose to present any name they want as a persona to the public community surrounding the stream. This action allows the audience to engage that community to whatever degree they feel comfortable with. Looking at the examples in Chapter 4, there are names like Ethan Clark, Cristopher Blosinski, and Liam L, along with names like StuffMcBee, xostarlight, Kornogg, and Dave Demented. There are names that are likely real, clearly fake names, and names that could fall into either category. The result is an environment where the viewer engages the stream and the community to whatever degree brings them the most enjoyment and thus the highest degree of emotional comfort and connection. This anonymity of the user could obviously lead to disparaging behavior which could then destroy the sense of presence and parasocial connections, but that is what the moderators are for. Moderators (mods) are audience members or real-life friends whom the streamer trusts to maintain the desired culture in the chatbox during the streams. If a user makes disparaging comments or advertises their own channel or products, the mods are there to delete the comment and then block the user.

This moderation protects and preserves the overall culture, emersion, and sense of a united community. This keeps the sense that viewers are amongst friends, thus heightening the parasocial bonds and even the sense of presence. Thus, while the freedom to choose one's online persona can have its challenges, it is a crucial aspect of the LGS environment that contributes to its unique dynamics and appeal.

Money Is a Factor

Though interpersonal relationships are the driving factor for LGS communications and culture, there is another vital result, and that is the generation of profit. For both the streamers of this study and the platforms they stream on, generating income is also a desired outcome. Even

without interviews, this financial motivation is observable. The data provided in the first chapter about the financial impact of LGS, as well as the structure of the interactive elements, suggests this other motivational factor.

For instance, in Chapter 4 the audience had to pay to experience most of those interactive cybernetic elements. To have their comments highlighted or get their name mentioned on-air along with their comment read aloud required some form of payment. Subscriptions/memberships cost money and gifting subscriptions/memberships to other members also costs money. Using the Blerps, Stream Stickers, and Stream Loot elements costs money. Commenting in the chat box typically is free, However, even in this case, the streamers will often put their chat box in subscriber/members-only mode where only the people who have paid for the subscriptions/memberships can type in the chat box.

This financial motivation could appear as greedy to some audience members; nevertheless, the platforms have to pay for servers, employees, and other business expenses. The streamers also strive to make streaming their primary job. This motivates them to stream for 6-8 hours straight per stream. As mentioned in Chapter 1, streamers can stream as many work hours as a full-time job. To be able to provide entertainment and an active community at that consistency requires financial recompense on par or better than the full-time job they have to sacrifice for that streaming consistency.

Implications

The implications of this study are threefold. There are theoretical, methodological, and practical implications. The theoretical section will discuss how the study used communication theories to guide the observation of events within the LGS community and what that exploration reveals about using the theories in this communication environment. Methodological explores

what research methods were used, why they were used, and the conclusions as to how effective those methods were. Finally, the practical implications look at how the results of this study could be applied to real-world situations.

Theoretical Implications

The three primary research questions focus on answering how the three primary communication theories and the secondary concept of cybernetics manifested during this study. These theories were chosen as the backbone for this study because they served well in their role of providing a perspective to gauge what was observed.

Parasocial Relationship Theory

Parasocial relationship theory provided a lens through which the online relationships developed in these communities could be assessed. While the relationships observed in LGS culture were not entirely parasocial, the theory served as a lens through which to understand the interactions. Keeping this clarification of relationship classification in mind led to the observation that both real and parasocial relationships were core connective elements within these communities. The unique combination of the relationship types absolutely impacted the nature of the communications and the culture of each streamer's community. However, there were some limitations. For one, interviews were not a part of the study so the exact details and scope as to what portions of the communications and relationships fell into the parasocial category, and which manifested into real long-distance relationships was not feasible for this study.

Social Presence Theory

Including social presence theory provided an essential perspective for understanding the LGS culture. It could almost be said that it was the most relevant theory to the study. A

significant portion of the focus for the streaming platforms' cybernetic elements, the streamers' communication focus, the way that the audience interacted with the streams, and the communication environment and the culture that developed around LGS, were parts of an intentional effort to achieve the highest level of social presence possible. The streaming culture strives to simulate a gathering of friends to enjoy gaming and each other's presence. The LGS environment is the online equivalent of attending a friend's backyard barbeque and board game night or watching a football game with a bunch of friends at a local sports bar. Being able to apply social presence theory to all the factors that build the communication environment and culture of LGS really helped to highlight this primary aspect of the communities.

The examples of this theory being applied have been adequately covered in the text up to this point, but for the sake of this section, a few will be reiterated. For instance, providing stream extensions like Blerp, Stream Stickers, and Stream Loots allows the audience to interact directly with and impact the visual presentation of the stream. Using these extensions can somewhat simulate physical actions as well, deepening the sense of presence further. Highlighting messages, calling out donors' names, reading comments aloud, and referring to the chat as a persona, are all streaming actions that deepen the sense of presence in the audience and to some degree the streamers. So much of the LGS experience is expressed in social presence theory, that it could be said that this theory became the foundational core theory.

Identity Management Theory

Identity management was also a primary theory used to provide guidance in analyzing the data gathered. There were observable factors that lent themselves to suggest motives behind some of these actions. For instance, choosing a screen name like "TheGirlsNameIsZelda" suggests a certain focus and intent for their online identity. This is clearly not their real name, yet

they desire to be seen publicly as part of the gaming culture. They also want to show their knowledge of a cherished game brand (The Legend of Zelda), as well as their sense of humor and other social factors that the researcher could be missing.

Possible Weaknesses. However, the full validation of these assumptions is impossible without either there being a direct statement observed as to the reasoning behind the screen name, or an interview that acquires that motivation. The primary struggle with using this theory in this particular study was that it would have been most effectively used in conjunction with interviews to compare how both the audience and the streamers perceived their use of identity management and the actual use of identity management. As it is impossible to read people's minds, the exact internal machinations that drove aspects like screen name choice, cybernetic engagement, communication engagement, and cultural engagement are impossible to gauge This methodological shortcoming (to be reiterated in the next section) did limit the potential impact of the theory, but not so much as to render it useless. Meaningful and actionable insight was still gained through the application of identity management to the LGS environment.

For instance, another useful aspect of identity management was found in its applicability to the streamers themselves with much the same limitations. For instance, even at first glance, Doctor Disrespect (Doc) is clearly not a real name nor a real person, but rather a persona or character presented to the audience for the sake of entertainment. Using such a name allowed Doc to make jokes relatable to the gaming culture that follows professional gamers. He could pretend to be an arrogant narcissist caught living in his past glories, who gets mad at games and is derisive to his audience members. The audience can then bond over the mockery of such gamers while also playing along by giving exaggerated praise to Doc to feed his faux ego. This

method of managing his identity has given Doc a tremendous ability to congeal his community and deeply define the culture that surrounds his channel.

On the other hand, there are streamers like Tim The Tatman who use their real name and mostly their real personality as the core of their channel's culture. He could be presenting exaggerations of persona for the sake of entertainment, but again this study is unable to gauge to what degree this type of presentation of identity is manifesting because no interviews were given. However, even streamers like Tim can adjust how their identity is experienced by the audience. For instance, Tim has a stuffed penguin named Kevin that sits beside him during the stream and he will often talk to it, yell at it, jokingly punch it, and other interactions that give both him and the penguin a tinge of specific personality traits.

Another factor to consider is how the brands these streamers deal with impact their identity. Tim and Doc are famous for working with Mountain Dew. Consequently, all the culture and social cues that come along with Mountain Dew's marketing can be somewhat transferred to the streamers. Stone Mountain works with an energy drink called Gamer Fuel, which matches his online persona of being competitive and more gameplay-focused than character presentation content. In conclusion, identity management theory was still very useful, but equally limited because of the methodology of the study.

Cybernetics

This study situates cybernetics as the technological elements of the stream that are combined within the LGS system (or platform) to guide the communication environment toward a similar goal. For the most part, this resulted in the observation of systems building a sense of social presence and parasocial experiences. Initially intended to be a secondary theory used sparingly, the overabundance of cybernetic elements caused this theory to be invaluable. The

way that 3rd party app extensions like Blerp, Stream Stickers, and Stream Loot, impact the way that the audience can interact with the streamer to guide them towards a sense of relationships and social presence is a primary example of this. But also, core stream functionalities, like the comment box, donations, highlighted messages, real-time communication between streamer and audience, and other similar elements really lend themselves to a systematic approach to guiding the audience towards a certain intended experience. As such, the theory was very useful as a sense-making tool when applied to the other theories in this study and how they worked together with the technological elements of the stream presentation.

Methodological Implications

This section will discuss the way methods were applied to the study and what discoveries were made about their strengths and weaknesses. The subsections will include a discussion about citations and archiving, being a participant observer, and the valuable application of emergent design in a study with so many moving parts.

Citations and Archiving

Methodological implications are where some of the most growth and discovery occurred during this study. The chimeric nature of live game streaming (LGS), where the communication environment and culture exist somewhere between traditional entertainment, social media, and personal relationships created interesting methodological hurdles and adaptations. One primary methodological complication occurred in the citation of the live streams. Since these streams were broadcast and viewed live in real-time, the setting resembled a live event, like a concert or watching a person give a speech on a street corner. Often the archives for these streaming channels did not include any of the past streams in their entirety. The few that did, could delete those recorded streams if they didn't perform well during the archived stage of presentation.

Sometimes recorded streams were deleted for other reasons like music copyrights or simply cleaning up the archives to be more visually attractive to viewers. The end result was an inability to make direct link citations to most of the streams viewed during this study. The end conclusion was to simply reference the channel page located on the platform of choice. There was a solution to this problem of the industry's archival inconsistency. Recording the content on a hard drive became a reliable way to retrieve footage for follow-up notes and verification of events or quotes that occurred during the streams. An interesting future discussion should include how to handle the citations, recording, and presentation of these streaming events that often fight against being easily classified in any traditional academic sense.

Participant Observer

Another methodological adjustment that had to be made, more in perception and recording than in performance, is the clear positioning of the researchers as a participant observer. The initial hope was that the live streams could be studied strictly from the outside as a purely objective observer. However, since the streams can only be properly viewed and interacted with by someone with a profile and screen name, the researcher must by the very nature of the platform, be a participant to some degree. There were too many factors involved with the communication environment that could only be discovered and recorded via interaction with those elements. Obviously, the need to maintain distance and neutrality is of the utmost importance, but even in attempting to remain separate from the community, the researcher's screen name could still show up in a list of live viewers. Also, events like gifted subscriptions, and similar automated system responses could involve the researcher without the researcher having any ability to stop them. The screen name for the most part provides anonymity. Again, it must be stressed the researcher remained as removed from the environment as possible, but complete removal is simply not possible. Just like going to a concert to record the happenings,

the researcher must put themselves in the audience to record the data. The one added step for future researchers to include might be to create a screen name that is completely new and unattached to any existing profile on any of the platforms.

Thank God for Emergent Design

This study started in the conceptual stage with a particular design and focus in mind. Then through the process of discovery experienced during the entirety of the study added breadth to the lens through which data was processed. For instance, the initial intent was to conduct a strict content analysis, but as the data was collected and analyzed the study took on aspects of a digital ethnography. The data was definitively processed by watching, recording, and analyzing content, however, the nature of the content turned the focus of the study toward the culture and the communities being developed in these communication environments. For instance, a big part of this shift was a realization that the focuses for the LGS communities involved in this study were relationships and community rather than strictly focusing on watching video games. As it became apparent that a primary motivation for both streamers and audiences was building and engaging relationships within communities, the focus on the cultural and communication behaviors that were driving these motivational factors became foundational.

By approaching this study with an emergent design in mind, knowing that the topic was mercurial in nature and still developing as an academic and scholastic frontier, the ability to "roll with the punches" and follow the data where it led provided great insights not only for the topic of the LGS communication environment but also for the methodological and academic practices used when studying this topic. As stated before, citation methods had to be adapted, time constraints were discovered, further research avenues were discovered, and methodological and scholastic approaches were combined and adapted (These topics will be discussed in more detail

in the following sections). Even the foundational communication tradition shifted from socio-psychological to socio-cultural during the process of becoming more familiar with the topic in an academic setting. All of these adjustments, which were vital to the proper collection and analysis of the data, were made possible by approaching this study with an emergent design.

Practical Implications

The main focus for practical use is seeing how a communication environment involving and similar to live game streaming can build communities and cultures in a real-world setting using the information gathered in this study. The level of engagement experienced by the audience heightens their attachment to the streamer without taking away the entertainment or instructional value of the content itself. As such this section will focus first on the practical implications for live game streamers, and then the practical implications for organizations that fall outside of game streaming.

Live Game Streaming

As a former streamer myself I can attest to the fact that some of these concepts are already understood on an actionable level, but that the understanding of why they work from a foundational and communication theory perspective is still lacking. For instance, streamers know that a key to growing their community is communicating with the audience.

Communication is Key. As was shown throughout Chapter 4, this communication takes on various forms. Some streamers are heavily focused on conversating with their audience and trying to directly speak back and forth with individual members like Ply and Menzies. Some streamers like Doctor Disrespect and Tim the Tatman spend a portion of their early stream just discussing topics while reading a few comments and donations. While yet other streamers may discuss what they are doing in the game constantly while reading comments in between rounds

or if a donation catches their eye but the focus is more on in-game action. Each community

functions differently and is looking for different stimuli. Having a more in-depth knowledge of

how communication theory is impacting this aspect could only aid streamers in running their

channels.

Money, Money, Money. In any case, all streamers try to make the audience feel engaged

and like they are being spoken to on familiar terms. The streamers most likely don't realize they

are tapping into parasocial relationships and social presence to cause the growth of their

community and their financial earnings, but they know that engaging the community is good

business practice. For instance, Ply and Menzies heavily focus on Cybernetic elements to engage

their audience and to increase monetary gain. However, this practice is somewhat limited to

smaller streamers of their size. Even at their smaller size, the streams can become chaotic and

noisy, and communication becomes more like yelling in a loud bar than hanging out with friends

around a TV playing games.

Size Matters. This is a major reason why the larger streamers like Tim and Doc do not

use such measures. With tens of thousands of people watching and communicating it would

almost be impossible for any emotional connectivity to be established within the chat or between

streamer and their chat if they were to employ the same cybernetic tools. Instead, streamers of

larger sizes rely on donations and sponsorships, which usually are not available in any

meaningful way to smaller streamers, to make financial gains. In fact, I somewhat wonder

whether the overuse of such disruptive cybernetic applications could be a limitation on audience

size. Community members begin to feel ignored or missed in all the chaos. Jokes typed out in

chat get missed, and one Blerp gets drowned out by the next 5 that follow right after. Thus,

audience members start to feel like they aren't being recognized and getting the attention they were seeking and go to another channel to find it.

Summary. If streamers gain a deeper understanding of the communication theories discussed in this study, they can better align their actions to maximize the benefits these theories offer. By integrating identity management into their on-air personas, they can more effectively engage their audience while considering the impact on their community. Some streamers might utilize tools like Blerps, Stream Stickers, and Stream Loot to boost engagement and revenue, while others might limit these elements to foster a more inclusive communication environment. In a space often overwhelmed by noise and chaos, ensuring that quieter voices are heard is crucial. This study's findings aim to help streamers strike a balance that promotes success and fosters a culture of growth and social connectivity.

Churches/Religious Gatherings

During discussions with colleagues, the idea that churches could implement many of the communication and culture-building techniques found in this study was brought up. Many churches implement online live streams of their services for people who are unable to attend the service in person. Providing a more engaging culture around the online presentation of their church to help bridge the gap between in-person attendance and online attendance could be a beneficial use of this study's findings. For instance, having an active live chat with moderators could allow for a deeper sense of engagement and social presence. If the moderators were someone with a position similar to an associate pastor or a trusted elder, questions about the sermon's content could be answered in chat or even chosen by the moderators and provided via monitor to the pastor giving the sermon. Notes could be provided in the chat, and prayer requests made.

The use of this type of online environment could also help with inviting non-members to their first service. It could erase the very real barrier to entry of the new person awkwardly having to attend a church service in person. Some people would like to experience a service without having to aggressively engage a whole new community. Instead of expecting new visitors to slink into the back row and then get hounded down after the service, allowing them to engage the community and the service in an online setting, where they can control the level of engagement they are comfortable with, could provide much lower resistance to initial attendance. To be clear, the use of this type of online environment is not intended to completely replace in-person attendance, but rather serve as a supplemental or introductory capacity.

Fund Raising

Nonprofit organizations need to raise funds for operational costs. Though a single fundraising stream could be beneficial within itself, as the sense of presence is heightened and could lead to a desire to give on the spot, building a consistent community through live-streamed content would prove even more effective. Very rarely were the viewers who gave donations to the streamers or participated heavily in the paid cybernetic aspects of the stream new viewers. It was mostly regular viewers, people who felt connected to the community and the streamer on a more genuine level, who gave financially to the gaming streamers. The same concept could be applied to non-profit organizations. They could develop a regular content schedule, and over time develop a community that engaged their organization virtually.

The type of content and schedule of presentation would have to be worked out on an individual basis for each organization. As an example, an organization that fights human trafficking could have something like a weekly interview podcast with people involved with the activities of fighting human trafficking. The audience could ask questions and engage with the

stream in other ways deemed appropriate for the organization. The community that was built around the streams would not only consistently give but could be more easily rallied for special fundraising streams. Once the relationships are built and the sense of community is established, rallying the community members or "troops" would be a much easier task than just springing a single stream or a single YouTube video on people who believe in the cause but may not feel as connected to the organization.

For-Profit Organizations

For-profit organizations could apply the same principles as non-profit organizations, but they can also actively use the emotional connections developed in streaming communities to sell products and services instead of just motivating audiences towards donations and stream expenditures. It could be worthy to sacrifice the profit capabilities of the streams themselves in order to establish brand loyalty and expedite sales. For example, a custom sneakers company could stream discussions about classic or expensive sneakers. Eventually, users would think of that particular company as trustworthy and the most desirable/knowledgeable custom sneaker provider. They would feel emotionally connected to the "sneakerhead" community that formed around that stream, making any future sales and events put on by the company a must-experience event. The company could tie being a paid member of the group connected to discounts and raffles. In the end, the core concept of using digital online presence and parasocial connections to develop loyalty and emotional connectivity to a brand can benefit almost any organization.

Delimitations, Limitations, and Future Studies

The LGS topic is extremely large. It is too large for any single study, or even a few studies for that matter, to explore in its entirety. As such, there were significant delimitations and limitations applied to this study. The refinement of focus within this study allows for significant

future research and academic inquiry, as well as future discourse towards developing consistent terminology and methodology more specified for this field of study.

Delimitations

This study's delimitations, or boundaries, include community size, genre of game being played, and platforms within which the streams were shown. The first classification was limiting the study to First-Person and Third-Person shooter game streams. Since there are so many genres of video games, trying to encapsulate all of their various cultures and cues into a manageable but still meaningful sample size would have been nigh impossible for the time frame set apart for this study. There were two streamers (Plyrock Nation and MenziesxMedia) who played a variety of games and are considered variety streamers. They were included for both their channel's community size and for comparison with the primary genre streamers.

The next factor considered was the size of the audience/community. This was measured using both the total number of followers/subscribers and the concurrent viewership numbers. Small streamers had 1,000–2,000 followers and around 25 concurrent viewers, while the largest streamers had follower counts near or at five million and concurrent viewership in the tens of thousands. The sizes were categorized as small, medium, and large. Small and large streams corresponded to the aforementioned numbers, whereas medium streamers had follower counts in the tens of thousands and concurrent viewership of around 1,000.

Finally, streamers were chosen from the three primary streaming platforms (as of the writing of this study) Twitch, YouTube Gaming, and Facebook Gaming. One streamer, Average Dad, had started to dual-stream to Kick.com as well as Facebook Gaming during the study, so this too was included for added variation. Each streaming platform had at least two representative streams included.

The selection of the streams was partially influenced by prior knowledge of the streamers. An initial three streams were chosen based on knowledge of their existence as well produced channels, and then platform-suggested streams were added to fill out the list. For instance, I already knew of Doctor Disrespect, Tim the Tatman, and Stone Mountain 64. Plyrock Nation, and MenziesxMedia. Spartakus, Average Dad, and CourageJD were then chosen as suggested streamers by their respective platforms. Doc, Tim, and Stone Mountain are large streamers known by most people familiar with streaming in any capacity. This includes both content creators and audience members. Plyrock and Menzies were discovered during my own time working within the industry. I had heard of CourageJD before but had never really watched his content before. Average Dad and Spartakus were completely new to me in all aspects. Familiarity with some of the streamers' content as well as general industry knowledge from prior involvement did provide me with insight that outsiders new to this entertainment avenue may have missed. Thus, I see my experience as a positive. Being able to understand some of the more detailed references and concepts allowed for a depth of understanding not present in the uninitiated. I did try to remain as neutral and removed from the streams as possible.

Limitations

Even with the delimitations placed on this study, the findings have several limitations that should be noted.

Livestream Length and Researcher Time

The full breadth of the topic covered in this study was more extensive than initially assumed. As such there are plenty of limitations present in the results. To begin with, there was the limitation of man hours required to watch the streams. I ended up spending 250+ hours watching streams during the time frame set up for data collection, plus there were years of

personal experience in the industry/culture prior to this study's beginning. Even with this amount

of time spent on gathering information, there is still so much data, topics, and variations of

scholarly focus left untouched. This study only involved eight streamers, if a study were to be

broader in its focus, the time requirement would only be enlarged.

It Is Like Indiana Jones in Here

Another serious limitation, which was discovered during the data collection and analysis

phase, was the inconsistency of availability for recorded archives. Only YouTube Gaming had

semi-reliable archived sessions of the past streams, and even those were subject to deletion at the

whims of the streamer. This meant that providing live links to the observed streams became nigh

impossible, and the nature of the study had to shift to being similar to experiencing a live event

like a rally or a concert, rather than a recordable entertainment avenue like TV shows or movies.

They Pled the Fifth.

The choice to avoid interviews provided its own set of challenges. For instance, the uses

and gratifications theory had to be abandoned as it was simply too difficult to attain accurate

motivations from content analysis alone. This same issue arose, though not so strongly as to

justify the elimination of the theory, with identity management theory. A separate study including

interviews would still be encouraged to fully explore both uses and gratification and identity

management. There was the limitation of this study only covering a particular genre of video

game stream also limits the expansiveness of the conclusions. Other game genres which are less

competitive, or live streams that maintain the primary streamer but without games as the subject

could provide for different cultural development and thus different results. The lack of female

streamers in the data sample also comes with similar limitations. Studies that compare gender,

sexuality, and other social factors are still needed to give a fuller picture of the LGS culture as a whole.

It Is Like the Oregon Trail but Without the Dysentery.

Though there is some academic research starting to be published on this communication environment, the amount is still very limited. The terminology surrounding this hybrid industry of entertainment and social media from an academic standpoint is mostly unestablished. Even within the industry terms are not solidified. For instance, the use of the word subscribers to present the status of a paid position within the streaming channel's community on sites like Twitch and Facebook can get confused with a subscriber on YouTube which is just a person who has chosen to follow the channel for free and to be alerted when the streams go live. Even the use of the term audience struggles to find a solidified meaning as the viewers are active participants in the content creation process to a degree and viewing them as merely passive viewers would be misleading. This struggle to match the terminology definitions from each platform to the others, from the streaming industry to other similar industries, and from industry terms to academic definitions was a definite limitation in presenting a cohesive explanation of the culture developing within the unique communication environment.

I Want To Stay At the YMCA!

The final limitation to be discussed is the lack of female streamers in the participant list. While the exclusion of female streamers was not intentional, it is a limitation that future research should address. The semi-random purposive selection process that leveraged platform-based searches coupled with genre and audience size criteria allowed the platforms' algorithms to present streamers who were somewhat similar to each other, and the top choices for each platform in each size category worked out to be all male streamers. It was simply an oversight by

the researcher to not notice the lack of female streamers within the participant list. There were plenty of (presumed and self-identified) female participants on the audience side, but unfortunately, the selection process for the streamers resulted in an all-male cast.

Future Studies

This study serves as an introduction to the communication environments that shape the unique cultures and communities around live gaming streams. Consequently, there are numerous opportunities for future research. Some of these have already been highlighted, such as examining different game genres and the impact of streamer and audience gender on the results. Additionally, the age of the target audience could be a significant factor, with some streams being adult-only (18+) and others aimed at young children. Further differentiation could be explored by considering the nationality and ethnic backgrounds of both streamers and audiences. A long-term study, designed to collect data showing aspects of the culture like inside jokes developing over a period of time as long as a few years would be interesting. Even using this current study as a basis, a deeper dive into the identity management of participants using interviews would be interesting. Interviews could be used as an additional data collection method to provide more depth to any other data collected through content analysis. This in turn could open up many more topics and theories for discussion.

Studies could be based on quantitative research rather than qualitative. Many communication theories are still very applicable to the LGS setting and were not even mentioned in this study. One such theory, which was considered for this study but ultimately removed was uses and gratification. With the interviews included, uses and gratifications could be fully fleshed out, and also a deeper look into the monetary motivations of all parties involved could be explored. Collaborative studies involving psychologists and communication scholars could

provide psychological assessments and reasonings to the observed actions, communications, and interactions found in LGS environments. The cooperative study could fit seamlessly with uses and gratifications, as the psychological and brain chemistry explanations could be used to aid in the explanation of the motivations involved with the communication theory. Given that platforms like Twitch, YouTube, Kick, and Facebook feature personal streaming categories that focus on entertainer personalities rather than video games, it may be worthwhile to investigate any comparative differences between these streaming genres and gaming streams.

Other potential research topics include the exploration of agency within the LGS environment, particularly how streamers share control with moderators and audiences. While streamers ultimately control what appears in the chat and on screen, they often share or appear to share this control with their audience through tools like Blerps and Stream Stickers. Investigating the concept of co-creation with the audience could further enhance this study on LGS agencies or serve as a robust stand-alone topic. Additionally, examining the concept of immediacy and its impact on relationships and the sense of agency is closely related to these themes. Streamers can intentionally provide interactive elements to their audience, fostering a sense of agency. Another aspect of the LGS environment that would produce interesting results, would be that of how cancel culture impacts streamers and their sense of authenticity, identity management, and agency. Finally, there should be a very interesting study conducted that investigates the transition of LGS relationships from parasocial to genuine. Sometimes the initial parasocial nature of a relationship will eventually evolve into a real and meaningful relationship through interaction and experience.

Summary

Below is the summary of Chapter 5 compiled for ease of use. Future scholars, let's be honest, this is where you start reading to get your quotes for your paper.

Lessons Learned

What a learning experience this study turned out to be. Seeing the social effects I noticed while working in the industry be given academic clarity through data analysis and communications theories was truly fascinating. Yet, this newfound clarity simply lead to even more questions and a fuller understanding of how little I truly knew about the topic. In many cases, this study solidified concepts I already assumed were true, while other experiences were given new meanings and sometimes defied expectations. One defied expectation was simply my assumption that there would be mountains of academic research already covering this topic with roadmaps explaining how to engage the subject matter. There was a realization that the common cultural terminology was fluid and often confusing both academically and within the industry itself. This assessment was a big step in understanding how to approach the data and present it in an understandable manner. Discovering the difficulties with the citation process for the mercurial streams' archive links was another moment of growth as a scholar.

As I approached the subject matter and data collection process I had to adjust the study's tradition from being socio-psychological to socio-cultural and the methodology from just being a content analysis to being a digital ethnographic content analysis. I had to remove uses and gratifications as a foundational theory while adding in social presence theory, increasing the focus on cybernetics, and tempering the amount I relied on identity management. I simply realized that content analysis would not allow for a full exploration of identity management nor uses and gratifications. As stated before, thank God for emergent design. The fact is, LGS is a

highly fluid, ever-changing industry with equally unpredictable cultures. One lesson I took away from the scholastic side of this study was that the topic of LGS communication and culture is too large and too fluid to encapsulate in a single study. I came into this study thinking I would be able to slam some definitive broad-reaching study on the table. Instead, this study became a starting point for future research into the topic rather than a conclusive statement.

It's the Relationships, Stupid!

For the record, I am not calling the reader stupid, but making a sly play on the Clinton campaign mantra "It's the economy, stupid!" from the 1992 presidential campaign. The phrase is not intended to insult the reader, but rather to cleverly draw attention to a key point. During the observation and analysis portion of the study, I found more clarity in concept and understanding than anything. From my experience running my own LGS channel and collaborating with other streamers, I observed that a key motivating factor for both the audience and streamers was the sense of community and belonging. Emotional connection, while anticipated to some extent, proved to be significant. Although games often served as the initial catalyst for relationship building, the streamer's interaction with the community and the culture they fostered within their streaming environment had the greatest influence on channel growth and positive audience response.

This study helped deepen my understanding of the community-building process in a more refined manner. For instance, the term parasocial is bandied about within the streamer backroom communities. This most often was simply a way that streamers would refer to someone in the chat who was clearly and openly developing romantic feelings for the streamer. However, their understanding (and thus mine as well) of the term was incomplete, and this study helped me grasp just how intimate and how variable a parasocial interaction or a parasocial relationship can

be. I also learned that the parasocial nature of relationships in streaming has a duality. Streamers, whether they realize it or not, also experience both real emotional relationship connections and falsely perceived relationship connections in the LGS environment.

The integration of the social presence theory appears to have been instrumental in synthesizing the various theories employed in this study. The personalized references made by streamers to their audience, both at an individual and collective level, the cybernetic components that facilitate active audience participation and interaction with the stream, and the fundamental features of the platforms, such as real-time communication via chat boxes I have and donation-highlighted messages, collectively contribute to fostering a sense of presence among the audience. This sense of presence is combined with the individual's choice of identity management and the parasocial nature of the relationship being built to create loyalty and a sense of belonging.

Viewers genuinely begin to feel like they are part of a community and from that community, the culture begins to develop and self-regulate. The viewers who enjoy a certain sense of humor, presentation style, etc., begin to connect and bond, while those who do not share the same cultural values move on to other streaming channels that might reflect their values more accurately. This process is guided, to a degree, by the streamers and their moderators who can remove and block users who are antagonistic to the culture they are hoping to foster. Yet, the streamers do adapt to the requests and comments of the viewers, giving the audience a vital part to play in the culture building as well.

There is a complicated and fluid interconnection of these communication theories at play which create these highly unique and potent social cultures that develop around each streamer. Both real and imagined relationships develop in full and carry with them actions that often are

only seen in real-world physically available relationships. I do wish that future studies will be

able to include uses and gratifications as well as some psychological theories to bring even more

clarity to the complexity of these communities. As previously articulated, the scope for further

research on this subject is vast, given that this study has merely begun to explore the profound

and extensive topic of live-streaming communities, with a particular focus on LGS communities.

Despite acquiring a substantial amount of knowledge, it appears that it constitutes only a small

fraction of the overall context. The most significant insight from this study may be the realization

that, despite investing hundreds of hours in observing and analyzing streamers and their

communities, there remains a desire for additional information and clarity, rather than a sense of

completion. It is a source of pride to have been an active participant in such an intriguing and

significant community for over seven years (the exact duration is uncertain, but it could be up to

a decade). This study, hopefully, will pave the way for others to contribute further to the

multifaceted mosaic that represents the subject of.

References

Adjei, J. K., Adams, S., Mensah, I. K., Tobbin, P. E., & Odei-Appiah, S. (2020). Digital identity management on social media: Exploring the factors that influence personal information disclosure on social media. *Sustainability*, *12*(23), 9994.

Anderson J. (1983). Who really invented the video game? *Creative Computing: Video and Arcade Games. Spring 1983; 1(1).* www.atarimagazines.com/cva/v1n1/inventedgames.php

Anderson, K. (2017). The business of video games: A multibillion-dollar industry. *Forbes*. https://www.forbes.com/sites/kevinanderton/2017/04/29/the-business-of-video-games-a-multi-billion-dollar-industry-infographic/#243ae0766d27

Anderson, R. (2007). Thematic content analysis (TCA). *Descriptive presentation of qualitative data*, *3,* 1–4.

Alexander, L. (2014). Sexism, lies, and video games: the culture war no one is winning. *Time Magazine.* http://time.com/3274247/video-game-culture-war/.

Anguera, J. A., Boccanfuso, J., Rintoul, J. L., Al-Hashimi, O., Faraji, F., Janowich, J., . . . Gazzaley, A. (2013). Video game training enhances cognitive control in older adults. *Nature, 501*(7465), 97. doi:10.1038/nature12486

Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of emerging trends in educational research and policy studies*, *5*(2), 272–281.

Arifin, S. R. M. (2018). Ethical considerations in qualitative study. *International Journal of Care Scholars*, *1*(2), 30–33.

Aspers, P., & Corte, U. (2019). What is qualitative in qualitative research. *Qualitative sociology*, *42*(2), 139-160.

Austin, J. L. (1975). *How to do things with words*. Oxford University Press.

Average Dad. (2023, October 4). Facebook Gaming. https://www.facebook.com/gaming/averagedad1/

Bahg, C.G. (1990). Major systems theories throughout the world. *Behavioral Science, 35(2): 79–107*.

Bahrami, N., Soleimani, M. A., Yaghoobzadeh, A., & Ranjbar, H. (2016). Researcher as an instrument in qualitative research: Challenges and opportunities. *Advances in Nursing & Midwifery*, *25*(90), 27–37.

Barone, M. (2021). Facebook is America's biggest suppressor of free speech—and proud of it! *New York Post*. https://nypost.com/2021/06/04/facebook-is-americas-biggest-suppressor-of-free-speech-and-proud-of-it/

Bar-Tal, D., & Magal, T. (2021). Socio-psychological analysis of the deterioration of democracy and the rise of authoritarianism: The role of needs, values, and context. In *The psychology of populism* (pp. 42–61). Routledge.

Bavelas, J. B., Black, A., Chovil, N., & Mullett, J. (1990). *Equivocal communication*. Sage Publications, Inc.

Bayindir, N., Paisley, E.W. (2019). *Digital vs. traditional media consumption*. Global Web Index. https://www.amic.media/media/files/file_352_2142.pdf

Bennett, R. (2022). 10 best live streaming platforms you should know. *Wondershare Filmora*. https://filmora.wondershare.com/live-streaming/10-best-live-streaming-platforms-you-should-know.html

Bickle, J. T., Hirudayaraj, M., & Doyle, A. (2019). Social presence theory: Relevance for HRD/VHRD research and practice. *Advances in Developing Human Resources*, *21*(3), 383–399.

Biggs, T. (2012). Why real-world morals have no place in video games. *IGN*. http://www.ign.com/articles/2012/08/20/why-real-world-morals-have-no-place-in-video-games.

Biocca, F. (1999). The Cyborg's dilemma: Progressive embodiment in virtual environments. *Human Factors in Information Technology, 13*(1), 113–144.

Evans, A. C., Jr., Garbarino, J., Bocanegra, E., Kinscherff, R. T., & Márquez-Greene, N. (2019, August 8–11). *Gun violence: An event on the power of community* [Conference presentation]. APA 2019 Convention, Chicago, IL, United States. https://convention.apa.org/2019-video

Biocca, F., & Harms, C. (2002). Defining and measuring social presence: Contribution to the networked minds theory measure. In F. R. Gouveia & F. Biocca (Eds.), *Proceedings of the 5th International Workshop on Presence 2002* (pp. 7–36). Porto: University Fernando Pessoa.

Biocca, F., Harms, C., & Burgoon, J. (2003). Toward a more robust theory and measure of social presence: Review and suggested criteria. *Presence: Teleoperators & Virtual Environments, 12*(5), 456–480.

Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. *Journal of Agribusiness*, 23(1), 75–91.

Bonnar, D., Lee, S., Gradisar, M., & Suh, S. (2019). Risk factors and sleep intervention considerations in esports: A review and practical guide. *Sleep Medicine Research*, *10*(2), 59–66.

Boshier, R. (1990). Socio-psychological factors in electronic networking. *International Journal of Lifelong Education*, *9*(1), 49–64.

Bous, V. (2022). The best free social streaming platforms in 2022. *Restream*. https://restream.io/blog/best-live-streaming-platforms/

Bowen, G. A. (2009). Supporting a grounded theory with an audit trail: An illustration. *International Journal of Social Research Methodology, 12(4),* 305–316. doi: 10.1080/13645570802156196

Brenan, M. (2022). Movie theatre attendance far below historical norms. *Gallup.* https://news.gallup.com/poll/388538/movie-theater-attendance-far-below-historical-norms.aspx

Brinkmann, S. (2014). Unstructured and semi-structured. In P. Leavy (Ed.), The Oxford handbook of qualitative research (pp. 277–299). Oxford Library of Psychology. https://doi.org/10.1093/oxfordhb/9780199811755.013.030

Brisola, E. B. V., & Cury, V. E. (2016). Researcher experience as an instrument of investigation of a phenomenon: An example of heuristic research. *Estudos de Psicologia (Campinas)*, *33*, 95–105.

Brooks, A. (2022). Video game live streaming trends 2022 Q1 report. *Stream Hatchet*.

https://streamhatchet.com/2022/04/27/video-game-live-streaming-trends-q1-2022-report/

Brown, A. (2022). Dr Disrespect's game studio is selling early access "Founders Pass" NFTs.

NME. https://www.nme.com/news/gaming-news/dr-disrespects-game-studio-is-selling-

early-access-founders-pass-nfts-3182978

Brown, H. J., & Ebrary, I. (2014). *Videogames and education*. Armonk, N.Y: M.E. Sharpe.

doi:10.4324/9781315698373

Brown, William J. (2015). Examining four processes of audience involvement with media

personae: Transportation, parasocial interaction, identification, and worship.

Communication Theory, 25 (3): 259–83. https://doi.org/10.1111/comt.12053.

Burrill, D. (2017). Provocation: Rethinking video games. *Journal of Gaming & Virtual Worlds,*

9(1), 87-92. doi:10.1386/jgvw.9.1.87_1

Burroughs, B., & Rama, P. (2015). The eSports Trojan horse: Twitch and streaming futures.

Journal For Virtual Worlds Research, *8*(2).

Burton, M. (2019). 10 colleges with esports degree programs. *Animation Career Review*.

https://www.animationcareerreview.com/articles/10-colleges-esports-degree-programs

Bybyk, A. (2021). The history of live streaming. *Restream*. https://restream.io/blog/history-of-

live-streaming/

Byshonkov, D. (2022). Game market overview, May 2022. *Devtodev*.

https://www.devtodev.com/education/articles/en/443/game-market-overview-the-most-

important-reports-published-in-may-2022

Cabeza-Ramírez, L. J., Muñoz-Fernández, G. A., & Santos-Roldán, L. (2021). Video game streaming in young people and teenagers: Uptake, user groups, dangers, and opportunities. *Healthcare (Basel), 9*(2), 192. https://doi.org/10.3390/healthcare9020192

Cai, J., & Wohn, D. Y. (2019). Live streaming commerce: Uses and gratifications approach to understanding consumers' motivations.

Callaghan, C. (2017). Critical theory and contemporary paradigm differentiation. *Acta Commercii, 16*(2). DOI:10.4102/ac.v16i2.421

Cantril, H. (1940). *The invasion from Mars: A study in the psychology of panic*. Princeton, NJ: Princeton University Press.

Cantril, H. (1942). Professor quiz: A gratifications study. *In P. F. Lazarsfeld & F. Stanton (Eds.), Radio research 1941 (pp. 34–45)*. New York: Duell, Sloan & Pearce.

Cantril, H., & Allport, G. (1935). *The psychology of radio*. New York: Harper.

Cesinger, B., Vallaster, C., & Müller, J. M. (2022). The ebb and flow of identity: How sustainable entrepreneurs deal with their hybridity. *European Management Journal*, *40*(1), 77–89. https://doi.org/10.1016/j.emj.2021.04.003

Piaget, J. (1972). Intellectual evolution from adolescence to adulthood (J. Bliss & H. Furth, Trans.). Human Development, 15(1), 1–12. https://doi.org/10.1159/000271225 (Original work published 1970)

Chalk, A. (2017). Gabe Newell is worth $5.5 billion according to Forbes. *PC Gamer.* http://www.pcgamer.com/gabe-newell-is-worth-55-billion-according-to-forbes/?utm_content=buffer59eb0&utm_medium=social&utm_source=facebook&utm_campaign=buffer_pcgamerfb.

Chalk, A. (2021). Dr. Disrespect launches 'AAA game studio' with Call of Duty and Halo

veterans. *PC Gamer.* https://www.pcgamer.com/dr-disrespect-launches-aaa-game-studio-

with-call-of-duty-and-halo-veterans/

Chen, C. P. (2016). Forming digital self and parasocial relationships on YouTube. *Journal of*

Consumer Culture, *16*(1), 232–254.

Chen, H., Dou, Y., & Xiao, Y. (2023). Understanding the role of live streamers in live-streaming

e-commerce. *Electronic commerce research and applications, 59,* 101266.

Chilisa, B., & Preece, J. (2005). *African perspective in adult learning: Research methods for*

adult educators. Hamburg, German: UNESCO Institute of Education.

Chou, S. W., & Lu, G. Y. (2022). Content creation intention in digital participation based on

identity management on Twitch. *Behaviour & Information Technology*, *41*(12), 2578–

2595.

Chung, S., & Cho, H. (2017). Fostering parasocial relationships with celebrities on social media:

Implications for celebrity endorsement. *Psychology & Marketing*, *34*(4), 481–495.

Cifaldi F. (2012). Sad but true: We can't prove when Super Mario Bros. came out. *Gamasutra.*

www.gamasutra.com/view/feature/167392/sad_but_true_we_cant_prove_when_.php

Clement, J. (2021). Twitch global user share 2019, by age. *Statista.*

https://www.statista.com/statistics/634057/twitch-user-age-worldwide/

Clement, J. (2021). Hours watched on Streamlabs by platform 2020. *Statista.*

https://www.statista.com/statistics/1030795/hours-watched-streamlabs-platform/

Clement, J. (2021). Video game live streaming hours watched 2019–2021. *Statista*.

https://www.statista.com/statistics/1125469/video-game-stream-hours-

watched/#:~:text=In%20the%20first%20quarter%20of%202021%2C%20a%20total,2019

%20to%20Q1%202021%20%28in%20billions%29%20Additional%20Information

Clement, J. (2022). Gaming revenue worldwide 2022, by segment. *Statista.*

https://www.statista.com/statistics/292751/mobile-gaming-revenue-worldwide-device/

Cole, M., & Wertsch, J. V. (1996). Beyond the individual-social antinomy in discussions of

Piaget and Vygotsky. *Human development*, *39*(5), 250–256.

Communication Theory. (2014, November 10). *Identity Management Theory*.

https://www.communicationtheory.org/identity-management-theory/

Coulson, J. (2021). Nickmercs signs an exclusive deal with Twitch. *The Gamer.*

https://www.thegamer.com/nickmercs-exclusive-twitch-deal/

CourageJD. (2023, October 9). *YouTube Gaming*. https://www.youtube.com/@CouRageJD

Creswell, J., & Miller, D. (2000). Getting good qualitative data to improve. *Theory into practice*,

39(3), 124–130.

Creswell, J. W., & Poth, C. N. (2013). *Qualitative inquiry and research design: Choosing among

five approaches*. Sage publications.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among

five approaches*. Sage publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among

five approaches*. Sage.

Cui, G., Lockee, B., & Meng, C. (2013). Building modern online social presence: A review of social presence theory and its instructional design implications for future trends. *Education and information technologies*, *18*, 661-685.

Cullen, A. L. (2018). "I play to win!": Geguri as a (post) feminist icon in esports. *Feminist Media Studies*, *18*(5), 948-952.

Cullen, A. (2019). Feeling for an Audience. *Digital Culture & Society.*, *5*(2), 85–102. https://doi.org/10.14361/dcs-2019-0206

Cullen, A. L., & Ruberg, B. (2019). Necklines and 'naughty bits' constructing and regulating bodies in live streaming community guidelines. In *Proceedings of the 14th International Conference on the Foundations of Digital Games* (pp. 1–8).

Cupach, W.R., & Imahori, T.T. (1993). Identity management theory: Communication competence in intercultural episodes and relationships. In R.L. Wiseman & J. Koester (Eds.), *Intercultural communication competence* (pp. 112–131). SAGE Publishing.

Daily time spent with selected media in the United States in 1st quarter 2020, by age group (in minutes) [Chart]. *Statista.* https://www.statista.com/statistics/233386/average-daily-media-use-of-us-adult-population-by-medium/ Retrieved November 6th, 2022.

Deetz, S.A. (1996). Crossroads - describing differences in approaches to organization science: Rethinking Burrell and Morgan and their legac*y. Organization Science, 7, 191–207.*

Del Rosario, A. (2023). 'Call of Duty' faces backlash for removing streamer against LGBTQ+ school policies. *Los Angeles Times*. https://www.latimes.com/entertainment-arts/story/2023-06-13/call-of-duty-nickmercs-controversy-timthetatman-lgbtq-glendale-school

Democratic Leadership Council. (1999). Online Town Meeting. *C-SPAN*. https://www.c-span.org/video/?153449-1/line-town-hall-meeting

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research*. Sage.

Dibble, J. L., Hartmann, T., & Rosaen, S. F. (2016). Parasocial interaction and parasocial relationship: Conceptual clarification and a critical assessment of measures. *Human Communication Research*, *42*(1), 21–44. https://doi.org/10.1111/hcre.12063

DrDisRespect. (September 25, 2019). *DrDisrespect reacts to the best interview and is transported to another dimension* [Video]. YouTube. https://www.youtube.com/watch?v=UA5r40nx9H8

DrDisRespect. (2023, October 4). *YouTube Gaming*. https://www.youtube.com/@DrDisRespect

Dumas, B. (2022). Elon Musk takes to Twitter to explain 'what free speech means'. *Fox Business*. https://www.foxbusiness.com/technology/elon-musk-takes-to-twitter-to-explain-what-free-speech-means

Dux, J., & Kim, J. (2018). Social live-streaming: Twitch. TV and uses and gratification theory social network analysis. *Computer Science & Information Technology*, *47*.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE open*, *4*(1), 2158244014522633.

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing*, *62*(1), 107–115.

Emden C., & Sandelowski M. (1999). The good, the bad and the relative, part two: Goodness and the criterion problem in qualitative research. *International Journal of Nursing Practice*, 5, 2–7.

Engeström, Y., & Cole, M. (2021). Situated cognition in search of an agenda. In *Situated cognition* (pp. 301–309). Routledge.

Erin, S., Ferrucci, P., Edson, T., & Walker, T. (2021). Advertising primed: How professional identity affects moral reasoning. *Journal of Business Ethics: JBE*, *171*(1), 175–187. http://dx.doi.org/10.1007/s10551-020-04429-0

Ferdous, M. S., & Poet, R. (2012). A comparative analysis of identity management systems. In *2012 International Conference on High-Performance Computing & Simulation (HPCS)* (pp. 454–461). IEEE.

Freeman, G., & Wohn, D. Y. (2020). Streaming your identity: Navigating the presentation of gender and sexuality through live streaming. *Computer Supported Cooperative Work (CSCW)*, *29*(6), 795–825.

Fingas, J. (2021). Pokimane is starting a talent management company for streamers. *Engadget*. https://www.engadget.com/pokimane-rts-streamer-talent-management-company-150034597.html

Flyvbjerg, B. (2011). Case study. In *The Sage handbook of qualitative research* (*4th ed.*, pp. 301–316)

Forrester. (2021). Postpandemic media consumption: Online streaming accelerates a new content experience. *Forbes*. https://www.forbes.com/sites/forrester/2021/06/28/postpandemic-

media-consumption-online-streaming-accelerates-a-new-content-

experience/?sh=289424418cf5

Froese, T. (2010). From cybernetics to second-order cybernetics: A comparative analysis of their

central ideas. *Constructivist Foundations*, *5*(2).

Geyser, W. (2021). Top Facebook Gaming states every brand should know in 2022. *Influencer

Marketing Hub.* https://influencermarketinghub.com/facebook-gaming-stats/#toc-9

Giertz, J. N., Weiger, W. H., Törhönen, M., & Hamari, J. (2021). Content versus community

focus in live streaming services: How to drive engagement in synchronous social media.

Journal of Service Management.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in

qualitative research: Interviews and focus groups. *British Dental Journal*, *204*(6), 291–

295.

Given, L. M. (Ed.) (2008). Emergent design. In *The SAGE Encyclopedia of Qualitative

Research.* (Vols. 1–0). SAGE Publications, Inc., https://doi.org/10.4135/9781412963909

Gjestang, R. (2020). *Working as a live streamer: The effect of audience interaction on psycho-

social work environment* (Master's thesis, NTNU).

Glushkov, V. (1966). *Introduction to Cybernetics.* New York: Academic Press. ISBN 978-

0122868504.

Goffman, E. (1967). *Interaction ritual: Essays in face-to-face behavior*. Aldine Pub. Co.

Goldberg, M, (2008). The 2600 Story – Part I". *GameSpy*.

> https://web.archive.org/web/20131013220343/http:/classicgaming.gamespy.com/View.ph
>
> p?view=Articles.Detail&id=401

Goulson, J. (2021). Nickmercs signs an exclusive deal with Twitch. *The Gamer*.

> https://www.thegamer.com/nickmercs-exclusive-twitch-deal/

Graetz, J.M. (1981, August). The origin of Spacewar. *Creative Computing, 7(8): 56–67.*

Grayson, N. (2021). By joining Complexity and YouTube, TimTheTatman looks to evolve, not

> quit streaming. *Washington Post*. Retrieved October 23, 2022, from
>
> https://www.washingtonpost.com/video-games/2021/11/02/timthetatman-youtube-dallas-
>
> cowboys-complexity-gaming/

Guba E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries.

> *Educational Communication and Technology Journal*, 29, 75–91.

Gunawardena, C. N. (1995). Social presence theory and implications for interaction and

> collaborative learning in computer conferences. *International journal of educational*
>
> *telecommunications*, *1*(2), 147–166.

Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a

> computer-mediated conferencing environment. *American journal of distance education*,
>
> *11*(3), 8–26.

Gursky, C. (2022). National broadcast TV trends: Viewership analysis heading into 2022.

> *Comscore*. https://www.comscore.com/Insights/Presentations-and-
>
> Whitepapers/2022/National-Broadcast-TV-Trends-Viewership-Analysis-Heading-Into-
>
> 2022

Hammes, E. K. (2016). *Glorifying the simple life: Analyses of socio-psychological constructs in the context of reality TV*. Springer.

Hartmann, T. (2016). Parasocial interaction, parasocial relationships, and well-being. In Leonard Reinecke and Mary-Beth Oliver (Eds.), *The Routledge handbook of media use and well-being* (pp. 131-144). Abingdon: Routledge.

Harvey, M. M., & Marlatt, R. (Eds.). (2021). *Esports research and its integration in education*. IGI Global.

Haynes, K. (2012). Reflexivity in qualitative research. *In Symon, G., Cassell, C. (Eds.), Qualitative organizational research: Core methods and current challenges* (pp. 72–89). *SAGE, Los Angeles*.

Hiltscher, J. (2013). A short history of esports. *eSports yearbook*, *14*, 9–14.

Hilvert-Bruce, Z., Neill, J. T., Sjöblom, M., & Hamari, J. (2018). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, *84*, 58-67.

Hollenbaugh, E. E., & Ferris, A. L. (2014). Facebook self-disclosure: Examining the role of traits, social cohesion, and motives. *Computers in Human Behavior*, *30*, 50–58. https://doi.org/10.1016/j.chb.2013.07.055

Hootsuite. (2021). *25 YouTube statistics that may surprise you: 2021 edition*. https://blog.hootsuite.com/youtube-stats-marketers/

Horton, D., & Wohl, R. (2006). Mass communication and parasocial interaction: Observations on intimacy at a distance. *Participations 3*(1). https://www.participations.org/volume%203/issue%201/3_01_hortonwohl.htm.

Hsu, C. L., Lin, J. C. C., & Miao, Y. F. (2020). Why are people loyal to live stream channels? The perspectives of uses and gratifications and media richness theories. *Cyberpsychology, Behavior, and Social Networking*, *23*(5), 351–356.

Hu, M. (2016). The influence of a scandal on parasocial relationship, parasocial interaction, and parasocial breakup. *Psychology of Popular Media Culture*, *5*(3), 217.

Huston, C., Gracia, B., Cruz, A., & Zoppos, E. (2022). Dimensionalizing esports consumption: Alternative journeys to professional play. *Journal of Consumer Culture*, *22*(2), 456–475.

Imahori, T. T., & Cupach, W. R. (2005). Identity management theory. *Theorizing about intercultural communication*, 195-210

Influence Marketing Hub. (2020). *Top Facebook Gaming stats every brand should know in 2021*. https://influencermarketinghub.com/facebook-gaming-stats/

Ivory, J. D. (2015). A brief history of video games. In *The Video Game Debate* (pp. 1–21). Routledge.

Jackson, R. L., Drummond, D. K., & Camara, S. (2007). What is qualitative research? *Qualitative research reports in communication*, *8*(1), 21–28.

James, F. (2020). Who is CouRageJD? Everything explained from Ariana Grande to YouTube. *GamesRadar+*. https://www.gamesradar.com/who-is-courage-ariana-grande-youtube-twitch-mixer/

Jaspal, R., Nerlich, B., & Cinnirella, M. (2014). Human responses to climate change: Social representation, identity and socio-psychological action. *Environmental Communication*, *8*(1), 110–130.

Jia, A. L., Shen, S., Epema, D. H., & Iosup, A. (2016). When game becomes life: The creators and spectators of online game replays and live streaming. *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)*, *12*(4), 1–24.

Jiang, Y., & Cai, H. (2021). The impact of impulsive consumption on supply chain in the live-streaming economy. *IEEE Access*, *9*, 48923-48930.

Kaewsaiha, P. (2019). LMS VS Social Network: Content analysis with the social presence theory approach. In *VII International Conference "Transportation Realia: Aspects & Challenges for Economic Sustainability: TRACES 2023"* (pp. 238–247)

Kahlow, J. A., Coker, M. C., & Richards, R. (2020). The multimodal nature of Snapchat in close relationships: Toward a social presence-based theoretical framework. *Computers in Human Behavior*, *111*, 106409.

Karhulahti, V. M. (2016). Prank, troll, gross and gore: Performance issues in esport live-streaming. *DiGRA/FDG*, *1*, 1-13.

Katsko, I. A., & Kremyanskaya, E. V. (2020). Cognitive monitoring of cyber-physical systems in agriculture. In *Cyber-Physical Systems and Control* (pp. 422–430). Springer International Publishing.

Kaytoue, M., Silva, A., Cerf, L., Meira Jr, W., & Raïssi, C. (2012, April). Watch me playing, I am a professional: a first study on video game live streaming. In *Proceedings of the 21st International Conference on World Wide Web* (pp. 1181–1188).

Kemp, S. (2022). Digital 2022: Global overview report. *Datareportal*. https://datareportal.com/reports/digital-2022-global-overview-

report?utm_source=Global_Digital_Reports&utm_medium=Article&utm_campaign=Dig

ital_2022

Kent, S. L. (2010). *The ultimate history of video games, volume 1: From Pong to Pokemon and*

beyond... the story behind the craze that touched our lives and changed the world (Vol.

1). Crown.

Kharif, O. (2021). Female streamers are conquering Twitch. *Bloomberg*.

https://www.bloomberg.com/news/articles/2021-05-07/twitch-streamers-are-increasingly-

women-and-they-re-gaining-big-audiences#xj4y7vzkg

Kim, J., Kwon, Y., & Cho, D. (2011). Investigating factors that influence social presence and

learning outcomes in distance higher education. *Computers & Education, 57*(2), 1512–

1520.

Kirk, A. (2019). *Data Visualisation*. [VitalSource Bookshelf].

https://bookshelf.vitalsource.com/#/books/9781526482884/

Klapper, J. T. (1960). *The effects of mass communication*. New York: Free Press.

Klimmt, C., Hartmann, T., & Schramm, H. (2006). Parasocial interactions and relationships.

Psychology of entertainment, 291–313.

Koch, N., Pongratz, S., McCauley, B., & Achtenhagen, L. (2020). 'Smashing it': How user

entrepreneurs drive innovation in esports communities. *International Journal of Esports,*

1(1).

Koch T., Harrington A. (1998). Reconceptualizing rigour: The case for reflexivity. *Journal of*

Advanced Nursing, 28, 882–890.

Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. The

    American Journal of Occupational Therapy, 43(3), 214.

Krippendorff, K. (2009). Cybernetics. *Encyclopedia of Communication Theory, vol. 1, ed. (285–*

    290).

Kurtin, K. S., O'Brien, N., Roy, D., & Dam, L. (2018). The development of parasocial

    interaction relationships on YouTube. *The Journal of Social Media in Society*, *7*(1), 233–

    252.

Kurtin, K. S., O'Brien, N., Roy, D., & Dam, L. (2019). Parasocial relationships with musicians.

    Journal of Social Media in Society 8 (2): 30–50.

    https://www.thejsms.org/index.php/TSMRI/article/view/502.

Kyngäs, H., Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., & Utriainen, K. (2014). Qualitative

    Content Analysis: A Focus on Trustworthiness. Sage Open, 4(1).

    https://doi.org/10.1177/2158244014522633

Lamport, L. (1986). On interprocess communication. *Distributed computing*, *1*(2), 86–101.

Lave, C. A., & March, J. G. (1993). *An introduction to models in the social sciences*. University

    Press of America.

LeCompte, M. D., Millroy, W. L., & Preissle, J. (1992). *The handbook of qualitative research in*

    education. San Diego, CA: Academic Press.

Leith, A. P., & Gheen, E. (2022). Twitch in the time of quarantine: The role of engagement in

    needs fulfillment. *Psychology of Popular Media, 11*(3), 275–280.

    https://doi.org/10.1037/ppm0000372

Leontiev, A. I., Mostinsky, I. L., Polonsky, V. S., Styrikovich, M. A., & Chernika, I. M. (1981). Experimental investigation of the critical heat flux in horizontal channels with circumferentially variable heating. *International Journal of Heat and Mass Transfer*, *24*(5), 821–828.

Leroux-Parra, M. (2020). Esports Part 1: What are Esports? *Harvard International Review*. https://hir.harvard.edu/esports-part-1-what-are-esports/

Li, D. (2004). Trustworthiness of think-aloud protocols in the study of translation processes. *International Journal of Applied Linguistics, 14(3),* 301–313. doi: 10.1111/j.1473-4192.2004.00067.x

Li, Y., Wang, C., & Liu, J. (2020). A systematic review of literature on user behavior in video game live streaming. *International Journal of Environmental Research and Public Health, 17*(9), 3328. https://doi.org/10.3390/ijerph17093328

Liebers, N., & Schramm, H. (2019). Parasocial interactions and relationships with media characters–an inventory of 60 years of research. *Communication Research Trends*, *38*(2), 4–31.

Lincoln S. Y., Guba E. G. (1985). *Naturalistic inquiry*. Thousand Oaks, CA: Sage.

Liu, G., Lei, S. S. I., & Law, R. (2022). Enhancing social media branded content effectiveness: strategies via telepresence and social presence. *Information Technology & Tourism*, *24*(2), 245-263.

Liu, M. T., Liu, Y., & Zhang, L. L. (2019). Vlog and brand evaluations: The influence of parasocial interaction. *Asia Pacific Journal of Marketing and Logistics*, *31*(2), 419–436.

Liu, W. Y. (2015). A historical overview of uses and gratifications theory. *Cross-Cultural*

    *MIU*DOI: http://dx.doi.org/10.3968/7415Live services and events guide [Online

    Database]. (2022). *Christian World Media*.

    https://www.christianworldmedia.com/wordstream/live-service-guide

Lovink, G. (2012). What is the social in social media? *E-flux Journal*, *40*(12), 2012.

Low, J. (2013). Unstructured and semi-structured interviews in health research. In *Researching*

    health: Qualitative, quantitative and mixed methods (Vol. 2, pp. 87–105). Sage

    Publications.

Lowenthal, P. R. (2010). The evolution and influence of social presence theory on online

    learning. In T. T. Kidd (Ed.), *Online education and adult learning: New frontiers for*

    teaching practices. Hershey: IGI Global.

Luqman, Y. (2021). Millennials information-seeking behavior about climate change. In

    Proceedings of the 5th International Conference on Indonesian Social and Political

    Enquiries, ICISPE 2020, 9–10 October 2020, Semarang, Indonesia.

Luhmann, N. (1992). What is communication? *Communication theory*, *2*(3), 251–259.

Madison, D. S. (2011). *Critical ethnography: Methods, ethics, and performance (2nd ed.)*.

    Thousand Oaks, CA: Sage.

Matsui, A., Sapienza, A., & Ferrara, E. (2020). Does streaming esports affect players' behavior

    and performance? *Games and Culture*, *15*(1), 9–31.

Meisfjord, T. (2018). The not-so ancient history of live streaming. *Switchboard Live*.

    https://switchboard.live/blog/live-streaming-history/

Merriam-Webster 1. (n.d.). Live Stream. In *Merriam-Webster.com dictionary*. Retrieved

    September 8, 2022, from https://www.merriam-webster.com/dictionary/live%20stream

Merriam-Webster 2. (n.d.). Streamer. In *Merriam-Webster.com dictionary*. Retrieved September

    8, 2022, from https://www.merriam-webster.com/dictionary/streamer

Mervosh, S., Lu, D., & Swales, V. (2020). See which states and cities have told residents to stay

at home. *New York Times*. https://www.nytimes.com/interactive/2020/us/coronavirus-stay-at-

home-order.html

 https://twitchtracker.com/statistics

Morrison, S. (2019). List of varsity esports programs spans North America. *ESPN*.

    https://www.espn.com/esports/story/_/id/21152905/college-esports-list-varsity-esports-

    programs-north-america

Mukherjee, S. (2022). 5 most-watched YouTube Gaming streamers of 2022 so far. *Sportskeeda*.

    https://www.sportskeeda.com/esports/5-most-watched-youtube-gaming-streamers-2022-

    far

Munhall, P. L. (1988). Ethical considerations in qualitative research. *Western Journal of Nursing*

    Research, *10*(2), 150-162.

Muralidharan, G. (2021). OTT content consumption patterns pre- and post-COVID. *OTT Verse*.

    https://ottverse.com/ott-content-consumption-patterns-preand-postcovid/

Murko, D. (2022). Worlds 2022—Disappointing viewership of the group stage. *Esports Charts*.

    https://escharts.com/news/worlds-2022-group-stage-viewership-drop

Murray, T. (2021). TimTheTatman becomes the latest HyperX brand ambassador. *Sports Business Journal*. ttps://www.sportsbusinessjournal.com/Esports/Sections/Marketing/2021/07/Tatman-HyperX.aspx

Nielsen, R. K. L., & Hanghøj, T. (2019, October). Esports skills are people skills. In *Proceedings of the 13th European Conference on Game-Based Learning* (pp. 535–542).

99 Firms. (n.d.) *Live streaming statistics*. https://99firms.com/blog/live-streaming-statistics#gref

Novikov, D. A. (2015). *Cybernetics: From past to future* (Vol. 47). Springer.

O'Connor, T. (2005). Qualitative social science research methodology. *North Carolina Wesleyan College*. http://faculty.ncwc.edu/toconnor/308/308lect09.htm

Osei-Frimpong, K., McLean, G., Islam, N., & Otoo, B. A. (2022). What drives me there? The interplay of socio-psychological gratification and consumer values in social media brand engagement. *Journal of Business Research*, *146*, 288–307.

Oxford Languages. (n.d.). Live streaming. In *Oxford Learner's Dictionary*. Retrieved October 5, 2021 from https://www.oxfordlearnersdictionaries.com/us/definition/english/live-stream_2

Pailthorpe, B. C. (2017). Emergent design. *The international encyclopedia of communication research methods*, 1–2.

Parker, K., Horowitz, M. H., Minkin, R. (2022). COVID-19 pandemic continues to reshape work in America. *Pew Research Center*. https://www.pewresearch.org/social-trends/2022/02/16/covid-19-pandemic-continues-to-reshape-work-in-america/

Parshakov, P., Coates, D., & Zavertiaeva, M. (2018). Is diversity good or bad? Evidence from eSports teams analysis. *Applied Economics*, *50*(47), 5064–5075.

Pezalla, A. E., Pettigrew, J., & Miller-Day, M. (2012). Researching the researcher-as-instrument: An exercise in interviewer self-reflexivity. *Qualitative research*, *12*(2), 165–185.

Pham Q. T. (2024). Female sexually fluid (non) identity management strategies at work, *Journal of Homosexuality*, *71*(1), 232–258. https://doi.org/10.1080/00918369.2022.2111537

Plyrocknation. (2022, August 16). *Ply is still untarnished/ #2 Blerpers in World/ !blerp !discord / 18K Tik Tok!* [Video]. Twitch.tv. https://www.twitch.tv/videos/1564132861

Poggenpoel, M., & Myburgh, C. (2003). The researcher as research instrument in educational research: A possible threat to trustworthiness? (A: research_instrument). *Education*, *124*(2), 418–423.

Pokemonchallenges. (2022, October 10). Twitch TV. https://www.twitch.tv/pokemonchallenges

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of Counseling Psychology*, *52*(2), 137.

Prager, D. (2021). Dennis Prager on YouTube's record of censorship. *Wall Street Journal*. https://www.wsj.com/articles/youtube-censorship-prager-free-speech-big-tech-11628204348

Punch, K. F. (2014). *Introduction to social research: Quantitative & qualitative approaches*. SAGE.

Q1 2021 live game streaming trends. (2021). *Stream Hatchet*. https://streamhatchet.com/2021/04/07/q1-2021-live-game-streaming-trends/

Qaddo, M. (2019). Participant observation as research methodology: Assessing the validity of qualitative observational data as research tools. *Dubai International Academic City, Dubai, United Arab Emirates*.

Railsback, D., & Caporusso, N. (2018, July). Investigating the human factors in eSports performance. In *International Conference on Applied Human Factors and Ergonomics* (pp. 325–334). Springer, Cham.

Randomhouse. (n.d.). First-person shooter. In *Dictionary.com*. Retrieved October 6, 2021 from https://www.dictionary.com/browse/first-person-shooter

Raskovic, M., & Takacs-Haynes, K. (2020). (Re) Discovering social identity theory: An agenda for multinational enterprise internalization theory. *Multinational Business Review*, *29*(2), 145–165. https://doi.org/10.1108/MBR-02-2020-0031

Rasmussen, L. (2018). Parasocial interaction in the digital age: An examination of relationship building and the effectiveness of YouTube celebrities. *The Journal of Social Media in Society*, *7*(1), 280–294.

Read, S. (2022). Gaming is booming and is expected to keep growing. This chart tells you all you need to know. *World Economic Forum*. https://www.weforum.org/agenda/2022/07/gaming-pandemic-lockdowns-pwc-growth/

Redd, S. M. (2012). *Online communication attitude and parasocial interaction with celebrities across Facebook and Twitter* (Doctoral dissertation, Texas Christian University).

Report of the Week. (2018, March 11). *I react to mean comments* [Video]. YouTube. https://www.youtube.com/watch?v=6Km34EXxGZ4

Restream. (2021). *61 Streaming stats you should know in 2021*. https://restream.io/blog/live-streaming-statistics/

Restream Team. (2022). 56 Streaming stats you should know in 2022. *Restream*. https://restream.io/blog/live-streaming-statistics/

Twitch TV (2022, October 10). RetroLongplay. https://www.twitch.tv/RetroLongplay

Richards L, & Morse, J. (2007). *Users Guide to Qualitative Methods* (2nd ed.) Thousand Oaks, CA: Sage.

Ringer, C., Nicolaou, M., & Walker, J. (2020). Twitchchat: A dataset for exploring livestream chat. In *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment* (Vol. 16, No. 1, pp. 259–265)

Ritzer, G. (2015). Prosumer capitalism. *The Sociological Quarterly*, *56*(3), 413–445.

Rodrigues, R. (2022). Is the video game industry bigger than Hollywood? *LinkedIn*. https://www.linkedin.com/pulse/video-games-industry-bigger-than-hollywood-ricardo-rodrigues

Rosengren, K. E. (2000). *Communication: An introduction*. Sage.

Ruberg, B., Cullen, A. L., & Brewster, K. (2019). Nothing but a "titty streamer": legitimacy, labor, and the debate over women's breasts in video game live streaming. *Critical Studies in Media Communication*, *36*(5), 466–481.

Ruberg, B., & Brewer, J. (2022). Digital intimacy in real time: Live streaming gender and sexuality. *Television & New Media*, 15274764221084071.

Rubin, R. B., & McHugh, M.P. (1987). Development of parasocial interaction relationships. *Journal of Broadcasting and Electronic Media,* 31 (3): 279–92. https://doi.org/10.1080/08838158709386664.

Ruggiero, T. E. (2000). Uses and Gratifications Theory in the 21st Century. *Mass Communication and Society*, *3*(1), 3–37. https://doi.org/10.1207/S15327825MCS0301_02

Ryan, A. M., King, D. D., Elizondo, F., & Wadlington, P. (2020). Social identity management strategies of women in STEM fields. *Journal of Occupational and Organizational Psychology*, *93*(2), 245–272.

Ryan-Nicholls K., & Will C. (2009). Rigour in qualitative research: Mechanisms for control. *Nurse Researcher*, 16, 70–82.

Saadeh, J. (2020). *Creswell Chapter 7: Collecting qualitative data.* Department of Special Education at the University of Illinois at Chicago. https://thork.people.uic.edu/fair/Qualitative_data.pdf

Saltzman, S. (2021). E3 2021: Video games are bigger business than ever, topping movies and music combined. *USA Today.* https://www.usatoday.com/videos/tech/2021/06/10/e-3-2021-video-games-big-business-topping-film-and-music-combined/7637695002/

Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in nursing & health*, *23*(4), 334–340.

Santucci, M. (2021). Toward an integrated theory of computer-mediated social interaction. *Team Performance Management: An International Journal*, *27*(5/6), 353–376. https://doi.org/10.1108/TPM-11-2017-0077

Savage, M. E., & Spence, P. R. (2014). Will you listen? An examination of parasocial interaction

and credibility in radio. *Journal of Radio & Audio Media*, *21*(1), 3–19.

https://doi.org/10.1080/19376529.2014.891214

Scholz, T. M. (2019). A short history of esports and management. In *eSports is business* (pp. 17–

41). Palgrave Pivot, Cham.

Schreier M. (2012). *Qualitative content analysis in practice*. Thousand Oaks, CA: Sage.

Schwandt, T. A., Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it

rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for*

Evaluation (114), 11–25. doi:10.1002/ev.223

Scott, S., & Palincsar, A. (2013). *Sociocultural theory*. Gale Group. https://www.dr-

hatfield.com/theorists/resources/sociocultural_theory.pdf

Seers, K. (2012). Qualitative data analysis. *Evidence-based nursing*, *15*, 2.

Shabahang, R., Shim, H., Aruguete, M. S., & Zsila, Á. (2022). Oversharing on social media:

anxiety, attention-seeking, and social media addiction predict the breadth and depth of

sharing. *Psychological Reports*, *0*(0). https://doi.org/10.1177/00332941221122861

Shearer, E. & Mitchell, A. (2021). News use across social media platforms. *Pew Research.*

https://www.journalism.org/2021/01/12/news-use-across-social-media-platforms-in-

2020/

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects.

Education for Information, 22(2004), 63–7

Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London: Wiley.

Sime, J. A., & Themelis, C. (2020). Educators' perspectives on transmedia identity management: Redefining tele-teacher presence. *Distance Education*, *41*(1), 70–85.

Skardzius, K. (2020). Monetizing relationships: Streaming alone with all of your friends. *AoIR Selected Papers of Internet Research*.

The Slick Daddy Club. (2022, April 25). *Dr Disrespect off character interview + QA* [Video]. YouTube. https://www.youtube.com/watch?v=gE_UG_fQ_dc

Smith, T., Obrist, M., & Wright, P. (2013, June). Live-streaming changes the (video) game. In *Proceedings of the 11th European Conference on Interactive TV and Video* (pp. 131–138).

Soiferman, L. K. (2010). Compare and Contrast Inductive and Deductive Research Approaches. *Online Submission*.

Sokolova, K., & Kefi, H. (2020). Instagram and YouTube bloggers promote it, why should I buy? How credibility and parasocial interaction influence purchase intentions. *Journal of Retailing and Consumer Services*, *53*, 101742. https://doi.org/10.1016/j.jretconser.2019.01.011

Song, J., Moon, H., & Kim, M. (2019). When do customers engage in brand pages? Effects of social presence. *International Journal of Contemporary Hospitality Management*.

Songkick. (2022). Live stream concerts [Online Database]. https://www.songkick.com/live-stream-concerts

Spartakus. (2023, October 8). Facebook Gaming. https://www.facebook.com/gaming/Sparta

Spence, I., & Feng, J. (2010). Video games and spatial cognition. *Review of General Psychology, 14*(2), 92–104. doi:10.1037/a0019491

Sripanidkulchai, K., Maggs, B., & Zhang, H. (2004, October). An analysis of live streaming workloads on the internet. In *Proceedings of the 4th ACM SIGCOMM conference on Internet measurement* (pp. 41–54).

Stake, R. E. (2006). *Multiple case study analysis.* New York: The Guilford Press.

Steinkuehler, C. (2016). Parenting and video games: 1. *Journal of Adolescent & Adult Literacy, 59*(4), 357. doi:10.1002/jaal.455

Steinkuehler, C. (2020). Esports research: Critical, empirical, and historical studies of competitive videogame play. *Games and Culture*, *15*(1), 3–8.

Stever, G. S., & Lawson, K. (2013). Twitter as a way for celebrities to communicate with fans: Implications for the study of parasocial interaction. *Empire State College*. https://www.researchgate.net/publication/263257850_Twitter_as_a_Way_for_Celebrities _to_Communicate_with_Fans_Implications_for_the_Study_of_Parasocial_Interaction?en richId=rgreq-cfcf314cf6e717b01fe08fc7920e4929- XXX&enrichSource=Y292ZXJQYWdlOzI2MzI1Nzg1MDtBUzoxMTAxNTkzNTU0NT M0NDFAMTQwMzI3NTQ0NTg2MQ%3D%3D&el=1_x_2&_esc=publicationCoverPdf

Stewart, D. L. (2010). Researcher as instrument: Understanding" shifting" findings in constructivist research. *Journal of Student Affairs Research and Practice*, *47*(3), 291– 306.

StoneMountain64. (2023, October 2). *Facebook Gaming*.

https://www.facebook.com/gaming/StoneMountain64

Stopfer, J. M., Braun, B., Müller, K. W., & Egloff, B. (2015). Narcissus plays video games.

Personality and Individual Differences, 87, 212–218. doi:10.1016/j.paid.2015.08.011

Sullivan R., & William A. (1994, November 15). Higinbotham, 84; Helped build first atomic

bomb. *New York Times*. November 15, 1994, Section D, Page 29.

www.nytimes.com/1994/11/15/obituaries/william-a-higinbotham-84-helped-build-first-

atomic-bomb.html3.

SuperData. (2021). *2020 Year in review*. Retrieved February 10, 2021 at

https://www.superdataresearch.com/2020-year-in-review

SuperData: A Nielson Company. (2021). *Games and interactive media earnings rose 12% to

$139.9B in 2020*. Retrieved February 11, 2021 at

https://www.superdataresearch.com/blog/2020-year-in-review

Tackie, H. N. (2022). (Dis) Connected: Establishing social presence and intimacy in teacher–

student relationships during emergency remote learning. *AERA Open*, *8*,

23328584211069525.

Tamkin, C. (2021). TimTheTatman, one of gaming and esports' biggest personalities, joins

Complexity Gaming and GameSquare Esports. *Businesswire.*

https://www.businesswire.com/news/home/20210920005845/en/TimTheTatman-One-of-

Gaming-and-Esports%E2%80%99-Biggest-Personalities-Joins-Complexity-Gaming-and-

GameSquare-Esports

Tammy-Lin, J., Bowman, N., Lin, S., & Chen, Y. (2019). Setting the digital stage: Defining

game streaming as an entertainment experience. *Entertainment Computing, 31*, 100309.

https://doi.org/10.1016/j.entcom.2019.100309

Taylor, R. (2015). Video games' place in American culture. *Huffington Post.*

https://www.huffingtonpost.com/rich-taylor/video-games-place-in-american-

culture_b_7063838.html

Teddlie, C., & Yu, F. (2007). Mixed methods sampling. *Journal of Mixed Methods Research,*

1(1), 77-100. doi: 10.1177/2345678906292430

Teicholz, T. (2020). Playing with video game culture. *Forbes.*

https://www.forbes.com/sites/tomteicholz/2020/09/09/playing-with-video-gaming-

culture/?sh=4542fe787336.

Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. In *The SAGE*

Handbook of Qualitative Research in Psychology (pp. 17-36). SAGE Publications Ltd,

https://doi.org/10.4135/9781526405555.

The Editorial Board. (2019). Facebook and free speech. *Wall Street Journal*.

https://www.wsj.com/articles/facebook-and-free-speech-11571602853.

Thomas, J. (1993). *Doing critical ethnography*. Newbury Park, CA: Sage.

Thurlow, A. (2018). *Social media, organizational identity and public relations: The challenge of*

authenticity. Routledge. https://doi.org/10.4324/9781315160443.

TimTheTatman. (2022, August 30). *The Grau got a huge buff (its back)* [Video]. YouTube.

https://www.youtube.com/watch?v=ylU-c3vG3Oo.

TimTheTatman. (2023, October 3). *YouTube Gaming*.

>   https://www.youtube.com/@timthetatman.

TimTheTatman. (2023, October, 14). Rainbow 6 Halloween update today! [Video]. *YouTube Gaming*. https://www.youtube.com/watch?v=q8dtyFiPX28&t=2531s

Ting-Toomey, S., Gao, G., Trubisky, P., Yang, Z., Kim, H. S., Lin, S. L., & Nishida, T. (1991). Culture, face maintenance, and styles of handling interpersonal conflict: A study in five cultures. *International Journal of Conflict Management*.

Ting-Toomey, S., & Dorjee, T. (2018). *Communicating across cultures*. Guilford Publications.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing, 48(4)*, 388–396. doi: 10.1111/j.1365-2648.2004.03207.x

Tolbert, A. N., & Drogos, K. L. (2019). Tweens' wishful identification and parasocial relationships with YouTubers. *Frontiers in Psychology*, *10*, 2781.

Trofimov, A., Matviienko, L., Emishyants, O., Tretiakova, Y., Zelenin, V., Andrushchenko, T., & Kotsiuba, H. (2019). Socio-psychological factors of corporate loyalty. *International Journal of Scientific & Technology Research, 8(11), 4*. ISSN 2277-8616.

Tu, C. (2001). How Chinese perceive social presence: An examination of interaction in online learning environment. *Educational Media International, 38*(1), 45–60.

Twitch Tracker. (2021). *Average concurrent viewers [chart]*. https://twitchtracker.com/statistics

Twitch Tracker. (2021). *Monthly broadcasters* [Data Set with Chart].

TwitchTracker. (2021). *Twitch achievements through the years*. https://twitchtracker.com/statistics

Twitch Tracker. (2021). *Twitch Statistics and Charts [Graph]*.

https://twitchtracker.com/statistics

Twitch TV. (2022). *IRL.* https://www.twitch.tv/directory/irl

Twitch TV (2023, October 5). *Nickmercs*. https://www.twitch.tv/nickmercs

Twitch TV. (2023, October 7). *MenziesxMedia*. https://www.twitch.tv/menziesxmedia

Twitch TV. (2023, October 10). *Plyrocknation*. https://www.twitch.tv/plyrocknation

Umpleby, S. A. (2008). A short history of cybernetics in the United States: The origin of

cybernetics. *österreichische zeitschrift für geschichtswissenschaften*, *19*(4), 28-40.

U.S. Census Bureau (2022). *Household pulse survey: Measuring social and economic impacts

during the coronavirus pandemic*. https://www.census.gov/programs-surveys/household-

pulse-survey.html

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis:

Implications for conducting a qualitative descriptive study. *Nursing & health sciences*,

15(3), 398–405.

Vantage Marketing. (2022, March 29). *Live streaming market size to hit $4290 million by 2028*.

https://www.globenewswire.com/en/news-release/2022/03/29/2411755/0/en/Live-

Streaming-Market-Size-to-Hit-4290-Million-by-2028-Live-Streaming-Industry-CAGR-

of-23-50-between-2022-2028-Exclusive-Insight-Report-by-Vantage-Market-

Research.html

VGChartz Staff. (2010). Can video games teach morality? *VGChartz.*

http://www.6vgchartz.com/article/82421/can-video-games-teach-morality/

Video Game Stats. (2020). *Twitch stats, facts, and news*. https://videogamesstats.com/twitch-

    stats-facts/

Vygotsky, L. S. (1987). *The collected works of LS Vygotsky: Problems of the theory and history*

    of psychology (Vol. 3). Springer Science & Business Media.

Waisbord, S. (2019). *Communication: A postdiscipline*. John Wiley & Sons

Walker, A. (2014). Watching us play: Postures and platforms of live streaming. *Surveillance &*

    Society, *12*(3), 437–442.

Walther, J. (1992). Interpersonal effects in computer-mediated interaction: A relational

    perspective. *Communication Research, 19*(1), 52–90.

Wa-Mbaleka, S. (2019, October). The researcher as an instrument. In *World Conference on*

    Qualitative Research (pp. 33–41). Springer, Cham.

Wang, Y. (2019). User experiences in live video streaming: A netnography analysis. *Internet*

    Research, 29(4), 638–658. https://doi.org/10.1108/IntR-01-2018-0029

Ward, S. (2019). Logics of stratified identity management in world politics. *International*

    Theory, *11*(2), 211–238.

Wattenhofer, M., Wattenhofer, R., & Zhu, Z. (2012). The YouTube social network. *Proceedings*

    of the International AAAI Conference on Web and Social Media, *6*(1), 354–361.

White, D. E., Oelke, N. D., & Friesen, S. (2012). Management of a large qualitative data set:

    Establishing trustworthiness of the data. *International journal of qualitative methods*,

    11(3), 244–258.

Whittemore R., Chase S., & Mandle C. (2001). Validity in qualitative research. *Qualitative Health Research*, 11, 522–537.

Wilcox, S. (2022). 5 lurk command ideas for Twitch – [copy & paste]. *Get On Stream*. https://getonstream.com/5-lurk-command-ideas-for-twitch-copy-paste/

Wirtz, B. (2022). Evolution of gaming culture. *Game Designing*. https://www.gamedesigning.org/gaming/culture/

Wise, J. (2022). Twitch statistics 2022: How many people use Twitch? *Earthweb*. https://earthweb.com/twitch-statistics/

Wohn, D. Y., & Freeman, G. (2020). Live streaming, playing, and money-spending behaviors in eSports. *Games and Culture*, *15*(1), 73–88.

Wolcott, H. F. (2008). *Ethnography: A way of seeing (2nd ed.).* Walnut Creek, CA: AltaMira Press.

Woodhouse, T. (2021). Live streaming and archiving the hegemony of play. *Popular Culture Studies Journal*, *9*(2), 20–38.

Woodcock, J., & Johnson, M. R. (2021). Live streamers on Twitch. tv as social media influencers: Chances and challenges for strategic communication. In *Social Media Influencers in Strategic Communication* (pp. 88–102). Routledge.

Wut, T. M., Ng, P. M. L., & Low, M. P. (2023). Engaging university students in online learning: A regional comparative study from the perspective of social presence theory. *Journal of Computers in Education*, 1–27.

Wut, T. M., & Xu, J. (2021). Person-to-person interactions in online classroom settings under the impact of COVID-19: A social presence theory perspective. *Asia Pacific Education Review*, *22*(3), 371–383.

Xu, X., Huang, D., & Shang, X. (2021). Social presence or physical presence? Determinants of purchasing behaviour in tourism live-streamed shopping. *Tourism Management Perspectives*, *40*, 100917.

Yanev, V. (2020). Video game demographics: Who plays games in 2020. *TechJury*. https://techjury.net/blog/video-game-demographics/#gref

Young, S. (2021). Professional Counter-Strike: An analysis of media objects, esports culture, and gamer representation.

Yu, H. (2018). Game on: The rise of the esports middle Kingdom. *Media Industries Journal*, *5*(1).

Yuen, K. F., Ong, K. W., Zhou, Y., & Wang, X. (2023). Social media engagement of stakeholders in the oil and gas sector: Social presence, triple bottom line and source credibility theory. *Journal of Cleaner Production*, *382*, 135375.

Yuksel, M., & Labrecque, L. I. (2016). "Digital buddies": Parasocial interactions in social media. *Journal of Research in Interactive Marketing*, *10*(4), 305–320.

Zhang, G., & Hjorth, L. (2019). Live-streaming, games and politics of gender performance: The case of Nüzhubo in China. *Convergence*, *25*(5–6), 807–825.

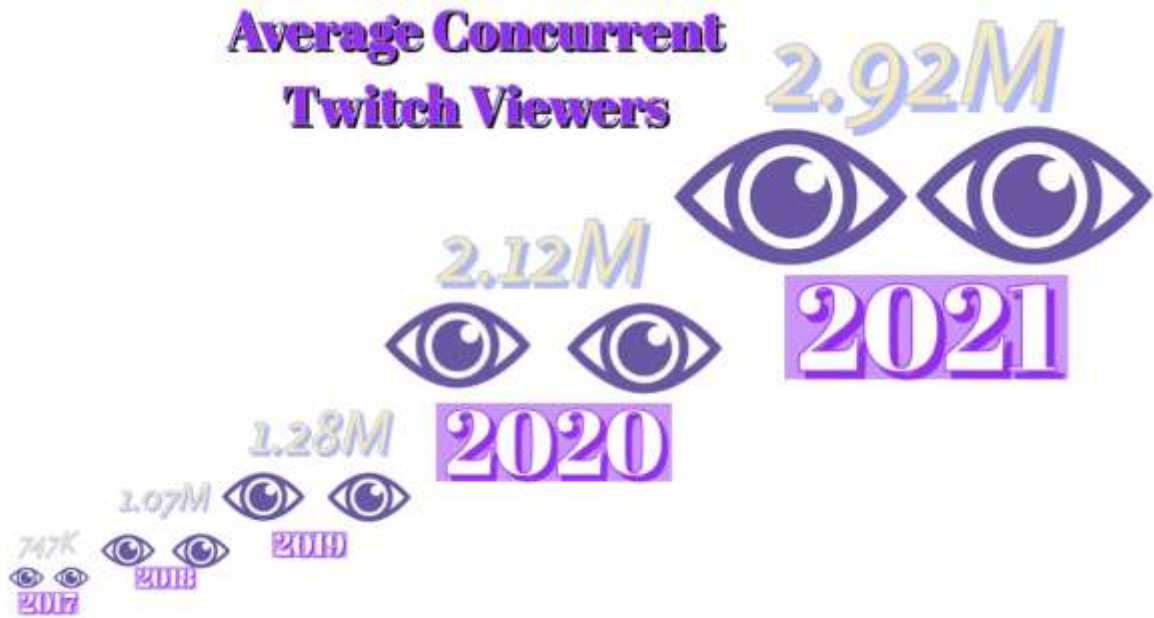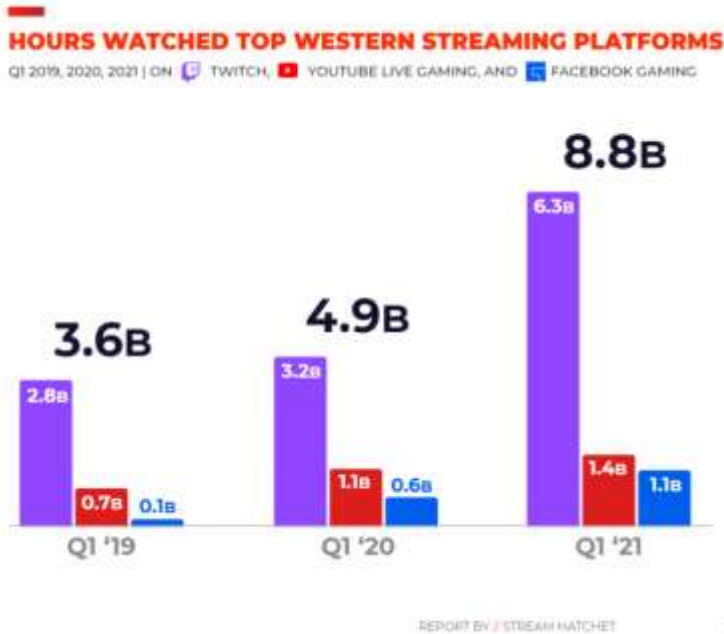Zulkiflee, S. (2022). New report shows a 2% rise in female influencers in the top 1,000 creators. Twitch, YouTube and Facebook compared. *Esports GG*. https://esports.gg/guides/streamers/female-influencers-increase-2021/

Appendix

Figure A1. (Average concurrent viewers, 2021)

Figure A2. (Q1 2021 Live Game Streaming Trends, 2021)
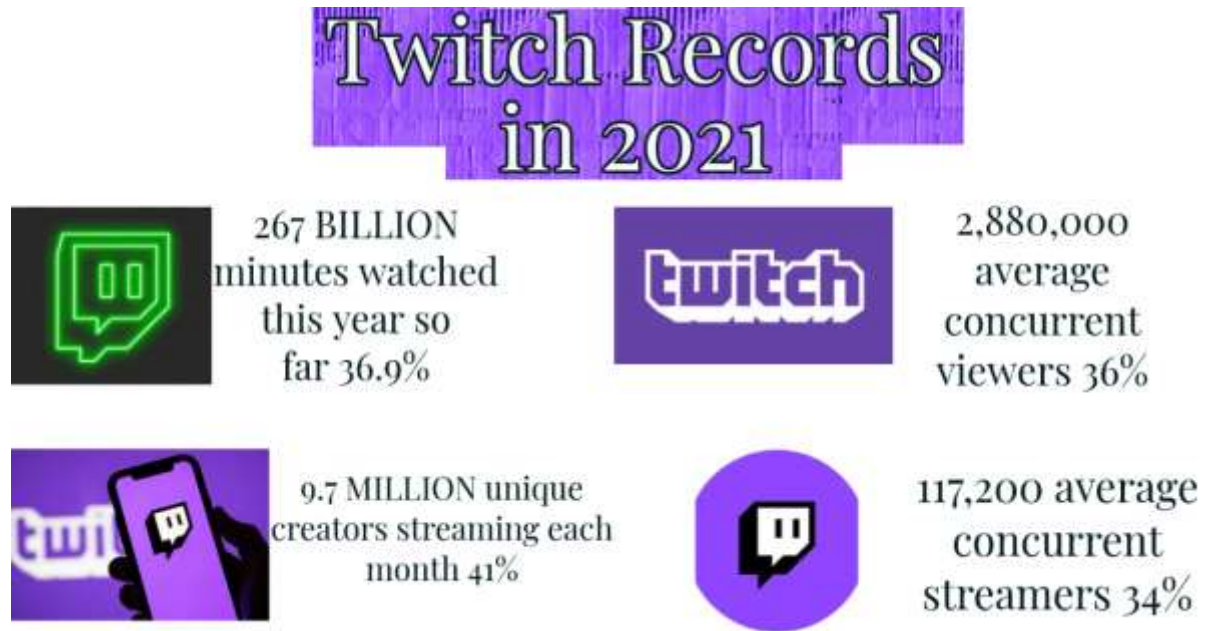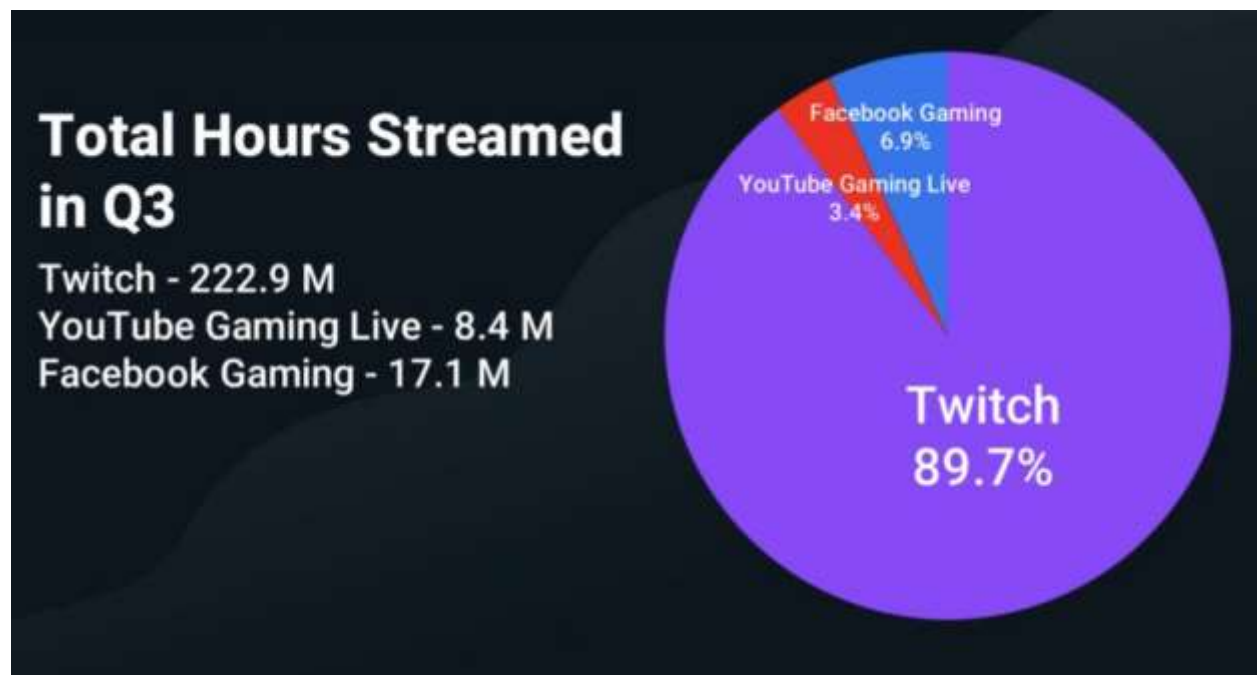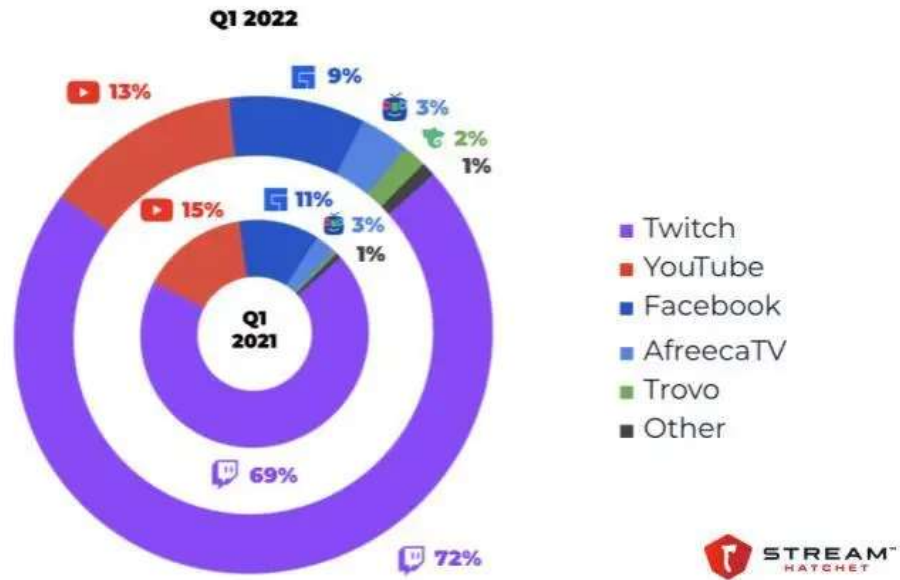
Figure A3. (Twitch achievements through the years, 2021).

Figure A4. (May, 2022)

Figure A5. (Brooks, 2022).