# VIDEO COLLABORATION: COPRESENCE AND PERFORMANCE

by

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Liberty University

A Dissertation Proposal Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

School of Communication and the Arts

Liberty University

2022

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### ABSTRACT

The purpose of this qualitative narrative theory study on video collaboration platform use is to explain how an individual's on-screen performance and their interpersonal verbal and nonverbal communication contributes to engagement and copresence with their audience. The literature review analyzes critical interpersonal communication theories to explain how this affects engagement and copresence levels in mediated virtual environments. The research was conducted through interviews with thirty professional businesspeople about their video collaboration experiences during the COVID-19 2020 shutdown. The interview respondents told the stories of business communication successes and failures that correspond to the scholarly theories in the literature review. The respondents discussed how verbal and nonverbal communication was used successfully and unsuccessfully. They also discussed why their companies found it challenging to communicate virtually during the COVID-19 shutdown with video collaboration. A final discussion analyzes how communication theory and practical experience combined to explain how verbal and nonverbal communication impact mediated virtual communications when using video collaboration. This study offers a model to help explain how interpersonal communication, engagement, and copresence exist in a cyclical motion. This model can be helpful to business people and scholars to communicate in a mediated virtual environment using video collaboration platforms.

Keywords: Copresence, Video Collaborations, Video Calls, Zoom, Google Teams

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### Dedication

This study is dedicated to my wife, Wendy Zito, who is diligently writing her dissertation and soon will be Dr. Wendy Zito. I also dedicate this to our high school-age son, Jay, who has already been interested in business, communication, and the arts. As a 3<sup>rd</sup> generation, fullblooded Italian immigrant born in the southeastern United States, I am reminded that my ancestors arrived on a boat in New Orleans from Sicily not knowing how to read or write. They came to this great country to create better opportunities for themselves and their future descendants. I am proud to make their dream come true. This paper is also dedicated to anyone with a bucket list. Completing my Ph.D. has always been one of my most important bucket list items that I never thought I would complete. As I arrive at the end of this academic journey, I challenge all who read this study. Complete the bucket list item you never thought would happen.

### Acknowledgments

I would like to acknowledge the 1<sup>st</sup> Communication Ph.D. candidates for Liberty University. This group has worked hard to challenge each other as both scholars and people. The impressive work from this inaugural class will lay the foundation for all future Liberty Communication Ph.D.'s. I would also like to thank the head of our program, Dr. Robert Mott, for his leadership and designs for this new program. His guidance has allowed our group the opportunity to establish Liberty University as a premier establishment for Communication Research. We are excited and honored to produce the first dissertations from this program.

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ICT- Information and Communication Technology

**VE-** Virtual Environments

### **CHAPTER ONE: INTRODUCTION**

### **Purpose of Study**

The purpose of this qualitative narrative theory study aimed to examine video collaboration users for copresence levels. It also provided knowledge to understand how interpersonal communication affects engagement when participating in technology-mediated virtual sessions. The literature review outlines fundamental interpersonal communication theories that correspond with copresence and mediated virtual communications. However, the connection between the performance, interpersonal communication, and the effect on copresence levels for video collaborations was largely unanswered before this study. Furthermore, this study's narrative element was initiated by the 2020 COVID-19 shutdown, prompting business professionals to change from in-person, face-to-face communication to video collaborations as a primary means of communication.

### Background

The electric telegraph allowed people to communicate across distances and brought forth thoughts of how voice and pictures could travel through the lines (Morus, 2019). Satirists in the late 1890s made claims in newspapers that audio and video could be synced, but these ideas were purely for entertainment. New inventions such as the telephone, video cameras, and motion pictures challenged thoughts that audio and video could be coupled together in one phone call. These concepts led scientists into new directions trying to synchronize audio and video. Bell Laboratories worked on variations of a Picturephone before demonstrating it at the 1964 World Fair (Lipartito, 2003). The initial tests were successful, and the concept was moved to the commercial market. Unfortunately, due to high prices, signal issues, and lack of demand, the

product experienced commercial failures from the 1970s to the 1990s. Problems, such as poor audio/video signals, that plagued video phones were fixed by new technology in the early 2000s.

Cellular phones, high-speed internet, audio/video compression improvements, and other technological innovations improved video collaboration capabilities. Platforms designed for laptop or mobile use simplified usability (Lindeblad et al., 2016). The laptop or mobile device plays the role of the mediator, allowing each participant to use the camera and microphone to communicate with the other party (Orta-Castañon et al., 2017). Although collaboration platform companies such as Cisco or Zoom have software differences, the central concept of synchronous audio and video is shared among the various brands (Dingwall et al., 2014). As a result, video collaboration users can communicate in real-time, mimicking in-person, face-to-face communication trading roles as both sender and receiver using various software brands (Ijsselsteijn et al., 2003). Therefore, understanding interpersonal communication within virtual mediated sessions is essential.

### **Business Collaborations**

Video collaborations can be used by individuals or groups who desire virtual communication instead of in-person, face-to-face meetings. Karl et al. (2021) stated that any business situation requiring physical distance from others creates a need for virtual workspaces. Video collaborations "bring complex objects at one physical location into a virtual shared workspace" (Whittaker, 1995, p. 521). Common uses for distance collaborations include eliminating the necessity for travel, speed of response, or sharing visuals (Ong et al., 2014). In addition, collaborations can occur within the same building as efficiently as collaborating across the country (Lindeblad et al., 2016).

The 2020 COVID-19 health pandemic shutdown rushed many companies to purchase business video collaboration subscriptions, such as Zoom or Microsoft Teams (Evans, 2020). In addition, face-to-face business communication declined due to social distancing regulations restricting normal business operations (Karl et al., 2021). Instead, business users could communicate locally or globally using video collaboration platforms without physical contact (Hacker et al., 2020).

Although some companies were already using video collaborations, the COVID-19 shutdown jumpstarted widespread use of business collaboration platforms. Users had experience with social video collaborations such as Apple's Facetime and FaceBook Messenger in their personal lives. These experiences helped them understand the technical skills necessary to navigate business platforms (Krull, 2015). However, they struggled to find their virtual performance style balancing social and professional communication. As a result, users adapted quickly to the technical expertise needed to operate the business software. Also, they struggled to find the best communication methods to engage their audiences, creating the inspiration for this study to research interpersonal communication within a virtual environment.

### **Communication Perspective and Theoretical Approach**

Video collaboration is a technology that uses two-way synchronous audio and video communication and lets users interpret real-time messages (Bull Schaefer & Erskine, 2012). Video collaboration platforms use computers as a means to communicate. Yus (2015) explained that communication is user-to-user, not system-to-user, allowing individuals to communicate with mediated technology as both the sender and receiver. However, the technology does not communicate for the users; it only sends and receives messages. Meyrowitz (1993) described

technology as a "conduit" that transmits a message but does not decode it. Decoding messages reside in the individual users and not the technology.

Apuke (2018) noted that senders and receivers would interpret verbal and nonverbal messages based on their social backgrounds. Blumer (1966) stated that verbal and nonverbal communication is symbolic. Individuals interpret meaning by belonging to social groups that influence their worldview. Craig's (1999) Semiotic approach allows researchers to examine social, psychological and shared symbolic meaning to understand communication. Shared symbolic meaning leads to "coordinated behavior among individuals as they work together" (Standaert et al., 2016, p. 325). Collaboration users must share symbolism to communicate effectively with verbal and nonverbal communication.

### **Researcher's Model of Communication**

Basic communication models presented a linear path from sender to receiver, such as the Shannon-Weaver model in 1948 (Adler & Towne, 1999). Shannon and Weaver's work for Bell Telephone Labs aimed to produce the best signal down linear telephone lines. Their study was concerned with reception more than receiver interpretation. Researchers were focused on the direct path from sender to receiver and not enough on message interpretation. Models, such as Schramm's (1971), recognized that the receiver was essential to communication. Before Schramm's study, previous communication research stagnated on the sender and receiver roles and was too linear. Schramm (1971) noticed that the receiver's role was more dynamic and cyclical than a direct path. The receiver's background and experiences were necessary to understand the meaning. Schramm (1971) also recognized that various audiences could interpret the same message differently. He noted, "it became apparent that the groups people belonged to had something to do with their communication habits" (p. 3).

Riley and Riley's (1951) model is like Schramm's (1971) but considers the social backgrounds of both the sender and receiver. Also, Riley and Riley's (1951) communication model recognized both parties as senders and receivers. The model guided that people's belonging to an intimate group and a larger group affected message interpretation. For example, an intimate group could be one's family, and the larger group could represent their country of origin. Both groups influence how messages are sent, received, and interpreted (Riley & Riley, 1951). This model was more flexible than previous sender-receiver models and focused on the message's path and interpretation.

Blythe (2009) recognized that messages are circular, agreeing with Riley and Riley's (1951) model. Blythe (2009) also argued that noise and interference must be considered within the messages. Noise can affect the give-and-take between sender and receiver. Criteria may be psychological, environmental, or technological. Psychological interference can be an issue within the individual's psyche that prevents them from interpreting the message (Nordquist, 2020). Emotions, such as anger, can interfere with the ability to encode correctly. Environmental noise can include extra sounds, issues with hearing, or any other physical issues restricting the message (Jafari et al., 2019). Technological issues include weak Wi-Fi, static on the phone, or any communication equipment failure.

Any noise or interference could degrade the message or create false understandings (Nordquist, 2020). Interference that confuses the receiver might affect message encoding. Interference could also cause confusion and incorrect responses back to the sender. These responses could be verbal or nonverbal, potentially creating misunderstandings between sender and receiver. Because communication is cyclical, noise and interference can create multiple struggles for meaning.

### **Problem Statement**

The problem is that video collaboration sessions can experience low engagement and have low copresence levels. Triplett's (1898) Copresence Theory noted that awareness between individuals affects their performance. The theory analyzed engagement and copresence with bicycle racers. Racers had better times against opponents compared to racing solo against a timer. The more aware racers were of their opponents, the higher their engagement and copresence levels were in the race. The less aware racers were of each other, engagement and copresence levels would lower (Triplett, 1898). This concept can be applied to video collaborations. Video collaboration users must engage their audience to experience high copresence levels (Diwanji et al., 2020). Without high engagement levels, copresence levels can drop. Engagement and copresence work together simultaneously.

Studying interpersonal communication is necessary when measuring copresence levels in mediated virtual environments (Walther, 2011). Nonverbal communication can consist of eye contact, eyebrow expression, lip position, facial expressions, head nods, hand motions, and any other purposely or non purposely communicated expression. Nonverbal communication can also include any criteria within the camera frame background, clothing, lighting, sound quality, background noise, interruptions, spatial relationships, or any other component that may intentionally or unintentionally communicate a message. Verbal communication includes all words, utterances, or communication attempts made intentionally or unintentionally by participants that the other participant can audibly hear (Beers Fägersten, 2010). Verbal and nonverbal actions are symbolic, and people interpret meaning based on their social interactions (Berger & Luckman, 1966). Therefore, verbal and nonverbal actions between video collaboration participants must have mutual understanding and shared symbolism to communicate effectively.

Spatial relationships can affect the visual and auditory senses (Hall, 1966). In video collaboration, participants can vary their distance from the camera. This distance can impact verbal and nonverbal interpretations. Eye gaze between media users can help build relationships (Campos-Castillo & Hitlin, 2013). Participants that are too near or far from the cameras can negatively affect eye gaze and communication. Spatial relationships must be evaluated to gauge how this affects engagement and copresence levels.

In this video collaboration study, participants' lived experiences were studied for Aristotle's (2001) classical traditions of Ethos, Pathos, and Logos. Ethos allows the performer to build trust with the audience and be viewed as an expert on the subject. Pathos is the verbal and nonverbal emotions and appeals that a performer may use for persuasion. Finally, Logos lets the performer use facts and logic to make the argument comprehendible to the audience. Logos could not be a focus in this study because the participants' careers variated. Therefore, Logos would require expertise in each career field to be evaluated appropriately. However, the participants did mention factors for Logos in their answers, and this information was included in the data. The participants' lived experiences were examined for Ethos and Pathos to find the effect on engagement and copresence levels.

"All the world's a stage, and all the men and women merely players" (Shakespeare & Brissenden, 2008). Shakespeare's words explain that individuals are actors in life. The collaboration session, like the stage, is a place where the performer must learn how to perform their role to communicate clearly. Performers use characterizations, altering their persona to gain the audience's trust (Goffman, 1969). An actor prepares for a play by adjusting their vocal performance, facial expressions, and elements that help portray their character's emotions. Because every audience is different, no blanket technique works for every performance. Video collaboration users, like actors, may adjust their regular personalities to engage different audiences (Diwanji et al., 2020). The performer's goals will dictate conjuring, deceptions, and characterizations (Triplett, 1900). Changing personas and adjusting to the audience allows individuals to reach mutual understandings favorable for persuasion (Goffman, 1969).

Goffman (1986) recognized the framework as a boundary of understanding. The audience has certain boundaries of understanding, and anything outside of these boundaries can create confusion. Any characterization changes by the performer must stay within the audience's boundaries and framework. When the audience and performer find agreement with characterization and boundaries, engagement and copresence levels can increase (Campos-Castillo & Hitlin, 2013).

Performance outside the audience's framework and boundaries can create a drop in engagement. As engagement lowers, the audience may initiate eye gaze separation between them and the performer. Even if these eye gaze separations are momentary, they can be enough to lower engagement and copresence levels in a video collaboration session. This study will examine if copresence levels will rise or lower in a virtual environment based on the audience's engagement and eye gaze with the performer.

### Significance of the Study

The criteria discussed in this study will present information to understand why audiences drift with their engagement, lowering copresence levels. In addition, understanding the performer's relationship with the audience can help video collaboration users understand virtual communication that maximizes engagement and copresence. First, video collaboration users must understand how verbal and nonverbal communication affects engagement and copresence levels. Next, users must understand Aristotle's (2001) Ethos and Pathos and how the performance affects the performer's relationship with the audience.

#### **Research Purpose**

Triplett (1898) introduced copresence as a theory to explain why individuals' behaviors are affected when they recognize others are present. For example, copresence levels increase and decrease as collaboration users engage and disengage their attention from a video session. Understanding why engagement levels variate helps researchers understand copresence.

### **Overview of Research Design**

A qualitative study was executed using narrative theory. The narrative theory design allowed researchers to think critically about data using personal lived experiences instead of testing existing theories (Khan, 2014). This qualitative narrative study searched to understand the lived experiences of video collaboration business users during the COVID-19 pandemic.

Interviews were conducted with video collaboration users willing to share their lived experiences. The subjects ranged in ages from 30 to 55, worked in business careers, and were experienced video collaboration users. It was essential to find experienced video collaboration users so that user inexperience with technology did not interfere with the results. Therefore, this age range was chosen for participants that use technology in their personal and professional lives based on experience. Each interview subject was asked a series of questions and recorded on Zoom video collaboration software with the researcher. These interviews were coded for commonalities using written transcriptions from the video. Finally, these commonalities and codes were compared to the communication theories.

Chapter Two examined traditional interpersonal communication theories to explain performance. It also gave a historical outline of how technology progressed in the video collaboration industry. Technological advancements allowed limitations to be addressed and new studies based on theory to be formed (Xu et al., 2014). Using a constructivist approach instead of testing existing theories through quantitative methods, a new model emerged from this video collaboration research study. This new model helps explain the relationship between engagement and copresence levels for video collaboration users.

This video collaboration study's research design will be discussed in Chapter Three. Next, the narrative results from the respondents' lived experiences are discussed in Chapter Four. Finally, Chapter Five concludes the study by answering the RQ questions and presenting the new copresence model.

### **Definition of Terms**

The following terms are defined to help the reader understand the context of each term in this study.

*Copresence*: The awareness of another's participation can change behavior. Triplett (1898) studied bicycle racers that achieved better results against a competitor compared to only racing themselves against the timer. Sets of races were designed for Triplett's (1898) research. The first set of races were bicyclists riding solo against a timer. The second set of races were bicyclists racing against other racers. When the racers were aware of their opponents, their race times improved compared to racing against the timer. The theory can be expanded in a virtual environment by explaining video collaboration users' awareness of each other during a session. Video collaboration differs from recorded video. A performer recording a video uses one-way communication without an audience's verbal and nonverbal feedback. Video collaboration is a two-way performance that includes the audience's verbal and nonverbal

feedback. The presence of an audience and their feedback is like Triplett's (1898) bicycle races, the awareness of others changes behavior.

*Ethos, Pathos, Logos*: Aristotle's traditional speech performance framework establishes how a speaker establishes credibility with an audience. The framework describes how a speaker's verbal and nonverbal performance, emotional appeal, and facts can persuade an audience toward their point of view (Aristotle, 2001).

*Framework:* Goffman's (1986) framework described the boundaries between the performer and the audience. These boundaries are like a picture frame that supports the picture. Everything must stay within the picture and cannot deviate outside the frame. Likewise, the performer cannot deviate outside the audience's boundaries or comfort zone. The audience will set expectations for their realm of understanding. Anything outside of these expectations can create miscommunication. Therefore, the performer must work to stay within the audience's boundaries and framework.

*Media Richness:* Media is rich when technology can offer all aspects of sender-receiver communication face-to-face (Daft & Lengel, 1986). Communication can be ranked by richness, with one being the richest level and five being the least rich. In-person, face-to-face communication without noise would be the richest level of communication.

*Mediated Communication*: Mediated Communication refers to technology acting as a midway point between users allowing them to communicate virtually Craig (1999). Meyrowitz (1993) referred to technology as a "conduit" that transmits messages but does not interpret meaning. For example, a video collaboration user communicates using a laptop's microphone and camera. The technology mediates the communication process between users. Lisiecka et al. (2016) found that "the medium moderates the message" (p. 1). The technology does not

communicate for the users but acts as a tool to communicate across distances. Device examples include laptops, tablets, and cell phones.

*Noise:* Any criteria of noise and interference could degrade the message or create false understandings (Nordquist, 2020). Blythe (2009) noted that noise and interference could affect the communication between sender and receiver. Noise can be physical, psychological, or emotional. Environmental noise can include sound disruptions affecting the sending or receiving audio. Psychological noise depends on the user's psyche and interpretation of communication. The emotional state can provide noise depending on how the users process information based on their emotions.

*Parasocial Relationship:* A one-sided relationship between the performer and the audience where the audience feels an emotional attachment to the performer's character (Horton & Wohl, 1956). Eye Gaze (Hall, 1966) can affect relationship building. Effective communication can lead to mutual eye gaze that can build relationships (Campos-Castillo & Hitlin, 2013). Engagement and copresence levels will increase as eye gaze and engagement increase between the audience and the performer.

*Persona:* Goffman's (1969) presentation of self and Triplett's (1900) conjuring explains that performers use variations and characterizations within their act to find audience agreement. Goffman (1986) explained that a framework provides boundaries for the act. Any elements outside the audience's boundaries can affect their comfort level. If the audience is not comfortable with the act, the performer's goals may be affected. Therefore, performers must keep their acts within the audience's boundaries.

*Proxemics:* Hall's (1966) study of distance zones allows the senses to engage or disengage based on the space between individuals. Proxemics variate distance for collaboration

users from their equipment. Users' distance from a camera and microphone can affect their communication ability during collaboration sessions. Likewise, distances judged too close or too far during a collaboration session can affect the audience's engagement. Hall's (1966) distance also plays a role in eye gaze. Too far between communicators can make eye gaze challenging, lowering engagement. Video collaborations mediate eye gaze with computer or mobile device screens and cameras. The participants must judge their distance with the camera and screen to find an appropriate virtual eye gaze with the other party. Too far from the camera or too far from the screen can make eye gaze with the other user difficult.

*Synchronous Audio and Video:* This is when video and audio are present in real-time without delay in one or the other. A video that arrives first and audio that does not match would not be synced. Improper Wi-Fi connections or equipment failures can lead to a lack of synced audio and video (Watt et al., 2002). Video collaboration companies' products vary, but their commonality includes the goal of synchronous video and audio. The software allows users the opportunity to be both sender and receivers.

"Traditional face-to-face communication, and its close cousin [sic] videoconferencing, which offers synchronous audio and visual information, offers advantages in comprehension and mutuality that no asynchronous communication system has yet to match" (Watt et al., 2002, p. 2). Video collaborations that use synchronous voice and audio can replicate face-to-face conversations' verbal and nonverbal elements. Audio and video synchronization can allow strong verbal and nonverbal communication (Beers Fägersten, 2010). However, collaborations with video lag, broken audio, and other technological defaults will limit message reception. Achieving proper synchronization requires the technological elements to operate correctly. Poor performance can lead to a timing breakdown between the audio and video, limiting the users' ability to correctly read verbal and nonverbal in real-time. Technology is advancing to provide internet and cell technology with sufficient speeds capable of real-time video and synchronous audio collaborations (Beers Fägersten, 2010).

Previous collaboration methods, such as instant messaging, did not include synchronous audio and video. Video collaboration offers participants the chance to use synchronous audio and video. Synchronous audio and video allow for immediate face-to-screen interactions, both verbal and nonverbal, to be interpreted by the users. Technological advancements will allow real-time expressions and cues to increase the connection between two individuals participating in a video conference.

*Virtual Environment:* Virtual Environments refer to the symbolically accepted realm where two users communicate mediated between technology and the user. Virtual Environments are separate from a user's physical location and bounds users in an artificial reality accepted by both as a realm to communicate (Schroeder, 2011). Virtual Environments allow users to communicate globally or locally using technology to mediate communication. Virtual environment research from a communication perspective is limited because many studies focus on texting, social media, emojis, and cell phone technologies. However, "Immersive virtual environments and computer games opened a much wider range of potential channels for behavioral interaction" (Biocca et al., 2003, p. 19). In addition, new technology with high-speed internet, Wi-Fi, and the availability of cell phones with video cameras and screens are just now allowing individuals to engage in real-time collaborations successfully.

*Video Collaboration Platforms*: Various platforms are available for synchronous video and audio collaboration using laptops, mobile devices, and Wi-Fi. Companies include Zoom, Google Chat, Apple FaceTime, Cisco Systems, and other available platforms (Dingwall et al., 2014). The platforms each have different capabilities but maintain the common goal of synchronous audio and video. Users and companies decide which platforms will be used for sessions. As a result, many users become versed in using multiple platforms with technical applications. Platforms can also be referred to as software applications and were used interchangeably by users within this study's participant interviews. New companies and platforms are consistently available on the market. In addition, existing platforms update their software as new technology becomes available.

*Wi-Fi:* Wireless connections and networks capable of streaming compressed highdefinition video and audio to laptops, mobile devices, and other collaboration software platforms (Lisiecka et al., 2016). Wi-Fi technology increased the capabilities of video collaboration platforms allowing laptops and mobile devices to achieve higher resolution audio and video within sessions. However, Wi-Fi signals that variate between weak and strong can affect video collaboration's video and audio signals. Weak signals can disrupt the communication process leading to misunderstandings between users.

### Assumptions, Delimitations, and Limitations

This study assumed that all participants who claimed to be businesspeople used collaboration software for business purposes. Since the terms businesspeople and business purposes were not clearly defined, any uses other than personal could be assumed for business. Therefore, all business purposes were included, and none were excluded. Another assumption was that the users were well versed with the technology. No skills tests were provided to the participants, and their experience was not questioned as part of the session. Finally, the participants were assumed to be truthful and not swayed by ulterior motives or desire to lie in the question-and-answer sessions.

A delimitation of this study was that the participants ranged in age and gender. A study that could separate both age and gender as variables could help provide knowledge if these factors influence the answers. Male versus female and or transgender, nonbinary communication was not considered a factor in the performance questions. Gender differences could potentially play a role in understanding digital communications.

The literature review was conducted before the study. However, once the interviews began, themes emerged that were not represented in the literature review. As a result, additional research was conducted, and sections were added to the literature review to reflect these themes and commonalities.

### Summary

This study worked to understand how video collaboration users' interpersonal communication affects audience engagement and copresence levels. In addition, the study guided how engagement and copresence levels work together. Copresence research can help video collaboration users understand the relationship between their performance and audience engagement.

This study is arranged into five chapters. Chapter Two is a literature review that examines the history of video collaboration, the tenets of the performance, and the relation to copresence. In addition, Chapter Two examines traditional interpersonal communication theories to explain performance. It also gives a historical outline of how technology progressed in the video collaboration industry. In Chapter Three, the topics discussed include the research design and specific study details. Finally, the research results are provided in Chapter Four, followed by an interpretation of the findings in Chapter Five, concluding the study.

### **CHAPTER TWO: LITERATURE REVIEW**

#### **Overview**

Video collaboration platforms allow users to communicate virtually using mediated communication through computers, cell phones, and other technology (Lindeblad et al., 2016). Due to social distancing guidelines, the COVID-19 health pandemic limited face-to-face interactions (Karl et al., 2021). As a result, video collaboration use increased during the pandemic as a necessary means for business communication. Existing literature within the science and medical communities previously studied the technical aspects of video collaboration platform use before the pandemic (Armstrong et al., 2011). Technical studies helped understand how video collaborations worked but did not examine the ways individuals communicate. Studying video collaborations from the Communication perspective allowed an understanding of the verbal and nonverbal elements that could help users engage their audience and increase copresence levels.

This literature review will examine copresence theory using the Semiotic tradition and following Riley and Riley's (1951) Communication model. The purpose is to understand interpersonal verbal and nonverbal communication when using collaborative video platforms in a technology-mediated, two-way communication virtual session. Understanding these elements in this study led to the emergence of a video collaboration model that users can follow to increase engagement levels and understand copresence in their sessions. This model presented in Chapter Five will include discussions of five proposed elements: verbal and nonverbal communication, symbolic interactionism, camera proxemics, the performance, and how engagement affects copresence for video collaboration. The literature review discussion will begin with the Semiotic tradition and history of video collaboration for background understanding of this study.

### **Semiotic Tradition and Theoretical Framework**

The communication field has suffered inconsistencies due to the many disciplines scholars can study. Communication research can borrow from outside disciplines and focus on the communication aspects creating confusion about the exact field of study (Craig, 1999). Communication accepted works from many disciplines and failed to create an identity of its own. This lack of identity created an argument if communication is a field or a discipline. The communication scholar can apply knowledge and research from many disciplines and bring these ideas into the communication realm (Jan et al., 2017). The communication discipline consisted of sectors from many different fields and could not agree on one central model that defined it as its field. Craig (1999) attempted to find commonalities between communication topics and form a structure. This structure provided a model for scholars to define the communication field. The model allowed communication theories to become the primary answer to questions based on merit and not as a response or afterthought to the other disciplines.

Craig (1999) proposed the "Dialogical-Dialectical coherence" model and recognized that many different types of communication theories existed with elements in common and differences. Finding one model that defined communication as a field and accepted all these commonalities with differences proved difficult. He proposed a secondary metamodel that named seven disciplines connected by their role in communication but with different approaches. These traditions were named: Rhetorical, Semiotic, Phenomenological, Cybernetic, Socio-Psychological, Socio-Cultural, and Critical (Craig, 1999, p. 133).

Craig (1999) allowed each tradition their differences but remained connected to communication studies. The Rhetorical would be based on discourse. Semiotics would focus on the symbolic nature and relations within communication. Phenomenological would study

people's dialog experiences. Cybernetics would focus on how people process information. Socio-Psychological would be guided by influence, expressions, and interaction with others. Socio-Cultural was concerned with the social order of society. Finally, Critical would focus on discursive reflections and open dialogue about power dynamics. Craig (1999) outlined that these seven disciplines could start the process, and more disciplines could be added as the field expanded.

This video collaboration study chose the Semiotic Tradition because it supported the combination of shared symbolic meaning and communication. Researchers benefit from a Semiotics approach because it examines the "core concepts of interpersonal communication" (Ramaraju, 2012, p. 72). The tradition rests in the social nature of people to communicate with each other through shared understanding. Communication scholars can apply existing psychology theories and bring them into communication studies through behavior and interpersonal communication discussions. Merging these styles is a frequently used style of research for communication scholars. "The history of communication theory, from one angle, is a decades-long rivalry between psychology and sociology" (Pooley, 2016, p. 3). Craig's (1999) Semiotics tradition allowed this rivalry to fall within the communication discussing shared meanings and taking on elements from each field.

Craig (1999) noted that communication could occur face-to-face and mediated virtually using technology (p. 143). Within mediated communication, users can experience similarities to face-to-face communication. The communicator does not have to be face-to-face or in-person to directly experience an event. Digital technology may place them virtually away from the event but still allows them to communicate verbally and nonverbally. The interaction is virtual and symbolic. People apply meanings and accept the virtual event as reality, but it is a symbolic representation of reality.

Within meaning, people will apply values based on their social backgrounds. These values will be influenced through their social interactions with others. Apuke (2018) recognized, "One's personality or psychological influence will impact how they react to certain messages, accepting them or being biased against them, and how they communicate their values, in the form of coming across in certain stereotypical behaviour" (pp. 21-22). People's social nature allows them to define the world around them.

Riley and Riley's (1951) Communication model complements Craig's (1999) Semiotic tradition and allows users to participate in both roles as the sender and receiver. The sender and receiver create a give-and-take style of communication that is two-way communication. The model also described how the message was sent and interpreted based on membership in social groups. Kulözü (2015) stated, "These theories argue that people are influenced by the other people around them; other individuals influence how an individual thinks, feels and acts" (p. 210). People are also influenced by their social groups, small and large (Berger and Luckmann, 1967). For example, the family is a small social group, and the country of origin is a large social group. Membership within these social groups will influence how individuals send, receive, and interpret messages, as Riley and Riley's (1951) model noted.

According to Meyrowitz (1993), the medium delivers the message, but the content will still be interpreted by the individual's background, as noted by Apuke (2018). The technology will not interpret content. Using mediated technology, people will communicate and interpret messages based on their belonging to social groups just as they do face-to-face. "By far the most common image of a medium is that it is a sort of conduit that is important insofar as it delivers content" (Meyrowitz, 1993, p. 56). Therefore, the medium must be considered for its effectiveness in message transmission.

When new technology develops, scholars need to examine how the advancements affect communication. Researchers can deviate from studying messages and focus too heavily on technological advancements. Scholars that focus on technical advancements do not directly explain the communication process or an understanding of meanings. The focus should remain on core communication topics such as the verbal and nonverbal process and not deviate too far into technological subjects that do not impact the messages (Kulözü, 2015). A communication approach is necessary to understand interpretation and meaning. It is essential to focus on verbal and nonverbal communication to understand message clarity through shared experiences. Kulözü (2015) recognized, "However, in the participation literature, the influence of body language on participatory processes, as of to date, has been passed over" (p. 57). Body language provides nonverbal communication, and the meaning must be shared through the individuals for understanding. Getting back to the basics allows scholars to study how technology impacts the Communication process and affects shared meaning.

The equipment's failure to transmit clear messages can affect the receiver's message interpretation. If the technology does not allow clear verbal and nonverbal communication to be appropriately transmitted, clarity can be impacted. This cause-and-effect relationship between the technology and the user is essential and should be studied systematically (Maguire, 2006, p. 89). A systematic communication process examines the relationship between technology, user, symbol interpretation, and meaning. Mediated communication methods must use technology that operates consistently. Inconsistent equipment operation can lead to miscommunication. Mediated communication expands boundaries and does not limit communication to one physical location between sender and receiver (Hacker et al., 2020). The process expands the definition of sender-receiver because the technology mediates the message within a virtual environment. Schroeder (2011) noted about virtual environments (VE), "To study communication in shared VEs will require a combination of perspectives, including social psychology, sociological analysis of interaction, and communication studies approaches to different media" (p. 6). These perspectives must be studied to understand how people connect and communicate in virtual environments—connecting people globally through virtual environments (Latané, 1996).

This study will examine video collaboration for technology's role in communication, the interaction between users, and the interpretation of meaning in a virtual environment. To study video collaboration communication, one must recognize the cause-and-effect relationships between technology and users. In addition, the theories that affect the users, symbols, messages, and shared meaning need to be examined. Finally, it will also be essential to understand technology as the conduit that allows message transmission. Therefore, each section below will examine existing scholarship and theories about video collaboration communication.

## Video Collaboration History and Background

## Early inventions 1800s-1900s

Technological innovations in the 1800s worked to communicate across distances (Roberts, 2017). The invention of the telegraph allowed for the written word to be transmitted through electronic means, which progressed to the invention of the telephone. Each new technology attempted to communicate over distances and engage other senses. The telephone was an advancement over the telegraph because audio and immediate two-way communication could be accomplished. Companies recognized that communication was a commodity because there were both business and personal needs to communicate over great distances. Companies could charge for these new services. Technology created business opportunities leading to new inventions involving innovative advancements.

British satire author George Du Maurier drew a comical view of what he called Edison's Telephonoscope in 1878 (Roberts, 2017). The drawing is placed in history as an early representation of sound and light combined. This technology was noted as a precursor to television and video calls. Although Alexander Graham Bell was still working with the telephone, the satire article made statements about the absurdity of technological progress. The telephonoscope satire article did allow scholars and inventors to question if video and audio could be combined. Their goal was to engage both the auditory and visual senses.

Satire author, Mark Twain, wrote about a fictional invention named the Telectroscope. This challenged engineers to understand the value of visuals combined with audio communication (Morus, 2019). Twain's ideas were based on actual inventors from Poland. The fundamental inventions did not excite audiences or work in the manner of Twain's outlandish vision. Twain's outrageous ideas prompted discussions within the press and science if a similar idea was possible (Morus, 2019).

# Vision meets technology from the 1900s through the 1960s

Marconi was working with Hertz's ideas for radio waves before the turn of the century. Marconi proved the functionality of the wireless telegraph (Toscano, 2012). This technology was helpful for ocean steamers communicating from great distances. The Titanic accident was transmitted from a wireless telegraph. The success of the wireless telegraph led to advancements in radio transmissions and the commercial radio era pre-television. The facsimile was an essential step in distance communication (Light, 2006). It was initially conceptualized in the late 1800s with the capabilities of sending text and visuals across wires. Early versions existed in the same age as the telegraph using similar technology. Commercial attempts in the 1920s and into the 1940s were unsuccessful, but the technology progressed. This progression allowed for visualization to be shared across distances. The military and farmers found valuable technology for distributing weather maps and weather patterns. Post WW2, Eastman Kodak, RCA, and NBC began to work by combining radio and visuals called an ultrafax (Light, 2006). The ultrafax could combine radio relays with high-speed film processing that could send documents and film to remote areas (Light, 2006, p. 365).

AT&T designed a working television in the early 1920s and experimented with video phone prototypes called the "Iconophone" by 1930 (Lipartito, 2003, p. 65). Germany was using a combination of video and telephone technology in the 1930s leading up to WW2. These early video collaborations connected with coaxial cable between Berlin and other German cities (Zhu et al., 2016, p. 131). In 1927, AT&T used a telephone and an early version of television to communicate from DC to NY with then-Secretary of State Herbert Hoover (Mills, 2012, p. 39). These inventions from 1900 to 1930 worked towards combining audio and video.

In 1934, AT&T's research and development division was integrated with Bell Labs to invent together for common goals (Nokia Bell Labs: History, 2019). There were attempts to work with wire photos and other technological innovations to create visual communication across distances (Mills, 2012). Audio communication was achieved through the telephone, but adding visuals promised the ability to engage the sense of sight along with the sense of sound. Early wired attempts included the separate use of a phone and a visual. . Bell Labs was also working in the 1950s with early thoughts of video streaming. They contemplated how to send movies and videos across telephone wires to televisions. The progressions led to a demonstration of picture phones at the 1964 NY World's Fair and Disneyland in California (Bly et al., 1993, p. 30). Unique booths were set up in New York and allowed users to communicate via telephone and picture screen to users in Disneyland California with closed-circuit technology. The system worked to show users how they could simulate face-to-face interpersonal communication using synchronous audio and video.

### Commercial Attempts 1960s-1980s

Commercial attempts in the 1960s-1970s failed for AT&T due to high prices and low customer use. The video was near broadcast quality black and white, but users could not find value in both audio and video. "Many reasons have been put forward for the failure of video conferencing to gain widespread acceptance, including cost, incorrect marketing, and the questionable value of a video channel" (O'Conaill et al., 1993, p. 420). AT&T Picturephone services ended by the mid-1970s in the significant United States cities where the products were launched (Lipartito, 2003). AT&T relaunched the concept in the 1990s, realizing clients wished to share charts and graphs with computers.

Xerox created media spaces in the 1980s at their Palo Alto Research Center. PARC, as it was named, used early audio and video compression methods that would be considered archaic by modern streaming standards. The PARC experiments in the 1980s allowed digital pioneers to understand, demonstrate, and use video collaboration to understand the need for interpersonal visuals (Lipartito, 2003). These advancements led to other inventions, including the video cell phone and internet video in the 1990s.

The 1990s- The 2000s Successes

Voice-over-Internet Protocol (VOIP) technology allowed multimedia to be utilized with internet technology. "The proliferation of video-capable consumer electronic devices and the penetration of increasingly faster residential network accesses paved the way for the wide adoption of videotelephony" (Xu et al., 2014, p. 826). Companies such as Cisco in the 1990s developed multimedia-capable video conference software. These were capable of using the internet or a combination of internet and existing telephone technology. Business programs, including WebEx, allowed remote communication and video collaboration capabilities (Xu et al., 2014).

Cell phone technology and new products progressed in the mid-2000s (Armstrong et al., 2011). Apple's release of the iPhone 4 introduced their FaceTime software capable of streaming synchronous audio and video using cell phone signals. FaceTime proved that video compression and real-time capabilities could assist in the medical field for distance evaluations. FaceTime use in the medical field was more reliable than other social media apps and Skype. The capabilities allowed physicians to consult with other team members and patients using technology (Armstrong et al., 2011). Improvements in video compression, wireless/Wi-Fi, and processing speeds allowed modern cell phones and laptops to stream synchronous video and audio. These improvements improved visual and auditory senses to engage when communicating with technology.

#### **Related Literature**

## **Collaboration Camera Proxemics**

The goal of the late 1800s satires, 1950s-1990s inventions, and modern 2000s technology was to recognize the senses in communication and communicate verbally and nonverbally like face-to-face communication. Inventors wanted to engage the senses,

such as sight sound, to help close the distance within distance communication. Olfactory senses such as heat, touch, and smell can never be recreated in distance communication (Hall, 1966). Even if the visual and auditory senses can be simulated, the other senses will not be engaged. "Social distance is not simply the distance at which an animal will lose contact with his group—that is, the distance at which it can no longer see, hear, or smell the group—it is rather a psychological distance" (Hall, 1966, p. 15). Social distance and public distance will lose the olfactory senses. The distance can never be closed, and face-to-face cannot be replicated entirely because of this.

Auditory and visual senses can still be engaged when attempting to communicate through distance. Combining these senses can work to create a virtual environment replicating the face-to-face environment with a mediated virtual environment. "The virtual world does not have a direct equivalent to physical distance; however, we argue that the degree of control a person has over data can serve the same function when defining a Virtual Proxemics" (Anacleto & Fels, 2015, para. 3). A virtual environment will never replace the lost senses of body heat and smell, but it can work to provide eye contact and auditory through video and audio-digital mediation.

Hall (1966) recognized that distances can vary by zones in face-to-face communication. Hall's (1966) four zones are intimate, personal, social, and public. Intimate allows for the most body heat and smells sensory because of the proximity and bodily contact. Examples include hugs but also would include wrestling. Both examples involve close bodily contact that engages the senses. Auditory senses are heightened and do not require loud volumes. Visual senses can be limited because of the closeness. Eye-to-eye contact focuses on the individual in front, but side views are limited due to the lack of distance. Personal space is a tight halo around an individual. Body heat and smell are still present, but there is a slight distance compared to intimate (Hall, 1966). Touch is still possible in personal space, but there is no immediate bodily contact. Auditory senses may require louder noises, but the distance is still very close. Eye-to-eye contact in this zone allows for a more comprehensive view than in the intimate zone, but a full view cannot be seen due to the obstruction of the other individual (Hall, 1966). It is possible to go from intimate space to personal space and back to intimate space. All interactions are fluid and may change zones based on the participant's actions.

Social distance, as discussed earlier, moves the individuals away from the olfactory responses where smell and body heat are not felt. Touch is no longer possible, and auditory senses decline because of distance (Hall, 1966). Noises must be projected for clarity, and the possibility of noise disruptions can occur. Visuals begin to increase because the other individual is not the only focus of the eyes. Peripherals on the left and ride side of the individual of focus can now be seen. Public distance places participants away from each other where touch, smell, body heat, auditory, and visuals are no longer possible. The olfactory senses are not engaged, and visuals are increased. A wide range of vision is available because participants no longer obstruct each other from view. The view becomes wide-angle, and the participants may or may not be in a distanced view of each other. Auditory senses decline because noises must be strongly projected for clarity due to the extreme distance (Hall, 1966).

If virtual mediated communication aims to replicate face-to-face with the auditory and visual senses, researchers must examine individual reactions to mediated communication. "Accordingly, a field analysis looks carefully at each image element, working inductively to analyze the unique experiential or sensemaking capabilities of a medium" (Barbatsis, 1999, p. 283). Many variables can change the visual and auditory senses. Screen size, screen quality, camera ability, and connection speed are all technical variables affecting the senses. Volume capabilities, microphone placement, and camera placement can also change the dynamics. Different brands and capabilities can influence the messaging process. If the medium is the "conduit," as Meyrowitz (1993) noted, then the quality of the conduit will always be in question. Equipment must perform to a standard that allows for clear visuals and audio in real-time synchronous use.

Camera framing can affect messages in video collaborations. Framing is placing the subject in the camera shot with an intended purpose. Framing can vary in distance, angles, and artistic directions (Mazur, 2000). Video collaboration framing most often centers the subject in the middle of the shot for prime viewing. These cinema concepts can apply to Hall's (1966) proxemics when examining a virtual environment. Although the senses of smell, touch, and body heat cannot be engaged virtually, it is possible to recreate sight and sound. The sight and sound will be enhanced through technology, mediating communication. Hall's (1966) intimate zone would be an extreme close-up camera angle that features the camera directly focused on the face of the individual. It would not be possible to see peripherals.

The angle would affect messages because cameras can have difficulty focusing on extreme close-up shots. Nonverbal communication with the hands and shoulders would not be possible to view due to the extreme nature of the camera framing. Because the audio is mediated, a normal speaking voice would max out the microphone levels leading to sound distortion. Hall's (1966) proxemics note that an intimate zone would allow low audio levels, such as whispering. In a virtual environment, the closeness to the microphone can lead to distortion due to amplification. Mazur (2000) described the medium close shot as any camera framing from the hips to the top of the head. Comparing this to Hall's (1966) proxemics, the personal zone would be the one recreated in a virtual environment. The sense of touch, smell, and body heat could not be recreated virtually, but eye-to-eye contact could be replicated. Visuals would allow for some peripheral levels to either side, and the focus can be face-to-screen for both individuals. Mediated eye contact is possible in this zone. Hand movements, facial expressions, and other nonverbal communication methods would be possible to view. Video collaborations most often use the medium shot (Mazur, 2000).

Using a desktop webcam can create a "different arrangement of bodies and technology, in which video conversationalists are usually sitting with the laptop resting on a desk or table: participants then orient towards a medium headshot that usually frames the head and part of the upper torso" (Licoppe & Morel, 2012, p. 34). The concept of a headshot allows for the torso and head to be the focus. There is no excess space left at the top or bottom of the frame, and the subject is centered horizontally and encompasses the frame vertically. The top of the frame ends just above the hairline, and the bottom of the frame would end at desk or hip level. The frame depends on the placement of the chair and desk. The medium shot allows for strong eye-to-eye simulated contact face-to-screen.

Hall (1966) noted on eye contact, "However important their function as 'information gatherers,' we should not overlook their usefulness in conveying information (p. 66). Hall valued the ability to read the information from the eyes. He noted that the eyes could portray emotions such as surprise or anger. Using facial muscles and eyebrows, people can communicate emotions with their eyes. Goffman (1963) recognized, "But the totality of social relations of human beings, their self-assertion, and self-abnegation, their intimacies, and estrangements, would be changed in unpredictable ways if there occurred no glance of eye to eye" (p. 93). The value of the medium shot is that emotions can be deciphered through eye-to-eye contact virtually. Although it is mediated using technology, eye contact can still be deciphered.

The long shot would include a full body shot of the individual spaced away from the camera (Mazur, 2000). At this distance, eye-to-eye contact will disappear, and peripheral vision will increase. This example would be Hall's (1966) socially distanced zone. Users will notice views to the left and right of their subject, potentially adding distractions to the communication. Full nonverbal communication can be viewed due to the full body shot. Slouches, shrugs, and hand motions would be incomplete views. Due to the distance, microphone amplification and speaker volume may need to be increased for clear audio.

The distance shot, or wide-angle, allows for a complete view of the peripheral. This shot is commonly used in cinema to show locations, such as an expansive view of a city. Hall's (1966) public distance would be like the distance shot. The subject would not be the focus, eye-to-eye contact would disappear, and audio would need the most robust amplification levels. This view would be the most impersonal of these camera angles and would devalue the individual in the shot. Eye expressions and subtle nonverbal communication would be lost in this view. Hand movements would need to be exaggerated to be noticed due to the distance.

Camera framing can variate, and proximity does not have to be stagnant. It may be necessary for video collaboration to variate spacing due to a presentation, other individuals participating, or any other need in the video collaboration. Sellen (1995) noted, "Remote participants cannot mutually determine the physical distance between themselves as they would if they shared the same space" (p. 407). There is no set style of video collaboration, and methods may vary. Users need to understand how proximity can affect the visuals and audio of the messages. Because it is crucial to understand the interpersonal aspects of communication, details such as camera distance are essential. Choosing the wrong camera shot can affect the ability to achieve eye-to-eye contact and nonverbal communication properly.

# **Reading Nonverbal Communication**

There are similarities between face-to-face and mediated virtual communication. "Faceto-face, the interruption can occur freely because the visual channel allows the communication of nonverbal signals which maintain the interaction and prevent the breakdown which interruption might otherwise produce" (Rutter & Stephenson, 1977, p. 35). These visual interactions, including interruptions, can happen without disrupting the flow of conversation. Users recognize visual cues from each other and accept these cues as communication.

In speaker switching, a specific give-and-take is negotiated between two people during the communication process, allowing one speaker to stop and another to begin. "Face-to-face conversations adhere to the rule that only one person speaks at any given time, so techniques are required to manage the process of speaker switching" (Whittaker, 1995, p. 502). Visual cues can help aid these disruptions by allowing one speaker to stop and another to start. However, these nonverbal cues cannot be seen when only audio is present. Therefore, using audio without video can confuse the users regarding when to speak because visual cues will not be visible.

Studies show that people can respond to nonverbal facial expressions when synchronizing audio and video compared to audio-only. "They could respond to a look of puzzlement on the follower's face and provide more detail, whereas their counterparts in the audio condition would not be able to adjust their instructions as easily" (Veinott et al., 1999, p. 307). Without visual confirmation of facial expressions, using audio-only can lead to people talking over each other. Visual confirmation allows the users to see when one speaker has stopped making words and the other begins. These confirmations can be as simple as the mouth closing and not reopening.

Visual cues can be missed when only audio is present. To compensate, audio-only users must use extra sentences, apologies, and overtalk until one speaker takes command of the conversation. Overtalking can be a struggle between users in the conversation, which can be avoided by synchronizing video and audio. Allowing the combination of audio and video in collaborations mimics how people communicate in face-to-face interactions. Users watch facial expressions and nonverbal communication efforts to a time when conversations begin and end. "Talk is accompanied by a rich array of nonverbal behaviors that we use and respond to, including gaze, posture, gesture, and facial expression" (Sellen, 1995, p. 403). Facial expressions, such as a bewildered look, can show emotions and thoughts without verbal expressions (Veinott et al., 1999). Hand movements, such as a thumbs-up, can also convey positive emotions. These virtual, nonverbal reactions help convey the emotions and thoughts of the users. Audio only users are not able to convey nonverbal reactions.

Turn-taking is a "chain of gaze-based micro-interaction that serves to achieve an interactional goal: the intended next speaker (who was gaze-selected by the previous speaker) mobilises [sic] the not-gaze-selected participant to step into the breach and take over the turn offered to them" (Weiss, 2018, p. 43). When a video is used, these simple gazes allow the users to understand the process of taking turns to speak. Through gaze, speakers can acknowledge whether they accept the chance to speak or reject it. "Few studies of video-mediated interaction have gone beyond this and looked at the content of communication, how it is organized [sic] in different contexts and how, in turn, particular visual cues such as gaze are related to this" (O'Malley et al., 1996, p. 179).

Simple head nods can also work with gaze and facial expressions to show agreement, understanding, and other emotions. Video-mediated communication is like face-to-face communication. Video allows speakers to use visual cues instead of audio cues to communicate (O'Malley et al., 1996, p. 190). In addition, video use allows for emotions to be communicated verbally and nonverbally. When using audio without video, these nonverbal emotions cannot be communicated.

# **Nonverbal Meaning**

It is imperative that the participants symbolically agree on the meanings of their nonverbal communication. Participants that do not share the same shared meanings can miscommunicate with their nonverbal activity. Blumer (1966) discussed Mead's non-symbolic and symbolic interaction concept. Non-symbolic interaction is when individuals react to nonverbal communication, but there is no meaning applied to the nonverbal. Symbolic interaction occurs when meaning is interpreted. According to Blumer (1966), Mead's primary concern was with symbolic interaction to understand how meaning is created and understood.

Objects have meaning because individuals agree on meaning. Individuals react towards objects and give them value. Blumer (1966) provided examples of objects such as a chair. The chair has value for sitting because individuals are familiar with the chair's function. If the individuals did not react to the chair and did not have a working knowledge of its function, the chair would have different values. Meaning is unique to each social group that interacts with objects. The members of the social group will share common meanings. It is also possible for individuals outside of the group to not understand the meaning or have completely different meanings. Many social groups can have variations in meanings for the same object. Berger and Luckmann (1967) noted, "sociology of knowledge understands human reality as socially constructed reality" (p. 189). An individual's reality is based upon the structure of their social group. The norms and meanings within that social group will affect the individual's attitudes towards an object. Reality and meaning are viewed through the lens of the social group to which the individual belongs. Interaction with others outside of the social group can lead to confusion within communication attempts. It is not guaranteed that any social group will agree on the meaning of objects. The differences in opinion and meanings make each social group unique. Cultures and norms are created through these shared meanings.

Because each social group shares different meanings (Berger & Luckmann, 1967), the collaborator needs to find a mutual understanding with the audience. Attention should be given to all intentional and unintentional nonverbal messages such as attire, the background of the shot, proximity, and any other criteria that could communicate. All verbal choices must work to have an intended goal to share meaning with the audience. Any verbal choices that do not have shared meaning (Blumer, 1966) with the audience can lead to misunderstandings. Misunderstandings of verbal and nonverbal meanings can lead to a drop in engagement and copresence.

## **Primary and Secondary Socialization**

Berger and Luckmann (1967) recognized that primary and secondary socialization contributes to learned behavior. Primary socialization is when children blend with society learning language, culture, and norms. This process is where attitudes and habits are learned from adults. Family and friends within the social circle will influence the children's merging with the group. These habits can be taught indirectly or directly to children by adults. Primary socialization can create parameters that group members can adopt, setting unofficial boundaries for existence. Family members and close friends are very influential during this process. Berger and Luckmann's (1967) secondary socialization occurs when these individuals cross into different social circles. New norms and values are learned through additional influences from another group. Education and new social groups can implement change in behavior and beliefs. Positive and negative attitudes can be reinforced and repeated within these parameters. These parameters are often associated with social demographics, gender roles, and class expectations. Fitting into the social structure can prevent individuals from existing outside the norm out of fear that they will no longer belong to the group

There will be influences from primary and secondary socialization within video collaborations. The primary socialization will affect the performer's general language, style, and attitude. For example, the adults and family influence the performer's self within their childhood. The performer's secondary socializations can influence how the individual behaves within their performance. For an additional example, an individual with a corporate career may feel the norms of their industry expect a confident professional attitude within their performance.

On the other hand, an individual with an artistic background may choose to have a performance looser in style and not value things such as professional appearance or professional language. The performance can reflect the performer's social circle, adopted attitudes, and socialization. From the performer's self, roles can be played to persuade an audience towards an agenda.

#### **The Performer's Role**

Goffman (1969) argued, "One may feel obliged, when backstage, to act out of character familiarly, and this can come to be more of a pose than the performance for which it was meant to provide a relaxation" (p. 82). There is a difference between a performer's backstage self and who they are onstage. Within video collaborations, the user becomes the performer when the

collaboration begins. The success of the collaboration goals will guide the performer's role. The role will be fluid as the performer finds what verbal and nonverbal communication elements can help their goal. The performer may find that some aspects of either verbal or nonverbal activities may create a desired reaction from the audience. The performer can choose to alter elements of their personality to create desired reactions. These reactions allow the performer to heighten or weaken personality and communication elements that help reach the goals of the performance.

The performer's nonverbal actions can be performed in a manner that can manipulate the audience's feelings, viewpoint, or perspective of the performer. DePaulo (1992) noted, "Whenever people are motivated to convey a particular impression of themselves to others in social interactions, they are highly likely to try to do so in part by managing their nonverbal behaviors" (p. 234). Simple modifications of the performer's nonverbal actions can help portray the desired story or idea to the audience. For example, sadness may be portrayed with simple, sad looks from the eyes, a frowning face, and hands placed to the head's side. The performer's nonverbal actions can persuade the audience toward the performer's intended goal.

Conjuring includes the deception of the audience and noted that people would deceive others to reach goals (Triplett, 1900). Triplett (1900) compared conjuring deceptions to animals that deceive in appearance to survive. The deception can involve misrepresenting the truth or complete fabrications of a performer's self. Much like a magician, the performer will alter elements of truth to persuade the audience. Disregarding self, the performer chooses an alternate persona necessary to create the desired reaction from their audience. The performer will act in character to be more persuasive. These changes will be verbal or nonverbal and different from the performer's natural personality (Triplett, 1900). This characterization can lead to a parasocial relationship allowing the performer to gain influence over the audience. Horton and Wohl (1956) discussed, "In addition to creating an appropriate tone and patter, the persona tries as far as possible to eradicate, or at last to blur, the line which divides him and his show, as a formal performance, from the audience both in the studio and at home" (pp. 218-219). The interactions lead to a one-sided relationship between the audience and the performer. Horton and Wohl's (1956) research on television can be applied to the collaborative video showing that the performer gains influence over the audience. The audience feels a kinship to the performer's role and accepts the role as the performer's true personality.

Relationships can be formed online without the parties meeting face-to-face (Beers Fägersten, 2017). These relationships can be built on deception but meet the end goals of both the audience and performer. Triplett (1900) and Horton and Wohl (1956) noted that the deception allows the performer to have substantial control over the audience through relationship building. The performer will repeat the behaviors that trigger the desired reaction of the audience. The performer can use these elements for persuasion and reach their goals (Beers Fägersten, 2017). The performance and role can be very similar to a stage performer inciting emotion from an audience in live theater. "To fully create the sense that the interaction is two-sided, some personalities will even perform so they can appear to be adapting their performance to their audience's response" (Ferchaud et al., 2018, p. 90). These performances can be compelling in bringing the audience to the performer's viewpoint.

Rihl and Wegener (2017) acknowledged, "While an interaction can be thought of as limited to the act of reception only, the relationship extends beyond the moment of reception through repetition of such moments, forming a closer – but still one-sided – relationship" (p. 3). There is a significant difference between the performer's connection to the audience versus the audience's connection to the performer. The audience will always feel more connected to the performer than the performer will be to the audience. Because the audience can become strongly connected to the performer, the performer can gain influence over the audience. The performer aims to relationship build to gain influence over the audience. Parasocial relationships (Horton & Wohl, 1956) can result from conjuring a deception (Triplett, 1900).

Goffman (1969) emphasized that performers will often share "enthusiasm and lively interest we have at our disposal we reserve for those before whom we are putting on a show and that the surest sign of backstage solidarity is to feel that it is safe to lapse into an associable mood of sullen, silent irritability" (p. 80). The collaboration platform becomes the stage, and the collaboration becomes the performance. The audience is never let in on the deception, and the performer must stay in character throughout the performance. It is essential never to break character, or the audience may no longer believe the performance.

Goffman (1969) noted, "Performers may even attempt to give the impression that their present poise and proficiency are something they have always had" (p.30). Performers may rehearse their verbal and nonverbal communication methods to achieve the desired effect on the audience. The confidence gained from proper preparation allows the performer to have a polished delivery. This delivery can include attention to both verbal and nonverbal elements. Nonverbal communication does not have to be limited to expressions or hand movements. It can include attention to the background of the performance.

The background, much like a stage, can create a presentation that can nonverbally communicate a goal, an idea, or a persona. Every social group will identify and interpret items such as attire, background, or lighting based on their social identity (Berger & Luckmann, 1966).

Adjusting the nonverbal communication in the background to tell a story can be an intentional element produced to create an outcome. Lack of attention to this can also lead to unintentional nonverbal communication that can derail the performance. The background can help or hinder the performer's role and must be examined in extreme detail to consider all nonverbal messages.

Each performance will require a different characterization to fit the needs of the audience "From encounters between individuals, where the self is presented to the other, we develop different roles vis-à-vis others in different circumstances, and thus also take on different roles in different networks of relationships" (Schroeder, 2011, p. 13). Every audience will be unique, and the performer will need to adjust their role to fit the need of each audience. The audience and the performer's reactions help define the performer. The self and the background can be adjusted to create the desired outcome.

The performer must understand their persona, stage setting, and role. Roles can be designed and rehearsed verbally and nonverbal to maximize persuasion. The role will need to stay fluid and allow the performer to alter elements based on the audience's reactions. Schroeder (2011) suggested that each performer adjusts and reacts to the audience. The audience will have verbal and nonverbal feedback that the performer should read during the performance. The feedback can help the performer gauge the involvement of the audience.

Goffman (1986) explained that performers use a framework to persuade the audience in directions that they want the audience to react. The framework provides structure to the performance and helps organize verbal and nonverbal actions. Goffman recognized (1986), "Social frameworks, on the other hand, providing background information for events this will, aim, and controlling effort of an intelligence, a live agent, the chief one being in the human being" (p. 22). The framework, much like a picture frame, holds the performance and role

together. If the performance deviates outside the framework, it is possible to lose the intent of the communication goals.

When the video collaboration is planned, the performer needs to understand the goals and design the necessary framework. The rhetoric with the verbal and nonverbal performance role must match the framework and settle within the confines. All background elements, including attire, lights, and setting, must be considered to match the role of nonverbal communication. If the role deviates too much from the framework, the video collaborator risks losing the audience's engagement lowering copresence levels.

# **Breaking the Fourth Wall**

Theater's fourth wall refers to the open front of the performer's stage facing the audience. All the sides of the performer's world include the other three sides: stage left, stage right, and stage back. When in character, the performers will acknowledge actors in all these positions and not acknowledge the audience on the stage front. Stichter (2016) stated that breaking the fourth wall in a theater performance allows the actor to acknowledge the audience and stop the play's action. This technique can be done intentionally or unintentionally within a performance. Accidents, such as a prop not working or something unplanned happening can be acknowledged by the performer deviating from the script. The other characters may freeze in time while the actor addresses their audience with certain information. The other characters may also continue in motion and not acknowledge the actor breaking the fourth wall (Stichter, 2016). Instead, the actor will engage the audience and then decide to reengage within the play's action. This decision of when to reengage to the play's action will stop the action within the scripted play (Stichter, 2016). The audience must jump back into the scripted plot when the actor returns to their role. Applying Stichter's (2016) fourth wall ideas, a video collaboration distraction on the performer's side can separate the audience from the performer breaking the fourth wall. These distractions can be anything that intentionally or unintentionally breaks the session's momentum. Distractions on the performer's side can break the audience's engagement and eye contact from the screen. The performer would attempt to bring the audience back into the performance once the distraction was removed. The two parties would have to work to reengage, or engagement and copresence levels would drop. Like a deviation from an actor's script, a video collaboration user would need to recapture their audience from any distraction breaking the fourth wall.

Video collaboration users need to understand that any distractions, intentional or unintentional, that happen on their end of the session can lower the engagement of their audience. Any temporary loss of the audience's visual contact with the screen or disruption of audio can create a momentary distraction. These minor distractions can decrease engagement and decrease copresence when the performer and audience are temporarily distracted from each other's focus. A slight movement in eye gaze (Hall, 1966) can create a temporary disconnection allowing the other party to drift with their engagement. Distractions can be subtle, extensive, momentary, or long-lasting, breaking the fourth wall of the performance (Stichter, 2016). The audience and performer need to work towards reconnecting to regain high levels of engagement and copresence if this disconnection happens.

### Ethos, Pathos, and Logos

Classical rhetorical concepts emphasizing structure and performance can provide lessons to modern digital environments. Aristotle's (2001) Ethos, Pathos, and Logos can be a point of interest chosen for collaboration. Ethos establishes credibility, Pathos is the emotional appeal, and Logos is the facts used to construct the argument. "Rhetoric has a strong presence in the audiovisual communication emerging from social networks" (Berlanga-Fernández et al., 2013, p. 134). Therefore, virtual communication can still follow Aristotle's (2001) rhetorical triangle to provide expertise, perform, and use convincing facts to reach the collaboration goals. For example, Halloran (1982) noted on Ethos, "The speech is among other things a dramatization of the character of the speaker, and the wise speaker will construct his speech with an eye toward the sort of character it portrays" (p. 60). Therefore, the performance needs to stay within the framework when establishing Ethos. Video collaborations still require Ethos from the performer.

Too much conjuring and deception can disrupt trust between the performer and the audience (Triplett, 1900). Therefore, the performer must always plan Ethos and not misjudge the audience's parameters. "Highly expert and trustworthy communicators can influence the audience into changing its attitudes and behaviors toward the issue, product, or person being promoted in the message" (English et al., 2011, p. 736). Each audience will have a set of parameters that gauge their levels of trust to levels of mistrust. The performer must exist within this realm or risk losing credibility for their persuasion. The shift from face-to-face to digital does not alter the technique. "Along these lines, network users display the typical features of the classical orators, those persuasive techniques passed down without interruption throughout history, now evidently reinforced by technology" (Berlanga-Fernández et al., 2013, p. 129). If the digital performer can provide Ethos, Pathos, and Logos within these parameters, their rhetoric will be perceived as favorable by the audience.

The ancients understood that the audience must believe the speaker as the expert. "Rhetorical theory in ancient Greece and Rome was concerned with public speaking and more broadly with the art of effective communication, emphasizing the speaker's qualifications, knowledge and skill, that is ethos" (Bade, 2009, p. 617). Therefore, speakers who cannot communicate expertise with their verbal and nonverbal actions can risk losing the audience's attention and engagement, lowering copresence levels.

Classic oratory stressed that teaching proper techniques on Ethos could potentially change a speaker into having positive attributes. For example, Aristotle (2001) theorized that learning about Ethos, Pathos, and Logos would lead a speaker to have integrity and no longer need to put on an act. In Aristotle's (2001) view, public speakers would become experts on their subjects. They would not need to create an act or performance to openly discuss the topics "To improve a student's skill in speaking, to enable him to assume the rhetorical postures of virtue, was to help him grow toward the goodness of the ideal citizen-orator" (Halloran, 1982, p. 61). Aristotle (2001) guided that the speaker should learn and prepare for their speeches. Preparation can help speakers perform from experience and knowledge without deception. These criteria cannot change an immoral person into a moral person, but they can show confidence in subjects because of preparation.

The performer can be viewed as the expert on a subject, but expertise and trust do not always coexist. "A wise person is perceived by the audience as having intellect and technical knowledge as an authority in the field (phronēsis). Goodwill (eunoia) is linked with a speaker's altruism" (Shanahan & Seele, 2015, p. 39). The audience can view the speaker as an expert but not trust the moral judgment of the speaker. The performer must gain the audience's trust to achieve this trust, referred to as Ethos. "This distinction is especially time of Aristotle; an Aristotelian rhetorician need not actually be a good person, but must only be perceived as one" (Kallendorf & Kallendorf, 1985, p. 42). Even if the performer is not morally sound, the performance can convince the audience of expertise and moral judgment. In the ancient world, the educated were the orators. In video collaborations, anyone, educated or not, can participate if they have the financial means and necessary equipment. Both the moral and immoral can be performers. Video collaborations users should work to gain Ethos establishing credibility.

Emotions and facts will originate within the speaker (Bade, 2009). The emotional appeal is Pathos. The speaker's goal is to win the audience's perception of the performance as trustworthy. The facts, or Logos, must match the performance. If the facts and performance do not match, this can confuse the audience. "If language, logos alone, rather than the speaker, is the source of meaning and the guarantee of understanding, then it is not you and I who speak and who must be trusted or not trusted" (Bade, 2009, p. 620). The facts cannot stand alone, and the performer must interpret the facts for the audience. Without the performer explaining their position on the facts, the audience would have their interpretations. The performer's act should work to control the interpretations and bring the audience to the performer's position within the argument. The performer should not allow the facts to speak for themselves because the audience's perspective may differ from the performer's viewpoint. Pathos, or the emotional appeal, helps make the facts, called Logos, convincing for the audience,

The performer must use Ethos and Pathos to make the Logos seem logical. The performance can aid the Logos by adequately presenting the argument. Finally, the structure, framework, and performance must work together to present the facts to the audience. The performer's goal must consider all these above items to present a clear, logical appeal to the audience. English et al. (2011) emphasized a logical appeal when "an individual provides factual information and arguments to support their position on an issue. This process allows the recipient to evaluate the argument based on that information and decide whether to accept the information as valid" (p. 736). The performer's act must logically make sense with verbal and nonverbal facts. If the Pathos emotional appeal does not match the facts, the audience can reject the facts

and the performer. On the other hand, if the performer can adequately construct the act and argument, it is possible to gain the audience's trust and belief in the facts.

The performer must manage their characterization and make sure the Pathos emotional appeal stays within the boundaries. Staying within the boundaries can help use facts and the performance to bring the audience towards the performer's viewpoint. Using the wrong emotional appeal can allow the audience to turn away and question the performer's motives. Using different emotional appeals can change the feel of the facts. Pathos' emotions can bring the facts to life, and it may be necessary for the performer to rely on their acting skills (English et al., 2011). The performer may portray verbal or nonverbal emotions such as happiness or sadness to construct the Pathos argument. The verbal and nonverbal actions chosen would need to reflect these emotions to stay consistent with the performance.

The more natural the performer is with the act, the smoother the delivery can be. An act that is not polished can create moments that break the audience's attention. The performer that can achieve what Aristotle called the willing suspension of disbelief can gain the audience's trust (Aristotle, 2001). Pathos represents that the emotions of a powerful performance can manipulate the audience. Trained performers can use emotions with their experiences to gain desired reactions from the audience. Roniger (2017) pointed out, "The speech of the mastercraftsman reveals the telos or perfection of what speech is (and should be) because in his teaching-speech he manifests the being and causes of things encountered in the world" (p. 39). The audience can be affected by the emotions and performance and break from logical thought.

A well-versed Pathos driven performance can move the audience toward the performer's intentions based on feelings (Aristotle, 2001). The performer can work to relate their argument to an audience's positions or existing emotions. If the act can control the audience's emotions, the

performer will gain strong influence (Aristotle, 2001). The performer's verbal and nonverbal skills can win over the audience throughout the performance. The audience will then suspend logic and side with emotion. An effective Pathos driven performance can convince the audience to accept the performer's interpretation of Logos.

The performer's version of Logos will be based on experience and the performer's needs. "Speech in conversation can be employed to function as a sign of the knowledge of causes of a given field of reality, and speech can be used to secure the foundations of intelligent discourse about reality" (Roniger, 2017, p. 41). The performer's goal is to get the audience to accept the act's interpretation of reality, facts, and truth. These interpretations will help the performer reach their goal. The goal must always guide the performance and provide the structure necessary to achieve these results. The goal, framework, and performance for verbal and nonverbal are all necessary for the performer to prepare a successful act.

Preparation will be critical, and this will start with the visual. Kallendorf and Kallendorf (1985) recognized, "In fact, while the visual ethos may win the initial attention or empathy of an audience, it is this verbal etiios which makes a substantive contribution to the impression of intelligence, goodwill, and character" (p. 43). First, the performer's visual appearance must match the emotional and factual appeal of the act. For example, if the act is casual, the performer can lose credibility by overdressing. If the act is professional, being unkempt may discredit the information. Next, the visual must match the intent of the performance. These criteria include all aspects of setting the stage, including elements such as the background, lighting, and audio. In addition, the verbal and nonverbal performance aspects must be recognized and rehearsed for the act. Both the visuals, words, and performance will guide the success of the performance.

The audience must feel that the performer brings new information worth holding their attention. "The decisions that creators and presenters make in the shaping of processes and performance experiences to some degree always aim to capture and hold attention (of participants or audiences), but attention is given in exchange for something" (Davis, 2012, p. 513). When the information is no longer valuable, the audience may tune out the speaker. Live, technology-mediated interactions can share similar "aspects of liveness and immediacy across a range of contexts" (Davis, 2012, p. 514). A virtual collaboration does not necessarily change the performance style compared to a live, face-to-face collaboration. The performer must still read the audience for verbal and nonverbal clues.

Reading the other participant's reactions can change the direction of the performer's role. "The user is aware of the mediated other, and the other is aware of the user" (Biocca et al., 2003, p. 14). The video collaboration performance can change with an ebb and flow from the participants based on the feedback of both parties. Feedback will differ from a monologue or traditional speech and be more collaborative.

## Copresence

Triplett's (1898) study had participants race their bicycles solo against the clock to simulate the pressures of competition. Triplett (1898) compared the clock times of racers sideby-side against opponents versus their clock times riding solo with no opponent. The study found that the racers had better times against opponents than against the clock. Being aware of other individuals created different results. Awareness of others changed perception and changed the racers' performances. Triplett's (1898) experiment noticed that the best performances were achieved when a racer was aware of the presence of other racers. Within communication, people react in various ways when they are aware of another's presence. These reactions can affect both verbal and nonverbal communication. Engagement will increase and decrease based on awareness levels. Applying Triplett's (1898) bicycle racer concept to communication, awareness of another's participation in a video collaboration session can change their reactions. This awareness, whether in person or virtual, is the copresence of others. A live video collaboration, much like a live race, would create awareness of another person's involvement. Involvement can cause the performer to have unique verbal and nonverbal communication session. In a video collaboration, verbal and nonverbal communication can be transferred from the sender to the receiver and vice versa.

Although performers take on roles for persuasion elements, this differs from copresence. "Copresence involves interpreting the direction and level of entrainment with another, whereas role-taking focuses on interpretation of the content of the other's situated perspective" (Campos-Castillo & Hitlin, 2013, p. 174). The role can aid copresence, creating engagement with the audience, but roles do not guarantee copresence. The role must connect with the audience creating engagement and awareness among the users. Copresence levels are vital indicators of the audience's engagement within the video collaboration. The audience and performer must still engage and work towards shared interpretation.

Sellen (1995) argued that copresence is not automatic. The audience's presence is a factor in a collaboration user's performance, but copresence may not exist without acceptance, reactions, and engagement. Goffman (1969) discussed that individuals "will act in a thoroughly calculating manner, expressing himself in a given way solely in order to give the kind of impression to others that is likely to evoke from them a specific response he is concerned to obtain" (p.3). The social cues allow the user to understand, act, and react to their messages based on the audience's reaction. Goffman (1969) also stated that individuals work to gain a response from their audience. In addition, Gunawardena (1995) noted, "The capacity of the medium to transmit information about facial expression, direction of looking, posture, dress and nonverbal cues, all contribute to the degree of social presence of a communications medium" (p. 151). Therefore, being aware of the audience and recognizing verbal and nonverbal social cues can help increase engagement and copresence levels.

The audience must also recognize the performer. These engagements and reactions are a circular equilibrium that must continuously exist between the performer and their audience to continue copresence. When awareness is not recognized, the performer and audience will not be engaged. Factors that diminish awareness and lower engagement, such as distractions or poor performance, can also lower copresence.

Based on feedback, the performer and audience can adjust their conversation style and characterization, working to raise engagement and copresence levels continuously. "Because of copresence (or lack thereof), people develop their thoughts and behavior during a specific situation as well as cumulatively during their life course" (Campos-Castillo & Hitlin, 2013, p. 425). In addition, Copresence teaches people how to react in the presence of others. As a result, people learn the verbal and nonverbal actions and reactions that communicate desired emotions. Therefore, video collaboration users who achieve high engagement and copresence levels create performances that recognize feedback.

## **Social Media vs. Collaborations**

A recorded video speech would be like Triplett's (1898) simulated solo races against the clock. Recording a speech without an audience would deliver the oratory to the camera. The

performer would be aware they are speaking to a camera, but they would not have a live audience to gauge reactions. There would be no audience feedback to cue the speaker of the performance's success or failure. Recognizing the audience is a key to understanding interpersonal communication with video collaborations. Campos-Castillo and Hitlin (2013) recognized performing in virtual environments (VE), "A user's copresence with others, a variable and subjective sense, in a VE shapes the extent that known social processes unfold" (p. 430). Users can react and alter their communication styles to fit the needs of the live audience.

A solo performance recorded on camera creates one-way communication with no involvement from the audience. Video collaboration creates two-way communication that engages the audience present on the other screen. Video collaborations differ from social media videos (such as YouTube) because collaborations have a live, interactive virtual audience. As Mogos and Trofin (2015) noted, interpersonal communication and copresence differ by the medium. Although both mediums can involve video, the one-way nature of social media will not experience copresence. For example, social media video performers can record themselves on camera without having an audience. Their recorded video performance assumes an audience will watch, but no audience, live or virtual, is present when recording. If the same performer recorded a video with a live or virtual audience present and interacting, copresence would change the user's verbal and nonverbal communication. The awareness of an audience and their reactions would change the performance (Triplett, 1898).

Diwanji et al. (2020) argued, "In such digital copresence environment, individuals may not necessarily exhibit the same information behavior or copresence behavior as they would in physical environments" (p. 2). Virtual environments can differ from face-to-face communication because there is a lack of shared space. The shared space becomes virtual in a mediated session. The participants simulate and accept the symbolic meeting place. If the participants cannot accept the virtual environment, the levels of engagement and copresence can drop. Mazur (2000) stated, "In fact, the lack of co-presence leads the list of complaints voiced by participants" (para. 2). Mazur (2000) also noticed that sessions without an active host could leave the audience feeling ignored. Both parties in the collaboration must work to engage each other in the session. If there is a drop in interaction between the parties, one party may feel they are not participating and tune out the messages. Consistent interaction between participants is necessary for collaboration not to become a one-way communication. The participants should strive to maintain two-way communication for engagement and high levels of copresence.

Engagement between virtual participants can create similarities to face-to-face conversations. "These technologies are premised on the hypothesis that the more closely they mimic face-to-face communication, the more effective the communication that will take place" (O'Conaill et al., 1993, p. 391). Although the goal is to replicate face-to-face, O'Conaill et al. (1993) found that people performed more professionally with their speech patterns when participating in video collaborations. Individuals behaved differently virtually than face-to-face with how they used their verbal and nonverbal communication. Virtual mediated communication involves a camera, microphones, and other technology that does not exist in a regular, face-toface conversation. These items can change a person's performance as they react to technology through their schema for performing on video.

Memories of other people's camera performances will affect what an individual perceives as camera behavior and how they perform. "What, precisely, does the 'schema' do? Together with the immediately preceding incoming impulse it renders a specific adaptive reaction possible" (Bartlett, 1932, p. 7). Video collaboration users can believe that their schema for camera performance should emulate an existing style, such as a television news anchor or social media influencer. "Efficacy describes the belief among participants that they have the necessary cognitive schema and social abilities to communicate effectively through a medium" (Sherblom et al., 2018, p. 106). However, schema can alter the voice, mannerisms, and overall performance style. These schemas can alter their verbal and nonverbal performances creating misunderstandings in the collaboration.

## **Virtual Environment Research**

Walther (2011) recognized a concern about "whether new technologies affect the utility of theories that were developed in the context of somewhat older technological contexts" (p. 470). Older video collaboration studies had limited capabilities compared to modern platforms. For example, the user experience of the early AT&T video phones cannot be compared to the current Zoom video collaborations. In addition, when the equipment and process were unfamiliar to users, levels of engagement and copresence dropped. "When they are not physically copresent they may be less confident in general that they understand each other well enough to complete their task" (O'Malley et al., 1996, p. 190). Beers Fägersten (2010) recognized that better technology led to better interaction results compared to the video collaboration methods used in the past.

Walther (2011) stated that technological advancements could allow studies to retest existing theories and apply new technology to find results. "At the same time, advances in technology-enabled social arrangements allow us to see if theories can stretch their original assumptive boundaries" (Walther, 2011, p. 471). Even though the technology may have suffered limitations in the past, there are efforts within existing research that should not be dismissed. For example, information from the previous research that involved verbal and nonverbal communication can still apply (Walther, 2011). Therefore, it is unnecessary to scratch all existing scholarship and refers to them as outdated.

Today's users are more adept with the video collaboration process and technology. Information and communication technology (ICT) continues to grow with laptops, cellphones, tablets, smartwatches, and other new technology. "Such significant shifts in the technological backing of social interaction impose a daunting challenge on media researchers: determining how communication practices have changed with the ubiquity of ICT-based media" (Lisiecka et al., 2016, p. 2). All generations can gain familiarity with technology using digital devices, assisting their video collaboration operation. "Experience and expertise with a medium, however, can improve a participant's sense of presence, identity, trust, openness, and interactivity by forming more effective cognitive schema and social skills in using the medium" (Leonard et al., 2015, p. 30). The more familiar users are with the collaboration process, the more comfortable people will become communicating virtually.

Rogers' (1983) "Diffusion of Innovation" recognized that technology would be adopted within five stages, including Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. When technology is first available, Innovators create a new system. Early Adopters are eager to try new methods even if the technology has not been perfected. The Early Adopters can be the first groups to identify struggles and help the technology move past these issues. The Early Majority is the first significant wave of adopters that find the value in the technology and start a trend with its use. The Late Majority are individuals that wait until others have found value and worked through any issues that might be prevalent with early use. Laggards switch when the technology is proven or overtakes the existing technology. Technology is displaced when the Late Majority and Laggards switch to the new technology. The old technology is no longer relevant or only used in minor, specialty applications.

For video collaborations, the Innovators would be all the visionaries that researched video and audio synchronization, making collaborations a future possibility. Early Adopters were the innovators such as Bell Labs, PARC, and the inventors of the technology. The Early Majority represented businesses that paid higher prices and worked through the bugs in the original systems that formed the original norms. The groups in the early 2000s using WebEx and Cisco Systems with Wi-Fi would be in the Early Majority. The Late Majority and Laggards would recognize those individuals not using video collaborations prior to the COVID-19 pandemic. The COVID-19 pandemic rushed video collaboration's progression. New technology was forced as a temporary replacement because of the pandemic shutdown. Face-to-face meetings were restricted during COVID-19 but not permanently displaced.

Straub (2009) guided that changes in technology use must consider the environment. Users were pushed to video collaboration during COVID-19, only to return to face-to-face when restrictions loosened. Rogers' (1983) diffusion was challenged because users were not making willing changes, and existing technology was not permanently displaced by new technology. Some users chose not to use video collaborations when distancing measures relaxed and returned to face-to-face meetings. As the COVID-19 pandemic progressed, users changed between virtual and face-to-face communication depending on social distance regulations.

Gray (1977) recognized "the need for a more comprehensive understanding of the communication process before any significant determination of technological impact can be realized" (p. 176). Users will find what they like and dislike about current apps, software, and brands. Andres (2006) noted that the process could be "modified in order to overcome any

shortcomings of video conferencing technology" as users learn to communicate (p. 14). The system must match the task, and the users must know how to work the system.

# **Effect of Media Richness on Copresence**

Media is rich when technology can offer all aspects of face-to-face sender-receiver communication. Daft and Lengel (1986) discussed, "In order of decreasing richness, the media classifications are (1) face-to-face, (2) telephone, (3) personal documents such as letters or memos, (4) impersonal written documents, and (5) numeric documents" (p. 560). Video collaboration aims to provide synchronous audio and video to replicate face-to-face communication, the top rank and the most media-rich.

. Daft and Lengel (1986) ranked telephone calls less media rich than face-to-face communication due to a phone call only using audio. The traditional telephone call would be a less rich media than video collaborations because visual cues and nonverbal communication are included in the asynchronous video and audio collaboration. Video collaboration platforms can be considered rich media and top-ranking when used with synchronous audio and video. The technology would need proper Wi-Fi speeds to prevent audio or video lags. Any issues with high-speed connections or software failures would lower the ranking. In addition, user inefficiencies, lack of training, or failures would lower the rich ranking.

Virtual Environments (VE) can be challenging to measure for richness. "Some evidence for low media richness or low social presence in VEs is that people do not use non-verbal communication as much as in face-to-face interaction" (Schroeder, 2011, p. 6). Schroeder's observations may point to people being more comfortable in face-to-face interactions compared to video collaborations. If the technology can replicate face-to-face communication, but people do not treat it the same, the richness of the technology would rank lower. Engagement and copresence levels will lower if people do not attempt to use nonverbal communication, turntaking, and gaze. Video collaborations can have the potential to be media-rich and allow users to have high copresence levels recognizing others. The user and platform need to perform at optimal levels to reach this potential.

The more strenuous the subject matter, the more likely the communication method will require a rich style. Arnfalk and Kogg (2003) proposed, "Media richness theory, argues that to communicate efficiently and to avoid misunderstandings, a message with a high degree of complexity and/or ambiguity should be transferred through a dense medium" (p. 864). For example, it would be better to use video collaboration with synchronous audio and video in a complicated communication scenario instead of a phone call with just audio.

Video provides clarity by allowing visuals with nonverbal communication. Video adds an extra layer of communication than audio-only, such as a traditional phone call. Video technology allows users to "express understanding or agreement, forecast responses, enhance verbal descriptions, give purely nonverbal information, express attitudes through posture and facial expression, and manage extended pauses" (Isaacs & Tang, 1994, p. 65). Video collaboration is a rich medium that allows the users to work through their complex processes with synchronous audio and videos.

### Summary

Global competition and global business will necessitate companies to explore virtual environments to keep connected to their distanced clients (Schmidt et al., 2001, p. 594). Market conditions, market competition, and future health pandemics can drive organizations to make changes toward working in virtual environments. Any resistance to change by corporations can be overcome by necessity and profitability. More research needs to focus on communicating in a virtual environment geared towards business needs (Schmidt et al., 2001, p. 594).

Within the COVID-19 pandemic, companies learned to operate in virtual environments while maintaining profitability. "The wide adoption of virtual working is promoted by a range of stakeholders in the expectation of economic, social and environmental benefits" (Breu & Hemingway, 2004, p. 191). Technology's role in virtual environments "enables the completion of work and overcomes many complexities created by time and distance; these technologies still need to be understood as only a communication and collaboration tool and not as communication or collaboration itself" (Berry, 2011, p. 191). Mediated technology cannot overcome a weakness in an individual's communication skills. Communication skills remain paramount regardless of the technologies available.

Chapter Three will include a methodology discussion of how this study will be performed. Next, Chapter Four will examine lived experiences of 30 diverse business professionals that used video collaboration platforms as one of their primary ways of conducting business. These lived experiences are unique perspectives because the 2020 COVID-19 shutdown forced businesspeople to use video collaboration platforms where norms and standards did not exist. Chapter Four will examine their answers and relate them to Chapter Two's existing literature discussion. Finally, Chapter Five will conclude the data by providing results that industry experts can examine to help business professionals with video collaborations. Chapter Five will also offer future research directions.

#### **CHAPTER THREE: METHODS**

#### **Overview**

This chapter will discuss the qualitative research methodology through a narrative theory study. This study aimed to develop a deeper understanding of copresence theory by examining verbal and nonverbal communication between video collaboration users. The narrative theory was chosen to help explain how business professionals changed from face-to-face communication to video collaboration during the 2020 COVID-19 shutdown. This chapter discusses the qualitative methods used and narrative theory for this study's design. The methodology, participants, procedures, analysis methods, and ethical concerns are elements of this chapter.

### **Purpose of the Study**

This narrative study aimed to compare existing communication theories to businesspeople's lived experiences that used video collaborations during the COVID-19 pandemic. The research interviews were conducted using Zoom video collaboration software. These interviews can offer future researchers an understanding of engagement and copresence. In addition, comparing commonalities between the interviewees to existing literature helped provide insight into human behavior when using video collaboration sessions.

### **Design: Methodology Selected**

This research aimed to examine video collaboration users' lived experiences. "Qualitative research has become associated with many different theoretical perspectives, but it is typically oriented to the inductive study of socially constructed reality, focusing on meanings, ideas, and practices, taking the native's point of view seriously" (Alvesson & Deetz, 2000, p. 1). Because

this study intended to understand how users interpret meanings, a qualitative study was the best method to comprehend the individual users' perspectives.

# **Narrative Theory Methodology**

Narrative theory can allow a researcher to collect data based on the information provided when interviewing individuals. Creswell and Poth (2018) stated, "Narrative researchers collect stories from individuals (and documents, and group conversations) about individuals' lived and told experiences" (p. 70). Therefore, it was necessary to examine data commonalities collected from interviews based on lived experiences. This new data led to an explanation for video collaboration issues that previously had minimal existing research. Narrative theory allowed a critical analysis of participants' video collaboration experiences during the COVID-19 pandemic shutdown.

Sela-Smith (2002) pointed out, "When there is no idea of where the researcher or the territory is going (i.e., there is no paradigm established for the field), then exploratory discovery, rather than testing hypotheses, is the goal" (p. 58). Organization and structure will be the key to a robust narrative theory study. Creswell and Creswell (2018) noted that researchers must have a plan on how the design will guide the study and follow the correct steps leading to new information. Disorganized data can lead to a breakdown within the study. Chun Tie et al. (2019) guided that it is necessary to have a solid outline and understanding of the most vital information to understand the goals.

Data similarities needed to be examined between all subjects with a keen eye for detail. Groenewald (2004) recognized that "the aim of the investigator is the reconstruction of the inner world of experience of the subject" (p.51). The coding process allowed the researcher to examine data and organize it into themes based on these shared experiences. "The researcher begins with open coding, coding the data for its significant categories of information (Creswell & Poth, 2018, p. 84). Once the studies and notes have been conducted, coding can help identify similarities. Creswell and Creswell (2018) recognized that the researcher must be careful and meticulous with the data to code correctly. They also noted that incorrect coding could lead to the study becoming invalid. Subjects such as coding and analyzing data, creating categories through coding, and generating organized data will allow an enlightened vision within the subject leading to new theory if it is done correctly. These suggestions were followed in this study generating organized and correct data.

Chun Tie et al. (2019) noted that spending time on each research step is essential to avoid missing important details or becoming overwhelmed by data. "Initial coding categorises [sic] and assigns meaning to the data, comparing incident-to-incident, labeling beginning patterns and beginning to look for comparisons between the codes" (Chun Tie et al., 2019, p. 5). The codes in this project were individualized and unique to the researcher and project. The coding showed matches and patterns, uncovering commonalities and discovering new information. As Chun Tie et al. (2019) guided, the researcher must collect, code, and analyze existing data before collecting further data.

Following Chun Tie et al. (2019) and Creswell and Creswell's (2018) guidelines, these methods prevented coding errors and added additional research and observations as the study progressed. Neubauer et al. (2019) discussed, "In other words, engaging in narrative research requires the scholar to become familiar with the philosophical moorings of our interpretations of human experience (p. 91). If there is truth to be found in various interview subjects, the researcher can find the common themes from the story to uncover the truth through the group's

experiences. The Creswell and Poth (2018) narrative theory methodology was followed for the study to provide factual and accurate data from the interviews based on their lived experiences.

### **Research Questions**

The study works to find the answer to the following research questions:

**RQ1:** What nonverbal communication criteria affect understanding, meaning, and engagement between participants in video collaboration?

**RQ2:** How does the performance affect engagement levels between participants in video collaboration?

**RQ3**: What is the relationship between engagement and copresence in video collaboration?

# **The Researcher**

The researcher has a background in television media, was a former Fortune 500 sales manager, self-employed as a communication consultant, college communication professor, and holds a Bachelor's and Master of arts degrees in Communication. The researcher was currently all but dissertation status for a Ph.D. in communication at the study time. This study was the dissertation necessary to complete the degree. No participants had any relationship with the researcher that would show bias, conflict of interest, distortions of data, or contracts that would affect the validity of the data or research.

The researcher gained the necessary skills to complete the research within Ph.D. studies. The researcher had experience as the designer and host of professional business video conference meetings, events, education classes, and live, in-person versions of these same events. The researcher also had vast experiences in professional performing arts necessary to interpret the performance aspects of this study. The combination of education and experience guided the researcher in interpreting the data collected from the participants.

## **Study Participants**

The 30-person sample was drawn from social media postings on Twitter, Facebook, and emails to networking groups. The postings were shared on business group pages throughout the country. The sample was not offered incentives and willingly participated in the study. Demographics were varied with male, female, non-identifying, and transgender ranging from ages 30 to 55. The study focused on the participants aged between 30 and 55 because this age range represented groups most likely to have participated in video conferences in their careers. Participants' income levels also varied from middle class to upper class. Any participants above and below the age range or financial range were disqualified from participation.

The participants learned of the study from the networking group emails and social media postings on Twitter and Facebook (Appendix A). The email outlined the purpose of the study and the participant's involvement. Participants were asked to attend a one-on-one video conference session with the researcher that would be recorded for audio and video via Zoom video collaboration software. The researcher paid the private Zoom account, which was not attached to any of the researcher's university employment accounts. All participants signed a consent form, and verbal consent was also acknowledged at the beginning of the interview sessions. The researcher asked questions (Appendix B) on demographics and the subject matters to obtain the research.

### **Participants Demographics**

Thirty respondents were interviewed for this study and numbered 1-30 to remain anonymous. Table 1 notes the respondent demographics and minimum requirements described in Chapter Three. The respondents ranged in age from 30 to 55, both male and female. Participants varied in professions, including small business owners, corporate-level executives, education, and full-time employed business workers. All respondents were consistent video collaboration users within their careers. They were experienced with computer technology, social media, and video collaborations from their professional and personal lives. There were no stated issues due to demographics that reflected a lack of understanding or training with collaboration video.

## Age of Respondents

The survey requested participation from workers ages 25 to55 in a corporate career that used video collaboration consistent in their work career. No 25 to 30-year-old respondents responded to the survey. However, 19 females and 11 males participated in the study. The ages of the respondents ranged from 31-55. The average age of all respondents was 42.1. In further detail, the average female age was 40.5, and the average male was 44.9. Thirteen respondents with ages 31 to 39 respondents participated, 11 with ages 40 to 49, and six aged 50 to 55 participated. Those workers identified in upper management included three in the 31-39 age group, four in the 41-49 group, and two in the 50-55 age group.

### Gender, Race, and Geographic Region

Of the 30 respondents, 19 were female, and 11 were male. Five of the 30 respondents were minorities, and 25 were white. Four of the female respondents were people of color, and one male was a person of color. The southeast (9), northeast (5), and midsouth (9) of the east coast United States dominated the geographic locations. Four respondents stated they were from the country's middle, and two were from the southwest.

### **Industries Represented**

Twenty-one of the respondents identified as mid-level managers, and nine were upperlevel managers or owners on the corporate level. Further broken down by fields, five respondents worked in management within government operations. Five identified within the sales/marketing and product management industries. Four were involved in the education field. Four noted employments within the logistics/project analysis fields. Three were self-employed small business owners. Two were involved in the financial industry, two in the medical industry, and two in technology. Finally, one respondent was in the military, one was within government operations, and one was involved with non-profit management.

Age was not connected to upper management employment. Upper management workers were scattered through all age groups. Gender did relate to upper management employment. Eight males were identified in upper management compared to one female. Three females were small business owners compared to zero males. Ethnicity was noticed in upper management, with only one person of color identifying as upper management. Geographic location and industry were also not related to upper management employment. Locations ranged from the middle of the country, middle of the Southern states, middle of the Northern states, Northeast states, and only two respondents identified in the Southwest. There were no respondents from the Northwest or Midwest sections of the country. Answers were consistent across race, gender, region, professional field, and mid-level. There were no significant discrepancies between any groups within their answers.

#### Table 1

#### Respondents' Demographics

Respondents	Age	I	Race	Gender	Region	Professional Field	Level
1	3	1 \	White	Female	Midsouth	sales/marketing	mid-level
2	3	2 ۱	White	Female	Midsouth	logistics/project analyst	mid-level
3	3	2 ۱	White	Female	Southeast	military/government	mid-level

4	33	White	Female	Southeast	Nonprofit	mid-level
5	35	Latino	Female	Middle	Government	mid-level
6	35	White	Female	Northeast	logistics/project analyst	mid-level
7	36	White	Female	Midsouth	Education	mid-level
8	37	White	Female	Southeast	Banking	mid-level
9	37	White	Female	Southwest	sales/small business	mid-level
10	38	White	Female	Midsouth	Education	mid-level
11	40	Latino	Female	Northeast	Technology	mid-level
12	42	White	Female	Southeast	Banking	upper management
13	43	White	Female	Southeast	sales/marketing	mid-level
14	45	Black	Female	Northeast	Government	mid-level
15	47	White	Female	Southeast	sales/small business	mid-level
16	49	White	Female	Midsouth	sales/small business	mid-level
17	51	Latino	Female	Northeast	Government	mid-level
18	52	White	Female	Midnorth	Education	mid-level
19	54	White	Female	Midnorth	logistics/project analyst	mid-level
20	35	White	Male	Southeast	Education	mid-level
21	36	Black	Male	Northeast	military/government	upper management
22	39	White	Male	North mid	sales/marketing	upper management
23	43	White	Male	Southeast	Medical	upper management
24	44	White	Male	Midsouth	sales/small business	upper management
25	44	White	Male	Southwest	sales/small business	upper management
26	46	White	Male	Southeast	logistics/project analyst	mid-level
27	46	White	Male	Middle	technology	mid-level
28	52	White	Male	Midsouth	Medical	upper management
29	54	White	Male	Midsouth	Government	upper management
30	55	White	Male	Midsouth	Government	upper management

# **Data Collection**

This study used a recorded Zoom video collaboration session for each respondent. These interviews between the interviewee and the researcher with the questions found in Appendix E. Microsoft Word audio transcriptions were used for the first pass to transcribe the interviews. The next step was the second pass of manual transcriptions and corrections to authenticate the data. The researcher also took electronic notes on an offscreen tablet using the E-memo function during the interviews.

The interviews began with a verbal acceptance to participate in the study. It was followed by open-ended questions about the participants' experiences using video collaboration platforms. The questions focused on verbal and nonverbal interpersonal communication from past business experiences. Questions were also asked about others' performances during past business video collaboration sessions. Each participant was interviewed separately without the participation of others. Participants were given directions to participate in the video session removed from the interaction of others or outside distractions. Any sessions with too many interferences, such as distorted audio, consistent interruptions from others, or broken Wi-Fi connections, were discarded from the research.

## **Procedures Followed**

Approval from the Institutional Review Board (IRB) was sought and achieved from Liberty University. Once approval was gained, the researcher posted on social media networking sites and emailed professional networking groups about the study (Appendix A). Potential participants were screened using a demographic survey (see Appendix B) to ensure they met the study's criteria. All participants signed a consent form (Appendix C). Participants were sent a follow-up message via email once they agreed to participate with a private internet link and time (Appendix D). No interview was conducted without confirming the participant's written and recorded video consent. Each session was a single interview with only the researcher and participant. Microsoft Word transcriber transcribed each interview and manually checked for authenticity by the researcher. One interview session was conducted with each participant answering all questions. No participant was asked to do extra sessions. No information from other participants was shared within the sessions. Any emerging ideas or changes to questions were noted in Appendix F. These emerging ideas and changes to questions are allowed in narrative theory research if they are noted.

Participants were not privy to any information from the other participants and did not participate in coding, writing, or other study processes. Therefore, the participants were not led to similarities or differences of other participants' answers or perspectives. Instead, each response from the participants represents their unique experiences. Electronic memos were used throughout the interview sessions for the researcher to make notes. Memos included connections to existing codes or the emergence of new codes. Memos also included any concerns related to the study of reflections on the quality of the interview process.

#### **Data Transcription**

The 30 respondents served as the primary source for the research data. Interviews were conducted by appointment and used Zoom video collaboration software. The interviews ranged from 15 minutes to 45 minutes, depending on the respondents' answers. Each session was recorded from the start. The sessions involved two to five minutes of personal discussions, checking that both video and audio worked for both parties. A formal introduction was then presented to each respondent, including permission to record, an interview agenda, and the discussion questions. The first three discussion question in each interview clarified the demographics and requirements for the study, purpose, and permission to record.

After five interviews were completed, the sessions were transcribed using voice-to-text software and then manually checked for accuracy. Emerging codes were also highlighted and defined manually using spreadsheet software. The process was repeated until saturation at 30 interviews. The researcher ensured narrative theory was followed throughout the process. The interview protocol and question clarifications are provided in Appendix D.

#### **Data Analysis**

The coding of transcripts was completed in the order of the interviews conducted. Five interviews were selected at a time, which allowed the researcher to edit and clarify any interview questions as theories emerged from the data. Coding was used to help the researcher understand any commonalities with the participants' experiences. "Coding is an analytical process used to identify concepts, similarities and conceptual reoccurrences in data" (Chun Tie et al., 2019, p. 4). Coding was conducted using AtlasTI coding software for keyword searches. AtlasTI also made connections for commonly used words and phrases. Each video and transcript from the interview was also manually reviewed with a second pass. Consistent reviews of previous data allowed the researcher to make connections and similarities necessary to find saturation. Creswell and Poth (2018, p. 84) noted, "How many passes one makes to the field depends on whether the categories of information become saturated—usually considered to be reached when no new ideas are emerging—and whether the theory is elaborated in all of its complexity." The extra manual passes were followed by another round of electronic coding with AtlasTI coding software. These extra passes led to a saturation point within the coding verifying the themes.

#### **Open and Axial Coding**

Open coding finds the initial categories within the transcribed data. Axial coding allows the researcher to find connections between the categories within coding (Creswell & Creswell, 2018). Manual codes were created by the researcher and then linked when commonalities were found. These manual codes were implemented into the AtlasTI software and referenced with the written transcriptions. Each question was watched on video. The transcriptions were reread for accuracy before being placed into the AtlasTI software. The multi-step process allowed for codes to be transcribed for each question. This question-by-question method allowed the researcher to stay organized within the coding process. The themes and commonalities were found between each participant's answers following this step-by-step method. This method allowed the research, codes, and commonalities to stay consistent.

### **Selective Coding**

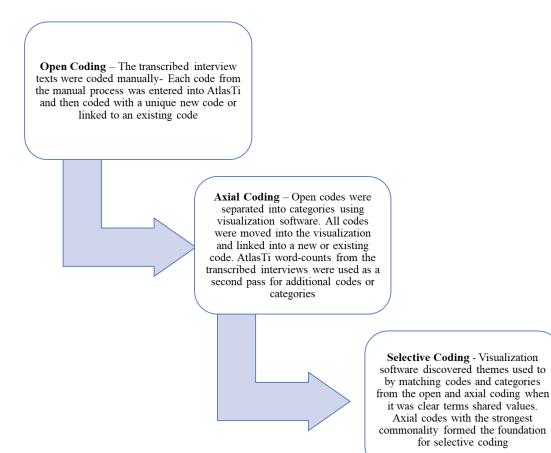
Creswell and Creswell (2018) argued that the researcher must show the connections between themes and create a hypothesis based on the data. In the selective coding phase, some codes may appear more than others. Codes with more importance in this study became prominent. New codes were compared to the existing codes to see if there was a relationship. The emerging themes explained the participants' answers and central tenets. Memos and recordings were also reviewed in this step for commonalities.

Interviews were coded manually in the first pass during open coding. The interviews were examined in groups of five before moving on to additional interviews—this process allowed for time to recognize emerging themes and categories. Transcripts were uploaded into professional coding software, AtlasTI for further analysis. Each interview was also coded with an additional pass manually comparing the themes against the software. These additional passes provided a comparison critical for narrative theory methodology. This process provided the researcher with consistency for themes and categories within the coding.

The open coding results included 20 codes from manual coding. In the selective coding phase, emerging categories were found from the similarities in the open codes. AtlasTI software analyzed these codes for common occurrences and themes throughout the transcripts. Figure 1 shows the open, axial, and selective coding data summary and analysis process. In selective coding, categories emerged from the similarities in the open codes.

# Figure 1

Data and Analysis Process



Using AtlasTI software, the grouping of open codes was possible and allowed axial codes to emerge from the data. Selective coding resulted from the relationships within and across the open and axial codes. Atlas TI Visualizations aided the discovery of relationships across the axial codes. Each time a category is linked to a code, the connection to other codes is examined. This step assisted in constructing the visualization. If there was a connection, these were marked with an arrow. The codes that emerged with the most similarities started the selective coding. These codes showed the commonalities within the interview data providing themes. The selective coding was grouped into 12 themes analyzing the effect on copresence. Analyzing copresence levels for video collaboration involves individuals' awareness of other participants in

sessions and how this affects their performance. The copresence model explained in Chapter Five emerged by classifying themes, analyzing data, and categorizing the codes based on performance, nonverbal communication, symbolism, and engagement.

Ethos and Pathos of Aristotle's (2001) rhetorical triangle were chosen for the nonverbal communication and performance elements that affect engagement and copresence levels. Although Logos is essential, each industry will have unique facts specific to those video collaborations. Logos would need to be studied alongside industry experts to examine the respondent's expertise in their field. Studying Ethos and Pathos allows for knowledge to be learned that can be applied to any field. The themes examined video collaboration users' awareness of how these themes impacted their engagement and copresence levels. The workers lived experiences were outlined per narrative methods showing themes.

### Trustworthiness

Because narrative theory examines similarities through the interviewee's lived experiences, one researcher's opinion of similarities may differ from another. Opinions can form on the validity of research based on a researcher's standpoint of examining data. The researcher needs to try and remove any personal bias from the observations or coding. "In this process, the researcher plays a very neutral role to avoid the biases in data collection and further its interpretation to present the unbiased result of the study" (Khan, 2014, p. 229). The researcher must not let their viewpoints affect how they collect and observe data. It is also important to watch any biases during the coding portion. A researcher must not use preconceived notions to generalize situations within the data that fit into any personal, preconceived schema.

The researcher in this study has no known biases towards the topic, participants, or research process. There were no known biases at the time of the research that would affect the

data process. The sample size was chosen based on the availability of volunteers. The participant sessions were not timed for a start or finish point. Each session allowed the participants to answer all questions within their time frame. The sessions ended when the questions were answered in their entirety. Only one session was allowed per participant, and multiple sessions to complete answers were not allowed. All individuals that volunteered from the researcher's posting were screened for the proper qualifications.

Using the Zoom video collaboration platform to record all participant sessions prevented the researcher from adding, deleting, or altering any data from the interviews. The data were manually coded following the narrative theory methodology. All data, video, and transcriptions were stored electronically on an external, digital hard drive for three years. The data included a password only known to the researcher to protect the participants' privacy. All electronic memos are also stored with the data. At the end of three years, the data will be destroyed entirely.

## **Ethical Concerns**

The researcher conducted all studies with integrity and ethical methods. The outline and methods in this chapter were necessary for the reliability and validity of this study. All participants were informed of the study purpose, the consent form details, and the study outline. The informed consent form, read to each participant prior to the interview, is shown in Appendix C. No minors were used in this study, and there were no known physical risks during the interview process. Participants were made aware of the data storage procedure and the planned erasure of the data after three years.

#### Summary

The goal of this chapter was to provide the study structure and provide an outline of the research methods. This discussion of the procedure, participants, collection methods, and

interview process with questions guided the specifics of who participated in the study and how it was conducted. In addition, all participants shared their experiences with interpersonal communication when using video collaboration platforms. Next, the goal of Chapter Four is to provide the results and show that the methodology from Chapter Three was followed. Chapter Five will summarize the results and conclude the study.

### **CHAPTER FOUR: FINDINGS**

#### Overview

This chapter contains the results of the narrative theory study conducted to answer the research questions:

**RQ1:** What nonverbal and verbal communication criteria affect understanding, meaning, and engagement between participants in video collaboration?

**RQ2:** How does the performance affect engagement levels between participants in video collaboration?

**RQ3**: What is the relationship between engagement and copresence in video collaboration?

This chapter also discusses whether the study was consistent with narrative theory methods and how this analysis relates to the research questions. This analysis will include sample demographics and charts. Transcripts were analyzed from 30 individual interviews conducted privately via Zoom video collaboration software to discover codes and themes described in this chapter. Three levels of analysis were used: (a) open coding, (b) axial coding, and (c) selective coding. The consistent comparison was used to dissect the data in detail through each analysis step until themes developed from the data. Chapter Four includes tables and graphics created to show coded and theme data. In addition, graphics and excerpts from the individual interviews were used to show themes and connections within the data.

### **Narrative Findings**

# **Communication issues COVID-19 Pandemic**

The twelve themes below were discovered through the interviews. In addition, the interview subjects shared their COVID-19 pandemic April 2020 – May 2021 lived experiences using video collaboration.

# Figure 2

12 Themes: Data and Analysis

Theme 1: Improper Training	Theme 2: Medium and the Performance	Theme 3: Disruptions
Theme 4: Virtual	Theme 5: On the	Theme 6:
Home Office Set Up	Go Mobile Sessions	Technology Use
Theme 7: Camera	Theme 8: Attire	Theme 9: Verbal
Angles and	and Nonverbal	Chit Chat Rapport
Proximity	Messages	Building and Ethos
Theme 10: Turn Taking and Power Dynamics	Theme 11: Credibility	Theme 12: Meeting Organization and Engagement

As offices shifted to virtual work during the spring 2020 COVID-19 shutdown, the corporate world did not develop a prevalent set of communication standards, styles, or norms for video collaboration sessions (Karl et al., 2021). Companies were caught off-guard by the COVID-19 shutdown and were forced to switch from face-to-face communication to video collaborations. Respondent 23 noted their company's use of video collaborations, "Yeah, so it was 100% driven by the pandemic." The respondents stated that companies did not have time to

develop communication and professionalism standards. The respondents recognized that a lack of standards and training added to the confusion. As a result, the respondents questioned their communication methods to engage others in video collaborations.

Before the pandemic, video collaboration platforms were a new technology that could be analyzed using Rogers' (1983) criteria for "Diffusion of Innovation." Usually, norms are gradually formed as technology is adopted within Rogers' (1983) five categories: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards. Although some companies were within the Early Adopters and Early Majority, others resisted new technology and would have been considered Late Majority and Laggards. The shutdown accelerated technology adoption and quickened the learning curve for new users.

Pop culture, television commercials, and social media reflected mishaps. Memes and jokes were made about how people dressed, the misuse of cameras, and inadequate communication skills. For example, Progressive Auto Insurance simulated a video collaboration call in one of their COVID-19 era television commercials, complete with comedic interruptions (Arnold Worldwide, 2020). The commercial reflected the trial-and-error video collaboration users were going through in the pandemic.

### **Theme 1: Improper Training**

Respondent 14 recognized that it was "weird," "different," and "uncomfortable" to communicate in video collaborations because it was an unfamiliar environment. In addition, communicating with people over the video was difficult because there were no business guidelines. Respondent 14 expressed, "It was like Oh my God, understanding, so now we have to work virtually, and I feel like everybody was scrambling to figure out how to do this." Workers understood how to use the platforms but not how to communicate clearly.

Respondent 23 had experience using Google video chats with family. They stated, "So while I've used Google (chat) a little bit for personal use, I haven't used it for work at all." Respondent 23 found it difficult to switch from personal use to business use without learning if there was a difference in how they should interact. The respondents answered that workers struggled with their nonverbal and verbal communication. Respondent 15 said that some people's success communicating on video collaboration was limited. "If you're not really comfortable with what you look like, what you sound like, [sic] what you look like when you're talking, the facial expressions that you make, [sic] If those bother you, then you are thinking about it too much." Users immediately became aware of how they performed on camera, the background they set, and the comprehensive presentation of their collaboration.

Respondent 22 noted the uncomfortable nature of being pushed into video collaborations. "Prior to the pandemic starting about 13 months ago, I would have been a guy that would have [sic] called in with the video off; we could just talk through the phone line." Hesitancy existed due to a lack of confidence in performance ability. Respondent 28 stated, "It was a pandemic, and we were all like, Oh my gosh! Get your head screwed on straight. [sic] You know, for the most part, everyone is trying to do the best they can and figure stuff out [sic]." Workers had no choice but to learn video collaboration communication through trial-and-error.

While workers were trying to figure out the best communication methods, companies had their concerns about switching to video collaborations. Employers worried about employees working from home slacking with day-to-day operations. Respondent 30, with a state government, remarked, "The State was very adamantly opposed to using this technology. And just to be candid, a lot of the people, my bosses, and other folks were very skeptical that State employees would put the time in working remotely." In addition, employers were concerned that not seeing someone in the office could lead to employees not doing their jobs. The respondents noted that their companies struggled to believe that virtual workers could match and potentially outperform face-to-face workers using video collaboration.

The respondents argued that not every process required video collaboration, and employers were too quick to move everything from their existing methods to video collaborations. Effectiveness does not always come from media "richness" (Daft & Lengel, 1986). Less rich media can be more effective for specific tasks. Respondent 4 recognized inefficiencies, "[sic] I'm working from home now, and everything switched to virtual. Like for the past ten years, we've always done this one thing over a 10-minute phone call, and now it's turned into a Zoom call." Respondent 4 remarked that the video call did not accomplish anything new over the phone call and was less efficient. In addition, it created breakdowns in communication by adding video. These inefficiencies were not present with the previous phone call method.

Respondent 4 recognized that there was no need for the company to change from the phone call if the existing 10-minute meeting was already successful. The shift in mediums from a phone call to video collaboration changed the efficiency. Respondent 4 added that time was wasted on making sure everyone's video and audio was available in the video collaboration as users logged on. The old phone call process was less "media rich" (Daft & Lengel, 1986) but had already proven successful and efficient. Respondent 4 pointed out that due to the company's lack of adopting video collaborations before the pandemic, new video meetings became riddled with errors as workers learned to use the program. As a result, meetings that should have used a quick phone call took longer using video collaboration.

#### **Theme 2: Medium and the Performance**

Changing mediums altered the comfort level and performance of the respondents. The respondents struggled to find the best way to perform on camera. They were confused about whether the platform should be treated like social media, television, or a face-to-face meeting. Some respondents said they used social media video messaging before the pandemic. As a result, they defaulted to treating a business video collaboration like their social media videos.

Respondent 22 expressed, "I think it's more of a happy medium [sic] between the Snapchat you know type video or the TikTok type video than an actual formal news program." There was confusion about whether workers should be informal like social media or treat video collaborations like television news. Both approaches would differ in appearance and performance. Respondents noticed that some people tried to emulate news anchors with their communication style and failed to connect with the audience. Others were too social in their approach and did not have a professional, business feel to their communication.

The respondents stated that it was hard to communicate when a user was emulating television personalities because they did not seem natural in their performance. In addition, the respondents noted that co-workers mimicked television news anchors because this was possibly their schema for performing on screen. Bartlett (1932) stated that existing memories can affect how someone views new information. People were familiar with television, and their schema for video led to them emulating television personas.

When workers mimicked television anchors, this made for poor performances because the respondents did not have proper television training. For example, respondent 22 further described video collaboration as closer to social media than television news. "[sic] It's somewhere in the middle. [sic] Maybe even more on the side of the TikTok." A social media approach shifts performance away from the formal communication style used in a face-to-face office meeting. Respondents said that LED ring lights and external mics sometimes gave the videos too much of a social media feel. The respondents felt there needed to be a balance between professionalism and a relaxed approach.

The respondents noted that companies and users struggled with mistakes and did their best to communicate through the various platforms—the lack of exact standards allowed personal styles to develop with both positive and negative effects. In addition, the respondents recognized that video collaboration users were not identical with their deliveries, and there were no exact guidelines of what to follow. Companies responded with rushed training seminars. Respondent 23 commented that too much training was on the technical side and not the performance. "I think that sometimes I talked to computer programmers, and they are very off the wall [sic]." Respondents discussed that many of their companies have technical departments that can train on the software but have not considered hiring communication professionals to train others for virtual work.

Respondent 14 discussed that more performance training could help people with camera anxiety issues. "First, you know you think that the camera might add anxiety, so having some sort of camera presence or camera practice training could be a good thing." The respondents added that they felt the need to increase their effectiveness with video collaboration, but companies seemed unsure how to train for video collaboration performance. The COVID-19 shutdown presented a void in academic and practical business knowledge about video collaboration performances.

### Video collaboration Ethos and Pathos

Walther (2011) discussed pushing older theories to their boundaries to help describe emerging technology. Studying lived experiences with video collaborations can apply Ethos and Pathos. To be persuasive, Aristotle (2001) discussed that the orator must gain the audience's trust, known as Ethos. Aristotle (2001) also wanted to engage the audience using emotional appeals, establishing Pathos. Logos establishes facts that the speaker will use to be persuasive (Aristotle, 2001). Video collaborations, much like speeches, must obtain trust between the speaker and their audience. Aristotle (2001) believed that all performances should engage the audience's emotions to produce a desired persuasive outcome orchestrated by the speaker.

Each industry will have unique expertise and language for Logos. Although analyzing Logos is excellent, the goals of this study are based on nonverbal communication, symbolism, engagement, and the effect on copresence. Analyzing Logos within this study would require specific industry knowledge for all respondent's video collaborations. It would also require recorded sessions of the respondents with their companies to deconstruct specific industry facts and wordings. Studying Ethos and Pathos allowed the respondents to discuss their relatable experiences with nonverbal communication, symbolism, and engagement that can be applied across all industries to understand copresence levels.

The respondents said that creating trust and establishing an emotional appeal began with non-verbal communication immediately within a session. Everything visible on the screen is a form of nonverbal communication. Items in the background, pictures, and personal items can all communicate if items such as these are visible on the screen. Respondents recognized that these judgments happen immediately when the video collaboration begins. However, interruptions and background visuals have created confusion affecting Ethos and Pathos without guidelines and standards. Establishing Ethos and Pathos has challenges within the virtual environment. Video collaboration users try to control the nonverbal elements, such as interruptions and distractions. Gaining Ethos in a virtual environment shifted from traditional, professional norms commonly associated with face-to-face communication into a more informal, relaxed online communication style. Respondent 7 spoke about interruptions, "My kids know, hey Mom has got a meeting. You know there's going to be boundaries, and of course, there's going to be parents that don't know how to keep and continue those boundaries." The respondents said video collaboration users learned to forgive screaming kids in the background, pets that wandered onto the screen, and other accidental mishaps due to circumstances related to the COVID-19 pandemic. Respondent 8 noted, "I mean, my cat made an appearance on one of my calls this morning, so he's a regular appearance guest." Disruptions and interruptions that would have been considered unprofessional in an office setting were forgiven in the virtual home office setting.

# Setting the stage: Video background

Controlling distractions and interruptions was a commonality that the respondents mentioned. They implied that sound and visual distractions could be minimized if users were in a corporate office compared to the distractions within the virtual home office. It was likely for a traditional office to have a professional atmosphere allowing video collaboration users to control the elements. Respondents attempted to recreate a professional feel to their virtual office. Schroeder (2011) recognized that performances change to fit the audience. Changing elements in their home to mimic a professional office met the needs of the professional audience's expectations of a corporate office. Much like setting a stage or building a production set, the respondents attempted to build out their home workspace mimicking their corporate office locations. The goal would be to have a professional appearance and minimize distractions. Goffman (1969) noted the importance of characterization in backstage and frontstage performances. Setting the stage for the camera, users created a front stage and a backstage with their video collaboration offices. The respondents created a front and backstage, adjusting their video collaboration backgrounds to appear professional for the camera's view. Everything outside of the camera's peripheral view and behind the camera would be backstage and not privy to the audience.

## Characterization and breaking the fourth wall: The effect on copresence.

Triplett (1900) noted that performers can conjure a deception to the audience, presenting a character that is not their natural persona. This characterization includes all verbal and nonverbal communication, including setting the stage for their performance. For example, deception would indicate that virtual workers were in their corporate office and not their home office. Therefore, setting the home office as the corporate office would be a deception. Multiple respondents recognized that the home office setting was challenging during the COVID-19 pandemic. Social distancing was the norm, and families were home. As a result, it was difficult to eliminate distractions and set the professional stage.

The home office did not have the professionalism of the corporate office. Blumer (1986) recognized that society's rules and standards are socially constructed. The expectation of professionalism consisted of socially accepted standards unique to each organization. Triplett (1900) stated that the act could not be broken for deception to work. The performer and the setting had to stay in character for the deception to work. The respondents said that workers attempted to adhere to their company's socially accepted standards of professionalism in the home office, but this proved challenging.

#### **Theme 3: Disruptions**

Triplett (1900) argued that conjuring a deception required the character not to break the act. An actor cannot break the act in a play and must stay in character. Distractions break the fourth wall of a play performance allowing the audience to see the individual when they are not in character. The fourth wall is the imaginary line between the audience and the performers on stage for a play (Stichter, 2016). Breaking the fourth wall stops the play, and the actor disengages from the other actors. A disengagement stops the action and momentum of the play. The character must return to their role to reengage with the other actors.

A video collaboration participant that disengages from their computer screen attending to an interruption can break the fourth wall during a video collaboration. The participant will need to reengage in the video collaboration and attempt to recapture the audience's attention. Within the home office, distractions proved to be a struggle. Respondent 26 stated, "Here you get somebody cutting down a tree, somebody mowing their lawn, and somebody walking on your roof." It is challenging for virtual workers to have 100 percent clear audio or video without some distraction. Like a play, the momentum is broken, and the two parties must work to reengage. The act, or the deception, is broken.

Triplett's (1900) conjuring and deception concepts can be applied to video collaborations. The video collaboration users break their professionalism and character, reacting to the distractions within the home. The other party in the video collaboration must decide whether to react to the distraction or pretend it did not happen. These distractions can break the session's progress, removing both parties from the moment. The moment is comparable to an act within a play. When the actors break character, the play's momentum is stopped. Likewise, when video collaboration users distract and break professional character, there is a moment of uncertainty where the user is not in character. During the COVID-19 pandemic, the imperfections of a home office created many instances of breaking the fourth wall due to interruptions and distractions. Respondents found themselves reengaging and forgiving interruptions because these instances were commonplace for users. For example, Respondent 8 noted that it could be expected for "your kid to walk in (the video) with math homework [sic]. We have a level of acceptability now because we are trying to do business out of our home." When a child interrupts, the user may disengage from the screen and break the fourth wall to the audience when they ask the kid politely to leave. At this moment, the performance and professional characterization are broken between the two parties. When reengagement occurs, the audience must decide to forgive the other party for breaking professional character and reengage or judge them negatively for lack of professionalism. The respondents recognized that the pandemic created a forgiving atmosphere. The forgiving atmosphere allowed participants to reestablish Ethos and Pathos after breaking the fourth wall.

Triplett (1898) argued that copresence existed when two people were aware of each other's existence. This awareness would affect how they acted and reacted to each other. The more aware of each other they were, the more their reactions would change. If one person's engagement dropped off, copresence also dropped off. When this happens, one party is no longer aware or engaged with the other. Breaking the fourth wall of the performance can temporarily lower engagement and copresence levels until engagement is recaptured.

A video collaboration participant turning away from the camera attending to a child, moving a pet, or checking on another distraction can eliminate their eye gaze on the screen; engagement and copresence drop when this eye gaze is eliminated. As a result, the other party has a momentary sense of not being engaged. The audience can then become distracted and break the fourth wall themselves, choosing to check email or cell phone and direct their attention away. Both parties must regain acknowledgment with each other, establish eye gaze, and then copresence can be established. When the participants have maximum copresence, they will be engaged and aware of the other's increasing performance (Triplett, 1898).

Breaking the fourth wall and attending to personal distractions were very common in video collaborations during the COVID-19 pandemic. Participants were more forgiving of circumstances in the virtual home office and did not expect a sterile corporate environment. Respondent 7 noted, "I think we're more forgiving because we're in the beginning stage." Participants recognized that everyone was new to the platforms, and there would be learning curves.

Breaking the fourth wall was a momentum breaker that could lower copresence levels, but people did not mind the recovery time to regain everyone's focus. The respondents recognized that it was not uncommon for the audience to choose to react fondly to the disruption. They could laugh at a pet on-screen or someone's young kid making noises in the background. The audience could break focus with the subject task but still try to stay engaged in the situation. Copresence levels are not perpetual and will fluctuate as engagement levels fluctuate.

Disruptions would be unacceptable in a professional office setting, but the virtual home office captured real moments from workers' lives. Respondent 14 recognized, "And I think we are forgiving, I think we are being understood and empathetic to the fact that people are at home, so we know they have their daily lives going on." Users realized that workers were going to have moments beyond control. Respondent 13 stated, "Then the way we've had to work and people juggling work and kids, you know, there's also been a lot of forgiveness there." Ethos and Pathos can be established if the audience is forgiving towards the distractions.

Video collaboration participants in the pandemic were unwilling to pretend that they were in an office. Respondent 26 noted, "You are not at work. We can pretend like we're at work, but I just don't think we are when we are at home." The office and the home have two sets of dynamics due to the uncontrollable distractions in a home office. Respondent 18 recognized, "We need to humanize each other a little bit more and soften it up so that you can get more from people, be a little more understanding." The bosses and the employee were both susceptible to faux pas in the background of videos. Status or position does not eliminate the possibility of background noise or distractions.

Respondent 8 discussed a situation with the boss having pets coming on the screen: "Like I said, leveling the playing field puts everybody on equal footing." Bosses could not fault or punish employees for uncontrollable distractions any more than they could prevent them from their videos. Respondent 27 shared, "For example, in a meeting, an all-hands meeting that we had with everyone in the company [sic], one of the executives was speaking, and his wife started vacuuming." The audience chose to joke about the boss's home and then re-engaged in the meeting. When the distraction was finished, the boss was able to continue the presentation—recapturing engagement, copresence, and preserving Ethos. Bosses could not get angry about employees' lack of professionalism because both parties experienced these issues.

The respondents recognized that workers attempted to control the elements, but things happened in their videos due to the nature of a virtual home office. During the COVID-19 pandemic, families were home. Children were not at school, spouses were likely working virtual, and pets were abundant in the homes. Everyday occurrences continued that became interruptions. Home repairs, package delivery, appliances running, and other common home occurrences became distracting situations for those participating in video collaborations. Respondent 10 discussed interruptions, "Absolutely. So, there's some of it, especially with families, and they're (distractions) kind of a normal thing. Someone's dog barking at home [sic] I think it is how you're using and engaging with the environment." Participants must control the environment and avoid too many fourth wall breaks. If the breaks are minimum, then the distractions can be forgiven.

Too many momentum breaks can lead to a drop in copresence. These drops diminish Ethos and Pathos and lower engagement. Respondent 14 discussed that any interruption must feel natural and unpreventable, "I understand that we are home, but in the same respect, we're also working. [sic] There's going to be things happening; we accept that as long as it feels legit." When the distractions were continuous, and the guilty participants did not try to control future disruptions, other participants were less likely to forgive the situations. Therefore, it is crucial for the distractions to be minimal and controlled as much as possible.

Trying to find a location in the home for video collaborations with minimal distractions can be a challenge. Respondent 1 explained, "Over the last year, you know we've all been working from home with the pandemic, and you get to see into people's homes." It has become commonplace to see people's dens, kitchens, bedrooms, and other rooms throughout the house. Seeing inside people's homes brought up professionalism issues. Users questioned what video collaboration participants should use as a background in their videos. Respondent 29 shared, "You could see in the backyard, and the swing set and everything, and the first thing that came in mind is while you're CEO of a company and you don't have an office to work." Participants need to consider what their location communicates nonverbally to their audience. Some participants chose to use a specific room in their house for a home office and attempt to control all intended or unintended nonverbal messages.

# Theme 4: Virtual Home Office Set Up

Respondent 8 recognized that people's homes were not designed for business and "Not everyone is going to have a home office." Although some homes may have separate rooms or available space with an office layout, many apartments and condos do not. Nevertheless, participants during the pandemic learned to find a comfortable spot and create a home office whether they lived in apartments, houses, or mobile homes. Respondent 28 added, "I like to have things closed off, door closed, [sic] and say don't bother me. [sic] I want total silence, and I want to give all my attention to the meeting, who I'm talking to, and what I'm talking about [sic]." Successful video collaboration participants try to make engagement paramount in the home office. However, full engagement requires minimal distractions, and interruptions must be limited.

The attempt to engage is more important than the physical space used for participation in video collaboration. Respondent 8 discussed that a separate room is not always available and said, "Sometimes they're just plopping down wherever they can, but that doesn't mean that they are any less of a professional, and they can't do their job just as well as somebody else." If engagement is the priority, the space does not change the communication methods. If there are distractions, then these must immediately be removed for clarity. Respondent 7 emphasized, "Yes. I think we need a controlled environment. You know, it's like right now [sic]. I'm in this conversation with you..... My dogs. I know if they get loud, they go outside." A controlled environment can allow the removal of potential distractions. Respondent 18 recognized, "You don't feel like we need to set one room in our house to look like a production studio." The virtual office does not have to be a separate space, but it must show an effort to minimize interruptions and distractions.

The background of the participant's chosen video space should be analyzed for any intentional or unintentional nonverbal communication. The respondents recognized that virtual office backgrounds vary using blank walls, existing home decorations, or a produced visual to help build credibility. They stated that some users choose to hang awards, degrees, or other signifiers to help build their credibility. Respondent 21 said, "Being in what I call the professional organization, regardless of what we do, but in a professional organization and then working with other professionals is that that framing is extremely important." The idea of framing is positioning the background to build a story. Goffman (1986) recognized that the framework allows the performer to structure their communication. Like a picture frame, the picture exists within the framework and stays within boundaries. Framing a background would be presenting any elements to influence an audience's thoughts about Ethos and Pathos.

The respondents stated that users choose to use different backgrounds to fulfill the need of the sessions. The more professional the setting and goal, the more likely participants are to frame the background. Respondent 20 noticed changes in their sessions, "I mean, I think the background is very important and I've done some job interviews and I'm very selective about what's in the background." Depending on the video collaboration's goals can help decide if the background needs to be produced or just functional. Respondent 18 noted on functionality, "I think it's important that everything isn't flawless, that we understand this is more authentic. You know I'm meeting people [sic] (virtually) in their homes, and it's OK that it's not perfect too. It's not a movie set." Perfection does not have to be the goal.

Video collaborations offer a voyeuristic view inside the home. Participants often use family rooms as their setting, including personal photos on the walls. Respondent 2 stated that people may be curious about what is in others' houses, "Or you know, for us nosy onlookers, we like to look around somebody's house and be like, oh, that's a cute picture." Participants' personal lives become on display, and these pictures are a form of nonverbal communication. Respondent 1 learned things about people they previously did not know just by looking at the background in video collaboration. "I think that the background really matters, especially since over the last year, you know, with the pandemic, we've all been working from home, and you get to see into people's homes." Users can judge each other based on the pictures they see or personal items lying around. Respondent 1 observed, "I was just completely floored because behind them were bookshelves full of trinkets and souvenirs from travel, and their favorite things and things from their favorite places they've been." Each user may view the trinkets and souvenirs differently based on their race, class, or gender identity.

Respondent 11 said personal items could help engage the two parties in the initial conversation. "Oh, that could be a conversation starter in an icebreaker." When first logging into the session, personal items can communicate a fun personality to the participant. The context of the session and the audience must be considered for proper nonverbal communication. Anything with potential negativity should be examined. Personal items, such as toy collectibles and sports trophies, are often popular items that appear in backgrounds. Respondent 1 guided that they often looked for conversation starters in their audience's frame. "But if, like, you have a nice bookcase behind you and you have your little Funkos (collectible toy items) lined up, and they look good, that's freaking awesome it." If the personal items are organized and not offensive, it may work to soften an image.

A boss may try to connect to employees by placing personal items in the background of their frame to show a fun side of their items. Respondent 1 recognized, "It makes me connect more with you on their personal level and it just helps make you more of a person." Opposite of this, awards and college degrees can nonverbally intimidate or be show an aggressive style of the personality. Respondent 14 discussed, "[sic] If you're home and you're sitting in a room with all your degrees (college) back there. [sic] I mean, I don't know if I would think it was bragging, but I think it would." Every situation and audience may look at the background differently. Berger and Luckmann (1967) acknowledged that each person's worldview and lens would be influenced by the social groups in which they identify and belong. The audience's lens will interpret the background in video collaborations with the world. Because of this, video collaboration backgrounds must be analyzed with a keen eye for all potential nonverbal communication. The situation and the audience must be considered.

Not paying attention to the personal items and background can potentially diminish Ethos. Respondent 12 added that they were once in a sales pitch where the background eliminated Ethos. "It looked like he was in his dorm room [sic]. His towel was like hanging over the rod, [sic] you're wanting to sell me a product, and it looks like you're working out of a dorm room." The lack of attention to the background diminished Aristotle's (2001) Ethos, Pathos, and Logos within the sales pitch. The respondents recognized that attention to the background should remove any potentially damaging or distracting nonverbal messages to preserve Ethos.

Respondent 8 noted, "Let's say I were to walk into a CFO's office. Typically [sic] somebody in the C-Suite right is going to have a nice swanky office. It's a little bit different to see somebody in their.... in their home setting." An executive's regular office may feature an oak desk, expensive computer, and impressive décor. This vision of what an executive's office should look like can communicate how someone may predict the executive to act. In the virtual home office, an executive that does not pay attention to their background can eliminate their mystique, power, and Ethos. For example, executives in a virtual home office may try to engage

in powerful oratory, but a pile of laundry behind them can damage their message by eliminating their Ethos. In addition, there is too much of a backstage view (Goffman, 1969) that can negatively impact the participant's stage (video) performance. Respondent 27 recognized, "You know, like, for example, on the meeting today, one of the executives had, you know, you could tell he was in his living room and had all of his stuff out in the background." These personal items were a distraction to the goals of the collaboration. It was difficult for the participants to stay focused because the personal items were distracting.

The copresence levels dropped when the focus and engagement dropped due to the visible personal items. These personal items created visual interruptions, which broke the fourth wall. Unless the personal items were removed, the audience must decide to forgive the other party for the distracting personal items. They may also choose to disengage completely. If the distraction and personal items are too prevalent, it may prevent the user from achieving Ethos and Pathos with their audience.

The respondents guided that there is no exact list of which items are distracting because every audience member will decide for themselves. It is best for users to critically examine their virtual home office setting for anything that could be distracting. Respondent 3 discussed that companies often give guidelines of things that should not be in the background. "They don't want highly politicized images. They don't want swear words in the background." Because video collaborations often happen in the home office, sometimes this can be a challenge. Things that are unique at home may be against professional standards for companies. Respondent 3 experienced, "Like I have a sign that is totally inappropriate for the work environment. But this is my home, and so it's hanging here, and I would never go in front of that sign for work, you know." Workers must decide where they may have something inappropriate for work in their home and try to avoid these areas during video collaborations.

The respondents said video collaboration audiences would scan and analyze everything because of the camera shot on the screen. Every item communicates to the audience. Respondent 24 discussed, "So I would say maybe there's a possibility that.. that people would judge you based on your surroundings [sic]." It would be best to clear any items that may be distracting. Respondent 11 noted, "I think professional is, you know, making sure you don't have like you're at a rave in the background, or you know, like anything crazy." Users should use judgment on what items in the background could potentially communicate to others. Respondent 1 shared, "[sic] I see things in the background that lowers my opinion of them that like if they're clearly in bed talking to me. It just bothers me. You're in a business meeting. Don't be in bed." Respondent 1 said these kinds of distractions could diminish professionalism and hurt the persuasion of the speaker.

Choosing to eliminate the background with a blank wall can also communicate messages. Respondent 1 chose to adjust the background color of their home office to produce different background imagery. The background was a regular blank wall until they painted it with various shades of color. [sic] the cream color behind me with my skin tone made me look washed out [sic] online. For me, I'm trying to convey that I am creative, so that's part of why I did funky colors behind me." The color change attempted to set the stage without placing any items in the background that could be viewed as distracting. Respondent 1 said the nonverbal message they wanted to show was a nontraditional thought process. They said that this message connected and failed depending on different audiences. Video collaborators should always be aware of their audience's perceptions. Specific changes may work with one audience and not work with another.

*Artificial computerized backgrounds.* Many software platforms offer users the opportunity to have virtual backgrounds. These virtual backgrounds can include preselected formats by the software or sometimes offer the user a chance to add their picture. These preselected backgrounds and pictures should first be analyzed for intentional or unintentional messages. Mistakes can be made with computerized filters creating unintentional mishaps. Attorney Rod Ponton's mishap became a viral internet sensation in February of 2021 while attending a Zoom court session. Ponton used his secretary's computer. A CGI cat filter was in place of his head when he logged into the session. His secretary's young daughter had previously been using the filter and did not know how to turn it off. He was prepared to litigate the court case with the cat filter present for his video, letting the judge know it was an accident and he was not a cat (Leis & Mazzarelli, 2021). Although the moment was comical, this could have impacted Rod Ponton's professional reputation. Instead, his viral status became a prime example of professional mishaps, miscommunication, and forgiveness using video collaborations.

Using a blurred effect or CGI picture can negatively impact the session. Respondent 10 added, "[sic] sometimes if it's overproduced, then depending on the meeting it can come off as kind of an inauthentic, or you know, a creating an environment that isn't really real." In addition, this strategy can show that the participants may try to control the background too much. Respondent 22 noted he does not like fake backgrounds or CGI because "I like reality." However, there is a fine line between having a distracting background, producing the background, and applying a CGI overlay filter to the background. Respondent 15 recognized, "I hate the phrase be real, but I think you have to," Respondents noted that the blurry effect and CGI overlay filters apply a computerized feel to the conversation and can unintentionally communicate cold feelings and emotions towards the audience.

Respondent 4 noted that overproducing the background can be used in some circumstances, such as, "If you're going to be interviewed for the news or something like that, but just for like basic conversation, I wouldn't see the need for it." The respondents stated that overproducing the background can provide an atmosphere that does not feel real to the audience. The audience will always decide the fine line between setting the stage and overproducing. If the background is not believable to the audience, this can break their engagement, affect Ethos and Pathos, and lower copresence levels.

*Eliminating the background with a picture.* Platforms offer the option of eliminating the video portion of the call and placing a picture uploaded by the user. Users can upload anything, but most upload a professional headshot. Uploading pictures other than headshots can lead to unintended messages depending on the nature of the picture. It is also an option just to show the name or initials of the user depending on the software platform. The user should analyze the picture chosen to make sure it fits the goals and norms of the meeting. Each meeting and audience should be considered when choosing the correct picture,

Not using video removes a layer of communication and the meeting has similar capabilities to a phone call with only audio capabilities. Respondent 12 discussed that it was a letdown meeting new clients online when they do not have a video or a picture. "Great, can't wait to meet him and they come on the screen and there's no picture. It's just their name, like, I don't even know what you look like. Come on show me your face!" Discarding video and only using audio-only can create anxiety and nervousness when all participants are expected to use video. Respondent 11 said, "[sic] It's definitely important to see if your audience is engaged, what their body language is. Because you can be just talking [sic], But you are not really getting that feedback to see if you're on the right track." Users may have planned to read expressions, hand signals, and nonverbal communication, which would not be possible in an audio-only session.

The more layers of communication used, the richer the media is for levels of communication (Daft & Lengel, 1986). Using collaboration platforms with video can increase engagement and increase communication levels. Arnfalk and Kogg (2003) argued that complex dealings should have the most media-rich possible. Respondent 23 said, "Yeah, I would say it be similar to that very, very similar to the phone, but the difference is we have this (video)." When the video is not used, and the audio-only session, the media richness is like a phone call.

Respondent 23 noticed that people without video do not feel invested in the session. "But, uh, I just wonder why people aren't using it like what are they doing? Are they engaged?" It is impossible to honestly know what the other user is doing while in the session. The lack of video allows them to successfully block the visual aspect and allow them to engage in other tasks. Respondent 30 recognized that this could be viewed as a negative situation and said, "Yeah, you know, if it's just a picture, I'm thinking, did this person not get up and do their hair, you know? Did they just roll out of bed and jump into this meeting?"

The user without video has power in the session and can choose to engage partially or not, affecting the copresence levels. Respondent 27 noted on not engaging, "[sic] There's definitely freedom to feel like I can pick up my phone [sic]. I was particularly zonked out, so I probably had a good nap for about 10 minutes of the hour-long meeting." Choosing to nap eliminates engagement, and the session becomes one-sided. Without reading visual feedback, such as the audience napping, the speaker will continue to talk about whether the engagement levels have dropped or not. Dropped engagement levels lead to sessions where the audience is not listening or paying attention. The speaker can continue presenting without engagement and no copresence in these cases.

Respondent 25 stated that using pictures without a video is a control mechanism, "When you do throw that up (picture), you're probably (not paying attention). I mean, that's when you go in and sort of checking email." Without video, it is possible to multi-task, and engagement becomes an option. Participants can ebb and flow with their chosen engagement level. Respondent 10 discussed that it is a choice of when to use video or a picture. "It kind of depends on a couple of different things. Number one, who it is that I'm speaking with [sic]." The less important a participant feels about a session, the more likely they will use a picture instead of a video. The respondents recognized that when they do not use video, it can lead to doing other tasks and giving the other party minimal or no engagement.

Respondent 10 noted, "Honestly, I'm doing something else at the same time that I'm listening to their sales pitch, and so if that's the case, you know I will take my video (down)." If the meeting is gauged as necessary, Respondent 10 recognized they put the video up from the beginning. "[sic] If it's a one-on-one type of a meeting where it's a high impact or the person you know I'll give my full attention and attend to put my video on." Respondent 30 does not like to use pictures and always places their video up from the start of every call. "Yeah, I, I think the visual of it; I much prefer a live visual, a face-to-face meeting as opposed to a picture." Using a video collaboration platform to its fullest potential maximizes engagement and copresence levels. Respondent 30 also noted, "[sic] I'm a very social person that at least I get to see that person's gestures and movements. I think that that adds to the flow of communication because those gestures are a part of human communication." If the attempt is made for both parties to use video, the session can be more dynamic than a phone call with the added video layer. Reading

movements, gestures, and emotions can allow for more robust message understanding and meaning.

## Theme 5: On the Go Mobile Sessions

Many meetings during the pandemic happened on the go. Because users can participate with cell phones or laptops, some collaborations were outside the office setting. Collaborations took place at kids' sporting events, the beach, the park, or the grocery store. Some stores and social events reopened as the country moved through COVID-19 phases after the initial shutdown. These shifts in schedules created a situation where workers needed to attend collaborations on the go. People were anxious to leave the house and chose to social distance. Collaboration users took their audience to many nontraditional locations for business meetings.

Respondent 13 stated that situations present themselves and, "You know, sometimes people have to pick up their computer or their phone and walk to another room because something is happening." To stay engaged, sometimes the equipment must change locations. There will not be time to produce backgrounds or adjust the lighting. The mobile session must find the best possible visuals, audio, and wireless service to attempt to engage. High-speed connections and a drop in cell phone connections can create issues when moving locations.

Respondent 1 recognized that technical and connection challenges prevented communication from being clear when moving locations. "So, we're not having the communication that I wanted to have, but also you're like glitching in and out, so it always turns into like just call me when you're back (online or at home)." If the wireless service is not producing good video and audio, it is best to end the session and make a new appointment. Drops in audio and video can lead to miscommunication affecting the goals of the meeting. A lack of quality audio and video can also be when workers attempt sessions in nonprofessional locations. Because of the freedom video collaborations offer, some workers struggle with non-ideal locations that offer too many distractions. Respondent 10 described the situation of people shopping and said, "So if you're walking through Walmart, there are so many external stimuli that you are likely to be distracted. You are looking for something (shopping). I don't feel like [sic] I have your full attention." Respondent 10 recognized that the technical aspects of high-speed connection and video clarity could be present, but a lack of engagement can lead to an unsuccessful collaboration. Respondent 27 discussed, "So you know that you're the lowest priority in that call or in that meeting." If someone is shopping, their focus is not on the call. Divided attention creates drops in engagement, breaks in the fourth wall, and lowers copresence levels.

The respondents stated that people are used to being on the go, and wireless service allows them to take their sessions wherever they please. Cell phone and tablet participation can unintentionally communicate a lack of respect to the session and attendees. Respondent 24 noted, "Then if we're on the laptop or desktop, that's our professional courtesy back to the other person. Hey, I'm here. I'm engaging with you on this call. This is our set time." The desktop computer can signify that the session is a priority and there are not external factors pulling attention away from the session. Respondent 24 said that walking through a store shopping while participating in a collaboration session on a mobile device can communicate divided attention. The audience may not feel they are top priority/

Respondent 20 recognized that all sessions are situational regarding the needs of the session and the relationship with the other party. "I've done a number of meetings that were less formal where [sic] I did one from my car while I was driving home, but I told them ahead of

time." Respondent 20 said that explaining the situation when setting the appointment can allow the other party to understand the timing.

Respondent 10 noted the difference between sitting in the car and driving. They guided that when driving, the engagement changes because external stimuli can pull attention away from the call. The driver must pay attention to the road and cannot give full attention to the video collaboration. They said that sitting in the car and not driving allows maximum participation and potentially blocks noises and distractions outside the vehicle. They suggested that users who attempt sessions at kids' soccer games, golf courses, and other social gatherings should leave that setting and go to their car to complete a collaboration session. Blocking external stimuli can still lead to a successful session even though they are not in a home office. Respondent 10 discussed, "But you know in again kind of just the day and age and where we are right now. [sic] But the fact that you're sitting still in your car still communicates to me that this time is important." If strong engagement is present while sitting in the car, copresence levels will also increase if distractions are minimalized.

When choosing locations, the device must also be considered. Laptops, Chromebooks, cell phones, smartwatches, tablets, and other smart devices can all be connected to high-speed Wi-Fi or mobile cell service. If these services are firm and not weak, the devices can produce clear audio and video. The respondents noted that the device must be able to operate the Wi-Fi and video collaboration platform with synchronous video and audio for the best results. Depending on the platform, these devices also can run full or limited versions of the video collaboration applications. Many of the respondents stated that engagement was more important than the device. If attention was given to controlling distractions, the device was less important than the location. The respondents recognized that the smallness of some cell phone screens made it challenging to engage visually during sessions. The device was in question if it failed to operate correctly or did not provide an acceptable range of usability for both parties.

Although much attention is given to camera lenses and equipment manufacturers, the respondents noted that they cared most about acceptable video quality. They stated that video quality does not have to be Hollywood production in style. In their sessions, the respondents also noticed that backgrounds varied between professionally produced stage sets, in people's homes, parks with quiet settings, or in the front seat of someone's vehicle while parked. The background of these locations should always be considered for unintentional nonverbal communication. The respondents noted that any location could be used for successful collaborations if the audio and video were clear without disruptions.

# **Theme 6: Technology Use**

Video collaboration does not have to be produced with lights and audio as extensively as social media or television. Respondent 8 noted, "You know, I don't think that somebody has to have a ring light in the halo around them and whatnot for them to be effective online." Users may find that the natural lighting in a room does not require them to use any extra lighting. Respondent 3 recognized, "If you're really worried about whether I have halogen light bulbs or LED light bulbs, you're probably not in the right place for our meeting. You know what I mean?"

If extra light is needed, any standard home light or lamp can do. Increasing essential lights will be acceptable if the picture is too dark or pixelated. Respondent 15 argued that sometimes a little extra light might help. "If it's really washed out, they can't see your face. I think that it doesn't have to be perfect, though." Adding direct light can ensure that facial expressions can be read for proper nonverbal communication. Respondent 22 has a small light on the desk next to their computer screen. "I keep a little light up in front of me. [sic] I've got room

lights on, but (the room) it's kind of dim." If the picture is too dark, it can lead to a lack of communication or miscommunication.

The respondents said that external microphones and speakers were not needed unless sound issues were present. For example, external devices can be used if a room has an echo that prevents users from speaking or hearing clearly. Respondent 5 noticed that a headset could eliminate these issues. "I have headphones for the audio so that you're not getting that reverberation kind of thing going on." If there are no issues with sound production or reception, these items are unnecessary. Respondent 28 noted other uses for headphones, such as "I use headphones and a mic so that only one part of the conversation is blaring through my home instead of two." If someone else is in the home, this minimizes the disruption from the video collaboration. The respondents guided that functionality is the most important for sound and lighting. Expensive external equipment is not needed for collaborations to be successful.

Any severe drop in light or sound quality can create a distraction that affects both engagement and levels of copresence. Respondent 8 noted sound and lighting, "But certainly you know making sure that you can hear someone and see someone is important to the conversation." Inadequate lighting or bad sound can prevent Ethos and make that individual seem unprepared and unprofessional. The respondents argued that it is best to test lighting and sound before beginning a collaboration. They said that users away from a home office in public risk poor sound and lighting if they use unfamiliar locations for their session. The respondents stated that sound and light function is vital without glitches, drops, or other issues. Any miscues with sound can break up important thoughts and affect Logos.

#### **Theme 7: Camera Angles and Proximity**

Video collaborations frame a chest headshot referred to as a medium shot (Mazur, 2000). Unlike a close-up or extreme close-up, this shot allows for hand movements to be captured by the camera. Users must consider Hall's (1966) proxemics when choosing camera angles. Hall's (1966) personal zone would be where traditional face-to-face conversations occur. When using video collaboration, face-to-face conversations would be mediated through laptops or cell phones. Mediated communication allows users to replicate eye contact virtually (Anacleto & Fels, 2015). Each user looks into their camera, projecting an image onto the other party's screen, replicating a face-to-face eye gaze.

Finding the correct spacing to produce clear video and audio is a concern for many video collaboration users. Respondent 19 noted that people have difficulty picking the proper distance and should concentrate "having a good camera angle where I'm not looking up somebody's nose." Too close of an angle can allow the audience to peer deep into the mouth or nostrils. The wrong camera angle can produce an unflattering and distracting visual that can lower engagement. Respondent 8 said that too close of an angle could make a user feel uncomfortable. "I mean, sometimes it could; it can feel a little bit awkward. You kind of want to be like, whoa, back me up a little bit."

If the camera angle feels too close, the other party may be distracted. Respondent 10 pointed out that "it's hard, maybe to see their expressions, or nonverbal if they were too close. Maybe they're holding the cell phone and they're not used to a selfie." Handheld selfie angles can lead to difficult camera work, presenting inconsistent spacing. The respondents noted that some users have a small tripod or use a book to hold the camera up as a homemade stand. These methods can try to limit the inconsistencies and harsh angles. The respondents stated that the best cell phone angles should allow the midsection to see all hand motions and expressions. If the

camera work is inconsistent, the audience can become distracted and disengage from the session. Respondent 1 recognized that spacing could affect sound quality. "It has to do with the microphone, but if they're too far away and rather than getting like clear audio, you get that roar out like the Charlie Brown teacher." In addition, medium or full-body shots can risk audio clarity by producing muffled sounds without extra sound equipment.

The respondents said that laptop microphones work well, but a negative aspect is that their sound diminishes when the user moves more than a few feet from the device. They stated it was difficult for the device to pick up sound from a distance. They also recognized that the camera image could also pixelate, especially if the lighting is low if the user moves away from the camera. Multiple respondents noted that cell phone cameras have better microphones and cameras than laptops, but it can be difficult for the user to see the other party on the cell phone screen. Depending on the size of the cell phone screen, this can be a clarity issue sending and receiving video in a collaboration.

Camera angles can also adjust the visuals and provide users extra confidence in their appearance. Respondent 7 noted that she was self-conscious about her size in person, but camera angles allowed her to adjust her image to feel more confident. "I'm a pretty thick girl. [sic]I would rather interview on Zoom any day of the week than have to go interview in front of somebody." She felt more effective online than in person. Camera angles allowed her to produce an image where she felt confident with her appearance. Respondent 1 noted, "[sic] Seeing me from a really nice angle and not seeing like a full body shot. You have no idea that I'm actually like super plus size and it's something that it will react to." Respondent 1 felt that people react to others' size when in person, which can hurt Ethos and Pathos. Using camera angles eliminates these reactions and allows users to establish Ethos and Pathos while feeling confident about their appearance. Respondent 23 noticed being 6 foot 10, "When you're physically that much larger than someone, I think there's a lot that goes on in a two-way communication that we kind of lose when we're on in the virtual realm." Respondent 23 recognized that in a face-to-face conversation, people become passive because their height can be intimidating to them. Adjusting camera angles in video collaborations removed the height and intimidation elements, allowing for an easier back and forth conversation. The respondents pointed out that users can adjust angles to help communicate more confidently and effectively.

## **Theme 8: Attire and Nonverbal Messages**

When the COVID-19 shutdown started, the respondents recognized that their companies provided few guidelines on what would be considered professional clothing for virtual work. As a result, they were concerned that their attire could be too professional or too casual. For example, respondent 19 noted that companies missed out on guidelines at the start of the shutdown. "I think that when I started with this company, they gave me a really strict guidelines about what you what you're supposed to wear when you're an in-person meetings at different levels, but they don't have that for video, and I think they really need it for video."

Respondent 29 stated, "No one I know wears a suit and tie anymore and we don't need to." Workers felt that if they could do their job from home dressing either casual or comfortable, there was no longer a need to wear professional work clothes. Respondent 28 noted that if people were doing their jobs, their attire was not affecting their performance. "[sic] When I'm working on this stuff on my own, it really what I'm wearing doesn't matter if you're comfy at home and a T-shirt and a pair of shorts, I mean it, it doesn't affect performance." The respondents agreed that anything considered offensive to others or unkempt should be analyzed for nonverbal messages. Respondent 19 said people should be making an effort to be fewer workout clothes casual and more corporate casual. "I think that it... they would make a better impression if they if they did try a little harder and didn't show up in their sweatshirts and their bandanas." Video collaboration users were forgiving of people working from home, and attire was also forgiven as one more unique issue with the virtual home office. Respondent 17 recognized that some individuals went too far with their comfort. "You can't be sitting there with your fuzzy-wuzzy. These, you know, picking Cheetos out of your hair while you're in a meeting with like 500 other people. And we're all trying to solve. You know this pandemic issue." Without providing standards at the start of the shutdown, some individuals pressed the limits of comfort, casual, and professional office wear.

Respondent 22 stated, "Not sitting in a hoodie on your couch with the TV going in the background is important. [sic] I think when it comes to appearance, I think it's almost like just sitting in an office one on one together." Companies failed to consider that people would wear non-professional attire because they were in their homes. Respondent 25 said, "95% of the time, you know it's video, and that could be, you know, because they just rolled out of bed. They didn't do their hair; they didn't take a shower." The respondents said they woke up later without commuting and taking kids to school. Their previous schedule may have taken a few extra hours to arrive at the office prepared in the morning. They could now get out of bed a few minutes before a video collaboration started and wear whatever they wanted.

Respondent 4 noted, "Uhm, you still definitely want to sound and look professional and not just look like a hot mess like what most of us really are in real life." The mix and variations in people's attire challenged the definition of professional. The respondents stated that they chose to judge or not judge others by what was considered professional or not professional due to a lack of a standard. They noticed that some workers would only dress professionally from the hips up. Adjustments were made to the camera angle to ensure the audience could not see them wearing gym shorts with a collared shirt. Respondent 3 said, "You are here to work. You know, from the chest up, they wanna see you looking pretty professional."

Respondent 28 discussed that the relationship with the other party on the video collaboration was the key to what to wear. "People that I had relationships built with, they would introduce the informalities. [sic] After we'd worked together for a long time, (we) would be like hey don't dress up, can we not?" If the relationship were established, the two parties could decide not to dress up for video collaborations and reach their goals if the desire was mutual. Respondent 8 recognized that credibility would not suffer from dressing casually if the relationship had trust. "I don't think anything about it if they show up, you know, on a conference call, and they've just come from a jog outside because, you know, I know them." It is still necessary to build trust and credibility early in relationship building. During these phases, respondent 8 recognized the need to dress up. "If I were meeting somebody for the first time and establishing a new relationship, say in.... in my case with a new partner in my market [sic] I would." Workers and companies need to establish guidelines on how to present an image.

The respondents argued that each company should decide their virtual norms by talking to their employees to find out what is currently working. The respondents stated that they have succeeded in the pandemic with the current method, and there may be no need for a complicated standard. The respondents stated that employees and companies must work together to find what attire does not send wrong non-verbal messages.

## **Theme 9: Verbal Chit-Chat Rapport Building and Ethos**

Respondent 23 said they log in two to three minutes early for every video collaboration session. "That's my rule that all meetings and I end up chit-chatting until about 3:00 or 4 minutes after the meeting is supposed to start, and then whoever is leading the meeting typically steps in." The respondents guided chit-chat allowed for relationship building. It created engagement with others during sessions. Copresence levels will increase when the two parties recognize each other (Triplett, 1898). Respondent 23 likes to engage and learn about the other person."Yeah, I mean, I believe this is building rapport. You know anytime you have something in common with someone,, it firms up your trust." The stronger the relationship builds, the more likely engagement and copresence levels will increase.

Respondent 10 implied, "Or if you're a minute or two early, you know in the meeting hasn't technically started yet, so it feels like you need to fill that silence or that time." The respondents noted that the chit-chat at the beginning of work meetings eliminated the awkward silence and served as an ice breaker before meetings to connect personally. Respondent 6 said it helped build familiarity with the other individuals, "Just kind of find out, you know, who are you? Who am I? What is this?" The respondents guided that people like doing business with people that they know. They stated that getting to know the other person through chit-chat allowed the relationship to build. Respondent 4 recognized that people want to understand more about the other person in the session. "We want a little history. We want to know if we can relate to them. We want to know a little bit of their story. Why are we even here kind of thing?"

Respondent 14 explained that it was odd to start chit-chatting with strangers, but it became part of the call. "But I do feel that we can build relationships with people. I mean I've seen it. It happened here where people I did not know one bit. I mean, I felt weird when I first started this." Relationships can grow, and it is vital to chit-chat at the start of calls for new and existing relationships. Respondent 8 discussed, "So whether it's you know old friends catching up, or whether you are trying to establish a new relationship with a client or a coworker, I think It's largely important to start off with."

The respondents noted that the talk did not have to be extensive or complicated. Respondent 1 emphasized that chit-chat can be superficial. "I mean, we're social animals. We want to greet each other and talk to each other." Understanding what people have going on in their lives and what their thoughts are can be vital in understanding their work schedule and pace. Respondent 9 struggled with how to chit-chat. "That's how you build trust, but also to be personable and I need to work on this to not just regurgitate information and just lecture to them rather than involve them." Some respondents struggled with what to discuss because the COVID-19 pandemic separated people with social distancing affecting their communication skills. Office water cooler time and lunches were eliminated, and the respondents were not used to talking during work. They recognized that some video collaborations were too quick and skipped chit-chat by discussing only business matters. They also said that social distancing disconnected people from each other, creating a void in communication. They were against skipping chit-chat because it diminished the chance for individuals to catch up with their lives.

Respondent 5 stated that it is easier to relate with others after chit chat and learning what is happening in their life. "Uhm, I mean, I think just kind of building rapport and kind of checking in. I feel like. That is something that we've missed out." Respondent 6 recognized that it is possible to go days at a time without talking with another adult. Only talking to kids at home can leave a void of communication with other contemporaries. Respondent 6 noted that catching up with chit-chat mimicked the conversations previously held at the office water cooler. "I'm like

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I haven't talked like spoken to any adults [sic]. Like adults, I've talked to and probably three or four days. Yeah. This is it. It's that socialization. I think that we're missing (it)."

Respondent 12 noted that business norms changed during the pandemic. Because video collaborations were different from face-to-face meetings, some chit-chat was lacking due to the transactional nature of getting right to the point of the video. "I mean, everything's so business now; it's so formal with doing everything on calls that we missed that communication, the personalization, everything over the pandemic for me seems to be more transactional." Without spending essential time to engage with others at the start of calls, it can be challenging to establish Ethos. The respondents said that taking a few moments to chit-chat the session's start allows the two parties to be less transactional.

The respondents guided that chit-chat during the pandemic became more personal and often mentioned kids, pets, or life at home because the virtual home office was new to the participants. Things that were happening around their camera influenced their chit-chat. Because others were experiencing the same things, this provided commonalities. Respondent 5 explained, "Just with me, at least like that really gets that... that sync going. [sic] Yep, you know about their kids, and so you form that common bond." Unlike traditional office talk, the respondents often mentioned families because people worked from home. They said that because of the forgiving nature of video collaborations during the pandemic, it became acceptable to mention kids, spouses, and other topics sometimes avoided in face-to-face office talk.

Respondent 13 stated, "I think, that your personality really can just come through and how you speak with them. Your knowledge of your work. You know how you treat them." If someone portrays a positive feeling at the start of their chit-chat, the other party is likely to respond positively. Respondent 15 remarked that rude people would have rude tones in their chit-chat. "But if someone is an \*\*\*\*\*\* in real life when you talk to them, there's still a dip wad when you're on the Internet, you know so." Chit-chat is not the magic cure for relating to people, but it can be an attempt to socialize and build Ethos. Respondent 11 noted that people lost the coffee talk about office politics. Chit-chat before the boss logged on became the new time to discuss issues. "There's a lot of constructive conversations, but there is a lot of venting also because when we used to be in person, you might be able to walk down to your buddy's office [sic]." The respondents said that not having the occasional cup of coffee together or water cooler talk further separated individuals from their coworkers. Chit-chat at the beginning of calls allowed them to reestablish these bonds.

The respondents recognized that building rapport with chit-chat allowed video collaborators to connect personally and with business. These connections increased engagement, making the users aware of the other individuals in the session. Understanding more about the lives and personalities of the audience allowed the users to choose the framework needed (Goffman, 1986). Understanding the other users can be valuable when choosing a persuasion method for Pathos. The key to building business parasocial relationships is finding the commonalities to create bonds (Horton & Wohl, 1956). When both parties feel bonded and connected, it is likely they will be able to influence each other. Adding chit-chat to the beginnings of video collaborations can help accomplish these goals.

#### **Theme 10: Turn-Taking and Power Dynamics**

The speaker in video collaborations controls the session. Depending on the platform brand used, the speaker may appear on the screen in a prominent position when it is their turn to speak. Some brands keep every participant in an equal rectangle placed around the screen's perimeter. Each platform brand has unique ways to allow the speaker to be visual when it is their turn to talk. If the video has proper lighting, angles, and spacing, the participants can watch the speaker on screen and follow vocal and audible cues of when to talk. Weiss (2018) referred to the "gaze" as noticing a speaker's mouth and eyes when talking. Hall (1966) focused that the eyes could portray emotions and provide timing for when to speak in conversations. Respondent 7 recognized vocal cues, "Yeah, absolutely. Usually, There's a facial expression. There's some sort of unspoken social rule that tells me, OK, it's a good time to talk." O'Malley et al. (1996) recognized that people watch for head nods and other nonverbal cues of their time to talk. If people are engaged with the video session and have high copresence levels, the conversation can mimic a face-to-face conversation.

Respondent 14 noticed that conversation online could feel as natural as face-to-face. "[sic] It feels legit as long as you and I feel like we're having a conversation and it's authentic." Users should interact back and forth and attempt to find the same nonverbal communication elements as they do face-to-face. Respondent 1 noted, "You can kind of see when someone's like taking that (pause) [sic] you get that like oh I want to jump in. So, when you see that kind of movement, or you hear that they're about to chime in." The pause happens not only with the timing of the mouth but also with their facial expressions. Users need to recognize these visual cues. The video layer of video collaboration separates this medium from phone calls or other audio-only based platforms. With audio-only, these nonverbal communication elements are missed. The video layer is an additional layer over audio, allowing it to rise on the media-rich scale (Daft & Lengel, 1986). Video collaborations are richer media than audio-only, allowing the users the visual elements to assist with their communication.

Pauses are a significant visual and audible cue of when it is time for a new speaker to take over. Respondent 5 recognized, "Just when the audio is quiet, and that person sits back and

they're just looking at you waiting on your response." The audible pause and the mouth shut give the new speaker a cue that it is time for them to speak. Respondent 5 said that sometimes people do not pause, and this blocks them from being able to jump into the conversation to speak. "Ah well, a lot of times with the (video) calls with my boss like she'll just be like I need you to do this, this and this and that, but she doesn't pause for any questions." When pauses are not incorporated into the session, users can be confused about when it is time to talk. This confusion can lead to users interrupting or attempting to speak over each other.

Initiating pauses when speaking and reading others' pauses can be a difficult communication skill to learn for video collaboration. Respondent 9 said they are still figuring out the exact timing online and how to read the nonverbal communication. "So, I let them speak their piece, [sic] when I find a little bit of a pause or even a pregnant pause; then I will jump in and kind of take control over the session." Respondent 9 defined the pregnant pause as an extended break in the conversation, attempting to get the other party to speak. The speaker stops talking and may signal with nonverbal communication that it is time for the other speaker to participate. Respondent 22 discussed, "It's the visual cues, you know, the pause between sentences. Kind of invites the next person to jump in."

Because these signals are often overlooked or missed, users can be talked over. Respondent 13 discussed being talked over, "Uh, we definitely have some creative folks who you know, especially like creative directors who just will talk over you, and it's almost like, did you hear me?" Talking over people can lead to frustration. Users can feel their input is not valued. Respondent 5 used hand motions to get noticed, "[sic] If you ain't making certain gestures like I talk with my hands all the time and so I think it does help people to see that [sic]." Hand movements can let people know when someone plans to speak, emphasizing words or singling someone else. If the goal is for users to collaborate, the conversation must be give-andtake. Both parties play the roles of sender and receiver (Riley & Riley, 1951). One party may have to signal the other party to let them have a turn. If the conversation is not give-and-take, then the conversation is a lecture and not a back-and-forth collaboration.

Respondent 17 noticed, "[sic] Let others speak because you're repeating yourself, so it's really challenging when someone just wants to (speak). Then people tune out. Heard it the first time, I don't need to hear you speak about it 25 times, especially." Respondent 17 said that sometimes it takes a conscious effort to stop speaking and give others the chance to jump in.

Timing the conversation can be especially challenging in group meetings for video collaborations. Respondent 12 discussed group meetings with lots of people participating, "[sic] Usually the main talkers will be the ones that chime in first and then just due to time constraints not everyone gets a chance to share their opinions." The respondents noted that mistiming the conversation can be a way to devalue someone's voice, intentionally or unintentionally. They also said that overspeaking could block others' opportunities to talk.

The mute button can be used to power and control a conversation. Respondent 23 recognized on muting others, "It's something you can't really do in real life, and I think that, uh, I think we use it for practical as well as control reasons." For example, in large group meetings, it may be necessary for the boss to mute others while they present information. Muting can make the collaboration one-sided and lecture-based than a back-and-forth group meeting. Respondent 23 noticed that it could be impossible to go back to an earlier topic and ask a question due to mute. Users cannot speak up until the mute button is unpressed. When the mute button was unpressed, the moment with questions passed, and the meeting progressed to new information. The controller of the mute button can have power over the individuals and control the session.

Respondent 5 said that mute keeps could keep the focus on the call and away from distractions. "You hear things. You know people scratching their nose in it, hitting the microphone, or people like typing, and you hear that you know that's just it's distracting and takes away from the speaker typically." These distractions can remove focus from the meeting, lowering the engagement and copresence levels. The respondents recognized that an open forum could sometimes have too many distractions to keep the communication lines open. The individual participants would need to control their distractions to create a successful, interactive, engaging session. When the mute button is removed, the forum is open. Respondent 12 stated, "Opening up the dialogue lines, taking the mute button off and not just speaking at people, but, you know, leaving the lines open because makes it freer for people to interact." Clicking the mute button limits interaction, and freeing the mute button increases interaction.

In group meetings where people cannot figure out turn-taking, there is the possibility that everyone speaks at once. Respondent 1 experienced, "So if people start talking over each other literally, everyone has to stop talking, and then you have to like reestablish the pecking order and reestablish like who's going to talk next." Finding this order of who will speak next can create confusion and time-wasting while the meeting attempts to get back on track. A few people can dominate and unintentionally block others from joining in. Respondent 1 noted that it is not always the mute button that causes disengagement. "It's not so much that like one person is dominating and I can't get in, but it's like two people are going back and forth and they're having a conversation and they forgot about me." Respondent 16 noted that it leads to aggression when users are left out of conversations in collaboration meetings. "OK, when they dominate [sic], I'm not a person that likes to take \*\*\*\*\*\*\*\* very well. I'd like to speak." A lack of turn-taking can create hostility within the session. The respondents' interviews also recognized that power dynamics and arrangments change in video collaborations. Removing the face-to-face element in person also eliminates seating arrangements. The leader of the conversation will not sit anywhere different than other individuals. The leader can have control such as the mute button, using a multimedia presentation, or choosing for everyone to have a picture instead of a video. If the forum is kept open with everyone using their video, it creates a very open communication style. An open style frees some of the power dynamics from face-to-face meetings. Respondent 17 noted on power, "I feel like it humanizes everyone a little more and puts everyone at the same level." However, those users must find all the speakers' rhythm and timing. It is essential to watch the visuals of all users in their digital rectangles and find when to speak and listen. Respondent 24 noticed, "Kind of learn how the person talks and their cadence. And, uh, kind of figure out how to not talk over each other. Yeah, it makes sense to me." Learning the timing and creating a conversation with back and forth increases the users' engagement and increases copresence levels.

#### Theme 11: Credibility

If the conversation feels too much like a performance and not like a conversation, it can cause users to disengage. Respondent 23 said some users try to be too rehearsed with tag lines, pitches, and cliches. "I feel sort of like I might be having a zoom call with the same guy that sends me spam." Any kind of rehearsed pitch that is not natural can throw off the nonverbal communication letting others know when it is their time to speak. It can feel too rehearsed and not natural to the audience. Respondent 8 recognized, "I think it's a lot more important for you to be genuine in your conversation and your mannerisms and the way that you interact with people because otherwise, it makes it very awkward." The awkwardness can lead to users not understanding when to speak, listen, or engage.

Respondent 14 recognized that when people are not being genuine, it is harder to have a back and forth. "I have actually seen that happen on one… on one of my meetings, and it seemed like the person was really trying to perform for the camera and I don't know. It's just very annoying. I get a little frustrated." Many users with social media backgrounds must find the difference between collaborations and social media. Social media, such as YouTube, are recorded performances based on entertainment. Video collaborations have a purpose or goal between two or more people that can be multifaceted, real-time, and engage the users simultaneously. Mogos and Trofin (2015) noted that interpersonal communication and copresence levels would change and adjust with different mediums. Although YouTube and video collaborations are similar, recorded videos are one-way communication and do not require the audience to pay attention to the turn-taking necessary to collaborate in real-time.

Respondent 13 recognized that users sometimes would perform more than necessary on video collaborations. "[sic] Everybody sort of has a face that they put on [sic], a voice and you know this, that and the other. [sic] I think whenever we're dealing with clients, [sic], we tend to sort of up our appearance." Performing can be effective if users do this without disrupting the speech patterns and turn-taking. Aristotle (2001) valued the Pathos performance and felt the best performers could seem genuine to the audience and not like they were performing. Any performance elements added to video collaboration cannot disrupt the natural communication flow between the participants or feel dishonest. Respondent 3 noted, "Definitely the more authentic and more honest (people can be) because it then it incorporates that better relationship and that trust." When users can find the comfort level that balances their performance with their natural speaking style, they can use their frontstage (Goffman, 1969) persona to create a parasocial relationship (Horton & Wohl, 1956). This performance style allows the user to gain

influence over the audience. The respondents guided that performing by changing personality elements can be an effective strategy to influence business clients.

Aristotle's (2001) Pathos discussed that a well-rehearsed performance would feel legitimate to an audience and can gain substantial influence over them. Although video collaborations are not rehearsed performances, an individual modifying various personality elements must be done so that the other user does not suspect it is an act. Respondent 12 noted that some users perform to create exciting video collaborations versus boring ones, "I mean, obviously if you're more fun and you're making things lighthearted, it makes it a better presentation, obviously, and you're more likely to laugh and pay attention." If Pathos is achieved, this will increase engagement from the audience because they will be interested in the performance. The respondents noticed that simple voice adjustments could allow the speaker to engage more with the audience. Respondent 14 recognized bland performances, "But I think once I was thinking to some of the calls that I have with people was boring as probably the tone or the presentation of it." Staying monotone and even-paced can disengage the audience. Variations can be used to keep the audience's interest.

To create a more dynamic performance, speakers can also engage in body language, facial expressions, and hand motions. Respondent 15 said they use lots of energy with their nonverbal communication. "I'm very expressive with my hands with my body like I don't just sit still, so it's better for me if I have full range of motion and I can be myself." Using body language helps users express themselves and engage more of the senses. Engagement increases by speaking and using body language because the audience must listen and watch to converse. Engaging multiple senses increases copresence levels when using video collaboration (Walther, 2011). The speaker's well-rounded performance prompts the audience to pay attention. The

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speaker will, in turn, read the audience's verbal and nonverbal responses. Finally, the speaker will adjust their performance to gain the desired feedback from the audience.

Respondent 13 noticed that simple facial expressions could help engage the other party. "You know, I'm a very expressive person. I'm someone who uses a lot of facial expressions and a lot of hands and things like that. [sic] I think just looking engaged in a meeting, you know a pleasant expression." When both parties must communicate as sender and receiver (Riley & Riley, 1951), simple acknowledgments may be necessary through facial expressions and eye movements. Communication improves when users have simple body language that is used in face-to-face conversations. Respondent 9 said that this makes reactions easier to understand to have both verbal and nonverbal. "I guess expressions if I can tell if they're understanding the material or not, like if they have a furrowed brow or kind of a confused or a raised eyebrow look." Simples gestures can help express understanding or confusion.

Because users are not face-to-face and are visible on a screen, their natural reactions may not be positive. Users are in their homes and are comfortable. This comfort can lead to using body language that is not what they would use in a face-to-face office setting. Respondent 3 noted, "I think oftentimes behind the computer we forget that the camera is on and so someone will say something, and you will roll your eyes, and everybody will see you roll your eyes." Intention or unintentional communication can be viewed live in the meeting and recorded. One significant difference from a face-to-face meeting is that video collaborations can be recorded and played back. Simple eye rolls, other frustrated facial expressions, or unflattering nonverbals may be played back for bosses and have repercussions for employees. Respondent 11 noticed, "Tm told that I speak with my eyes, so sometimes I have to be very careful because even though I might not say it, my look will say it all." The respondents guided that users have concerns about their facial expressions. Being on video makes them very aware of their facial expressions and worried about being recorded or captured in the session. Respondent 16 said, "The funny thing is, is that I cannot play poker. I do not have a poker face. If you say something that's just outrageous, you could see it on my face [sic]." When the video is used for group meetings, simple facial expressions made by users when someone is concentrating on listening can be misread by others. Respondent 7 found their listening face was misunderstood in large group video meetings. "I've got a real straight face. [sic] It looks almost mean at times. So, I have had to over overcome. I've had to work through what they call RBF, Resting Bitch Face." It may be necessary to put on a frontstage (Goffman, 1969) appearance during a group meeting if the facial expressions are an issue for unintentional nonverbal communication. Performing with different facial expressions may soften the appearance if unintentional nonverbal facial expressions are at risk of being misunderstood. The respondents stated that a simple smile could help overcome this issue and change the nonverbal messaging.

Hand motions can also be distracting or give unintentional nonverbal communication. Respondent 8 noticed that too many hand movements could affect their engagement. "Hand movements don't bother me unless it's to the point where it's distracting, and you're constantly, you know, moving your hands around, and I'm watching your hands more than I am you." When hand movements are used too frequently, it can distract from the verbal messages. There must be a delicate balance between having too many hand movements versus too few. Respondent 22 noticed they sometimes block the screen, moving hands too much. "But for me, I'm moving my hands all over the place, and you can't see [sic], so I am kind of aware of that." Video collaborations that use the medium close shot will frame the torso and top of the head. Medium shot framing allows the viewer to focus on the user's face (Licoppe & Morel, 2012). If too much hand movement is introduced into the frame, this can block the face's facial expressions and affect the sound quality. In addition, the sound can be distorted when hands pass across the face. These can all be distractions that can cause the other party to disengage, momentarily affecting copresence levels.

Blumer (1966) discussed Mead's concept when nonverbal communication has meaning. Each social group will interpret meaning differently. Respondent 17 recognized, "It is important it is important because you have to understand that your audience is not just about you." Video collaboration allows users to communicate locally, nationally, and globally. These capabilities allow users to connect with social groups that interpret verbal and nonverbal messages differently. Respondent 14 noted, "And I, I do think you know it is important to understand, especially we (are) communicating with people from other cultures and all other parts of the world to really understand you know, certain gestures." Berger and Luckmann (1967) noted that social groups might not agree on meanings. For example, a simple hand gesture can have multiple different meanings depending on the culture that interprets the gesture.

The intent is not the same as the meaning. Respondent 3 stated, "And things are very different in different countries, so you have to be cognizant and Ummm.... If approached with an issue, be aware of it." In addition, it is vital to consider the background of the other users. The communicator may not have a negative intent behind a gesture, but another social group can misinterpret the gesture and create disengagement within the session. Respondent 11 noted, "[sic] Because again, different cultures, different people, different hand gestures might mean different things to other people, so you have to be mindful again, and it's not losing on who you are."

It is essential to stay mindful of how verbal and nonverbal may be interpreted. Respondent 11 also said to be careful when communicating with our body language and expressions. "Because we might be saying something, but our body language is saying something totally different, so it causes issues with credit." Words may communicate one message, but people from another culture may interpret the body language and nonverbal communication as contradictory. It is vital to ensure that verbal and nonverbal attempts communicate the same message, especially when sessions involve people from different backgrounds. Offending users within the audience can create hostility leading to disengagement and lowered copresence levels.

## **Theme 12: Meeting Organization and Engagement**

An emotional appeal can set the mood and feel of the session through a framework (Goffman, 1986). The respondents stated that individuals should plan for the session to engage the audience, have a good time, and keep the presentation upbeat for the performance. Finding an engaging performance style does not mean long rehearsal times in front of a camera. Although Aristotle (2001) mentions that rehearsals can lead to a natural feeling performance, video collaborations do not need a complete planned performance. The respondents recognized that natural feeling sessions were more comfortable than one that felt rehearsed. However, they said, engagement was challenging when the session was unorganized.

The organization of the meeting can also affect the user's performance and engagement with the audience. An unstructured meeting can lose the audience's attention when the performance drifts. Respondent 23 noted, "I think you have a lot more buying and participation when it's well structured, well organized, flows well." Respondents recognized that a lack of structure leads to performances that include too many speech disfluencies, such as words such as Um, Like, Well, You Know, and You See. Goffman (1969) recognized that a framework keeps a performance together, but anything that deviates outside the framework can affect engagement. Too many breaks in the verbal pattern using speech disfluencies can lead to audience disengagement. A lack of verbal concision can create frustration and miscommunication due to clarity issues. Respondent 17 noted, "So for other people, especially those in leadership roles, to be more concise and direct with the information instead of just dragging it out because that just kills the attention span." The breaks in speech patterns affect how users follow the messages. Users' engagement may weave in and out due to a lack of verbal flow.

A meeting with a clear agenda can help the speaker if they are familiar with the material. Having a structure and familiarity with the framework can help the audience stay engaged (Goffman, 1986). Respondent 10 recognized, "So in the video sessions, I think they still just like an in-person meeting. You know, you should have a clear agenda. You know, a clear focus, a clear purpose." In addition, Respondent 10 discussed that meetings lacking structure could frustrate the audience, leading them to feel it is not worth their time to be in the collaboration. Respondent 4 said it was a "pet peeve" when there was no organization to the meeting and the speaker was unclear. "You know there's the whole like a meeting that could have been an email. I feel like nothing is worse than like a Zoom call or a video conference that could have been a text." Respondent 4 remarked that simple planning could have allowed the video collaboration to be concise and get to the point. Respondent 8 recognized, "Oh, it's hugely impactful because if the organizer is organized, has an agenda, has a sure flow....Just if the person is good about leading the conversation, it makes it easier for everybody [sic]." Respondent 8 also stated that the audience could disengage if they feel the main point has been covered and the meeting is longer than it needs to be.

If the meeting is organized, it can also allow the speaker to keep the meeting collaborative between the participants. Respondent 5 recognized that some meeting organizers forget to collaborate and get caught up in their presentations. They said this could create boredom when the presentation loses focus. Respondent 5 reminded that hosts should keep asking for audience feedback. "When it's boring, is very helpful to continue that, and I think a lot of times when you get on the video chat, people kind of lecture at you as opposed to, you know, having that back-and-forth conversation style (users disengage)." Respondent 5 guided that hosts must remember to get the audience engaged and ask for verbal and nonverbal feedback. It is also vital for the speakers to read the feedback from the audience.

The audience's nonverbal feedback can let the speaker know how the presentation progresses. Respondent 23 stated that users have nonverbal reactions to being bored. "I am very self-conscious about looking distracted or something like that." Respondent 23 recognized that large group video meetings could feel redundant and boring. They remarked that this leads to the audience allowing their attention to shift away from the meeting, lowering engagement. Respondent 23 discussed, "And they're sitting there. And you know, yeah, and you know they are not paying attention. Just because you have the ability to do other things doesn't necessarily mean we should." It is easy for users to get distracted by things around the home, their cell phones, or other distractions.

Respondent 17 noted that it is easy to do other things when the meeting is boring, "It's like my camera is off. My mute is on. I'm playing with the dog; I'm playing on my phone; I'm running to the kitchen to grab a snack." Turning away or walking away from the screen lowers engagement. Respondent 17 guided that a one-sided session creates a lack of collaboration and engagement. Without users engaging and being aware of each other, copresence levels drop.

If the platform's technical capabilities allow the host's video and PowerPoint to be shared, the respondents recommended sharing both. The respondents indicated that having the host's video on during the PowerPoint presentation allows the host's nonverbal communication to be read by the audience. Respondent 24 noted, "Death by PowerPoint on Zoom is 100 times worse if you just sit there and load it up [sic] and it's reading off the PowerPoint." The respondents recognized that the host's use of the mute button and removing video created a decrease in engagement. The mute button decreases interruptions. The respondents discussed that organizers might need to ensure the audience's videos and audio do not have external distractions that disrupt the meeting. Ideally, all individuals would need to control their environments. The respondents stated that companies need to have a session with minimal disruptions that uses everyone's video and audio capabilities to allow for the most engagement.

On the other hand, the respondents noted that sessions allowing everyone to speak on video could be challenging in big groups. Respondents examined an issue with having too many individuals attending at one time. They felt too many people were overwhelming the screen with meeting participants. They suggested that smaller meetings could allow for opportunities to be less overwhelming. The respondents recognized that big group meetings were not informative or pleasurable using video collaborations.

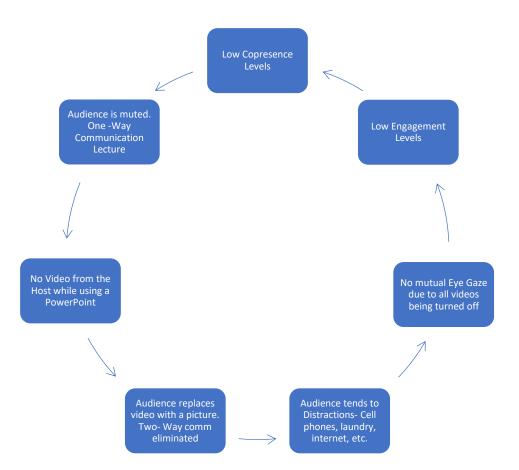
Multiple respondents described a series of events that led to a lack of engagement which Respondent 24 named "Death by PowerPoint." The respondents noted that their attention dropped when the host switched from two-way to one-way communication by muting the audience. When the host changed their live video to a PowerPoint screen, this removed the ability for the audience to make mediated eye contact with the host. Respondents said they would turn off their live video when the host changed their screen to PowerPoint only. This situation was described as neither party having live video, one-way audio from the host only, the audience muted, and a PowerPoint screen presented as the visual. In this scenario, two-way communication was impossible between the host and the audience. Respondents noted that their engagement was low when this happened, and they would move on to other tasks while the host presented. Respondents stated that they would check their phones, do household chores, surf the internet, and do other activities. Removing their attention from the session led to low engagement levels.

These factors created a lack of engagement, lowered copresence levels, and existed cyclically. As the host returned to live video, the audience would also return to live video prompting the host to remove the mute controls. When two-way visual and two-way audio communication was restored, the audience would return with high engagement levels increasing copresence. Without two-way audio and video communication, the host cannot know if the audience is engaged. The audience can choose their level of engagement based on their interest or investment in the presentation. This cycle is presented in Figure 3 below.

## Death by PowerPoint.

### Figure 3

Death by PowerPoint Video Collaboration Cyclical Events



The respondents noted that video collaboration might not be the correct choice of media if the meeting will not be collaborative with two-way communication. The respondents discussed that video recording could be more productive for everyone's time if no benefit of live collaboration can be found. Time can be wasted logging everyone into the session, having distractions, and only using a PowerPoint without collaborative video and audio. Wasting this time may not accomplish a goal other than having everyone attend a meeting together. The respondents recognized that if a meeting does not create any form of collaboration or feedback, then there is no purpose of everyone attending together other than to say everyone attended one meeting.

The respondents discussed that their companies were still learning to work virtually during the COVID-19 era. Companies were uncomfortable knowing if people were working or

not. Respondents noted that companies held large video collaboration meetings that did not have clear goals other than to verify that people were working.

Large virtual meetings with low engagement have low copresence levels. Respondent 15 recognized, "It's hard for me, though, when someone's just giving me a clinical and I appreciate they've worked very \*\*\*\* \*\* hard on their PowerPoint, but I'm just watching a screen, and I'm just watching a lot of text." Respondent 15 asserted that everyone would be in the same virtual meeting but not collaborating. They said that the PowerPoint eliminated the host's video and only used audio. They felt this created a separation between the audience members to each other and a complete separation from the host. Separation lowered the audience's engagement and copresence levels. The host, without copresence, continued to perform without acknowledging the audience's verbal or nonverbal feedback. Respondent 15 discussed that the host was performing, but the audience's engagement was not prioritized. Users switched from their live video to a picture, hiding their video from others during the session.

Without video from the host or users, all nonverbal communication could not be read. Turning off the video feed takes away all signals for turn-taking and expressions to let the audience know when they can speak (O'Malley et al., 1996). Since video and audio synchronization would not be used for its full ability, it diminishes video collaboration to an audio call with a visual presentation. The presentation allows for shared visuals, but it does not allow for any mediated face-to-face communication.

As a "rich media" (Daft & Lengel, 1986), it would rank above a phone call and below a video collaboration. A session like the one Respondent 15 described would not mimic a face-to-face conversation because of a lack of two-way communication. Instead, using the full ability of video collaboration would create a two-way, give-and-take session between the performer and

the audience with video and audio synchronization, making a "rich media" (Daft & Lengel, 1986).

The respondents recognized that organizers must consider the goals of a meeting. In PowerPoint-style lecture meetings, having an audience attend live sessions may not be necessary if the host and audience do not engage in two-way communication. The "richness" (Daft & Lengel, 1986) of the media and the capabilities of live video collaboration do not offer anything different than if the session was recorded and played back on demand by the audience. If the audience does not have the chance to use verbal and nonverbal feedback in a two-way give-andtake communication style with the host, then the most substantial benefit of using live video collaboration is eliminated.

The respondents argued that these PowerPoint meetings without collaboration were not engaging. They said that meeting organizers need to realize that engagement dwindled when the host and others turned off their videos. The respondents claimed that meeting organizers need to increase engagement by reducing meeting size and allowing others the chance to collaborate. The respondents recognized that reducing the meeting size would require meeting organizers to hold multiple sessions, which would take more time. However, they said that the time involved would be a trade-off if collaboration and feedback were valued as meeting goals. Respondents noted that some video collaboration platforms have the capability for breakout meetings that can then rejoin the central meeting. They said that these breakout rooms could be an answer to eliminating PowerPoint meetings with a lack of engagement. The respondents felt that companies did not value engagement as much as they did the presentation material.

The respondents reasoned that live video collaboration sessions were not always the best way to communicate information. If the platform is not used to the best of its capability, it is not considered "media rich" (Daft & Lengel, 1986). The respondents guided that different media options, such as a recorded video, would be better suited than video collaboration for PowerPoint meetings. They noted that recorded videos do not allow immediate confirmation of users being present. Attendance confirmation would require additional tracking software, quizzes, or other means to check if employees watched the video. They said that companies nervous about using recorded video in virtual environments were being stubborn and untrusting.

The respondents also guided that virtual work required trust, and companies were not comfortable with virtual work during the COVID-19 shutdown. The respondents claimed that companies were more interested in proof that employees were working than efficiency. However, the respondents also stated that employees and companies entered the virtual workspace without understanding and trust due to poor preparation.

#### Summary

The 30 respondents provided their lived experiences working with video collaborations during the COVID-19 pandemic from April 2020 to May 2021. The 12 themes explained that audience engagement leads to higher copresence levels. Engagement and copresence work together and will rise and fall, affecting each other. Collaboration sessions will be judged as poor or excellent based on each user's interpretation of the communication and effectiveness. The users will act as both the sender and receiver that will consistently interpret meanings and try to find commonalities with the other users.

Understanding how engagement and copresence levels work together are defined with the 12 themes below:

- 1. Improper Training
- 2. Medium and the Performance

- 3. Disruptions
- 4. Virtual Home Office Set Up
- 5. On the Go Mobile Sessions
- 6. Technology Use
- 7. Camera Angles and Proximity
- 8. Attire and Nonverbal messages
- 9. Verbal Chit Chat Rapport Building and Ethos
- 10. Turn-Taking and Power Dynamics
- 11. Credibility
- 12. Meeting Organization and Engagement

Word Search queries and related words were found in the interview transcripts using AtlasTI software. The commonalities were then manually grouped into the 12 themes above in an additional pass. AtlasTI software searches included the 20 topics:

- 1. Authentic, real, fake, legit
- 2. Appearance, attire, clothes, hair, makeup, suit, tie, shorts, casual, dress up
- 3. Boring, dull, not exciting, bored, tired, uninteresting, bland
- 4. Chit Chat, small talk, water cooler talk, office talk, friends talk, coworker talk
- 5. COVID, shutdown, pandemic, sent home
- 6. Nonverbal, verbal, hands, expressions, eyebrows, smile, frown, happy, mad, sad
- 7. Engagement, engaged, paying attention, exciting, fun, want to be there, not dull
- 8. Performance, rehearsed, comfortable, unrehearsed, confused, babbling, repeat
- 9. Professional, job, career, unprofessional,

10. Relationships, building relationships, friends, getting to know each other, work relationship

11. Rapport, getting to know, learning about someone, new client, new sales, friends

- 12. Microphones, sound, audio, mic, mic quality, good sound, bad sound, muffled
- 13. Lighting, external lighting, extra lighting, ring light, LED, overhead light, office light
- 14. Distractions, not paying attention, distract, loud, dark, overacting,
- 15. Family, kids, spouse, husband, wife, significant other
- 16. Pets, dogs, cats, bark, meow, jump on lap, in the lap, pet,
- 17. Turn-Taking, when to speak, speaking, reading lips, eye expressions, silence, pauses
- 18. Hand movements, hand motions, hand signals, finger signals, waving hands
- 19. Meanings, understanding, cultures, age groups, generations, social groups,
- 20. Power Dynamics- Boss, sitting, rectangle, mute button, CEO, Executive, Owner

The information in Chapter Four provided themes with commonalities to the existing scholarship in Chapter Two. Chapter Four provided insight into the lived experience of workers during the COVID-19 pandemic from April 2020 to May 2021 and how their companies worked virtually with video collaborations. Chapter Five will synthesize all the chapters, answer the RQs, and discuss future copresence research.

#### **CHAPTER FIVE: CONCLUSION**

#### **Overview**

This qualitative narrative theory study aimed to show the connection between interpersonal communication, engagement, and copresence levels in video collaboration sessions. The lived experiences of the 30 interview respondents shared insight on what criteria engages the audience affecting copresence levels. In addition, the interviews and the existing literature on traditional communication theories were discussed, finding commonalities.

Chapter Five will begin with a summary of the research and discuss the research questions. From this study, a new model emerged. The model illustrates interpersonal communication's effect on engagement and copresence levels in video collaborations. This model will be described in Chapter Five. Delimitations will be examined within the study. Future study recommendations will be made for new directions in the field. A conclusion of the research will finalize the study.

#### **Summary of Findings**

The 30 respondents in this study were found through social media and email networking for business professionals aged 30-55 in various business careers. The narrative theory qualitative method was chosen to provide a bridge between existing theories and lived experience. The respondents' answers about video collaboration platforms in business careers provided practical experiences connecting the data to existing communication theories. In addition, this study provided insight on verbal and nonverbal communication that directly impacts engagement levels necessary to understanding copresence levels. The combined theoretical and practical experience gives researchers valuable information on training business people to increase engagement and copresence in their video collaboration sessions.

#### **Previous Theory Research Discussions**

Previous existing research studies focused on the technical abilities of video collaborations and were dated due to changing technology. These original research discussions focused on communicating in a virtual environment. These previous discussions did not focus enough on communication between the users. Instead, emphasis was placed on technological downfalls and inconsistencies. Previous collaboration equipment was challenging to use and required specialized training to operate. New platforms are like social media, and users borrow from their personal experiences to operate. Modern technology is capable of providing consistent, synchronous audio and video. This section will include a theoretical and empirical discussion merging theory with practical applications.

## **Theoretical Discussion**

This study consolidated existing research about virtual environments and combined these with traditional interpersonal communication theories. First, it was necessary to understand that Craig's (1999) Semiotic tradition allowed the qualitative research method to examine the individual and symbolic meanings. Previous research studies examined too much from Craig's (1999) Cybernetics approach focusing on technology and not enough about the users. Meyrowitz (1993) stressed that technology is a "conduit" and only transmits messages. People will interpret messages, and the technology will only transmit the message. Examining people as communicators showed that Riley and Riley's (1951) model provided a two-way, give-and-take style to communication, consistently receiving and interpreting messages between users. Understanding that verbal and nonverbal messages are symbolic in meaning, Blumer's (1966) and Berger and Luckmann's (1967) studies recognized that audiences interpret messages based

on their social belonging to groups. Meaning is derived through people's social identities and will reflect their worldviews based on their belonging to social groups.

The traditional interpersonal Communication theories focused on the relationship between the performer, the audience, and the performance. Aristotle's classical rhetorical traditions (Aristotle, 2001) allowed this study to apply Ethos, Pathos, and Logos to virtual performances. The study showed that Arisotle's (2001) speech elements are still viable with virtual performances. Goffman's (1969) discussion on characterizations and Triplett's (1900) discussion of conjuring are applied to Aristotle's (2001) principles within the study. Hall's (1966) spatial relationships allowed discussion of how audio and video technology apply to the user's relationship with the camera and screen. Finally, it was necessary to discuss Mazur's (2000) camera principles to learn about camera angles directly affecting proximity.

#### **Empirical Discussion**

Triplett's (1898) bicycle race theory for copresence allowed this research to show the direct connection between users' awareness of each other and their engagement in video collaboration sessions. This video collaboration study showed that verbal and nonverbal communication, audience engagement, and interpretation directly influence copresence levels. The more the audience and speaker are aware of each other's presence, the higher engagement and copresence levels will exist. Aristotle's classical rhetorical triangle (Aristotle, 2001) provided the framework for performance leading to engagement through Ethos, Pathos, and Logos. Ethos establishes credibility, Pathos is the emotional performance, and Logos uses facts and logic. This study's interview respondents' experiences explained that verbal and nonverbal communication directly impacted engagement and copresence levels. Combining theory and the

lived experience of the study respondents provides insight to both researchers and video collaboration users for understanding user engagement.

## **Implications for Practice: Merging Previous Theories with New Findings**

This section combined theoretical research with the 30 interview respondents' lived experiences to understand current communication issues in the virtual workplace. Business video collaboration users can benefit from the scholarly research focusing on interpersonal, contemporary, and classical communication theories. On the other hand, scholars need to understand the practical implications and the lived experiences of current users. The implications for practice discussion will examine theories and the interview respondents' practical, lived experiences.

## **Diffusion of Innovation**

The study respondents noted that the COVID-19 pandemic shutdown pushed companies into virtual work, and employees did not receive formal virtual office training. The shutdown made for hasty decisions, and companies pushed video collaboration platforms into use as their primary means of communication. As a result, the interview respondents stated they struggled with their performance and engaging the audience. The rushed switch to virtual workspaces challenged Rogers' (1983) "Diffusion of Innovation" five phases: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards.

Each phase represents when people adapt to new technology. Norms and understanding are formed as users work with new technologies. The Early Adopters and Early majority will be the phases to experience workarounds and learn how to adapt to the new technology. Those joining in the Late Majority and Laggards phase will adopt the norms formed in the Early Adopters and Early Majority phase. For example, the study respondents noted that businesses did not adopt video collaborations early. The users stated they were unfamiliar with the best communication methods and frustrated not understanding the norms for collaboration platforms. The respondents discussed that face-to-face communication was not an option due to mandatory social distancing guidelines. As a result, productivity was lost, and companies were confused about virtual work.

#### **Rich Media**

The study respondents stated that live video sessions were planned that could have been better suited with other media, such as phone calls or recorded media. However, just because a video collaboration could happen does not always mean it should. It was possible to hold an ineffective video collaboration that could have been more productive and time-efficient with a phone call, video recording, or an email with an attachment. Daft and Lengel (1986) referred to "rich media" and described video and audio synchronization as ranked hire with more capabilities than a phone call. Video offers visual elements along with audio which engages other senses. Meetings do not always require the richest media available and do not always need visuals synced with audio.

According to the interview respondents in this study, some meetings did not accomplish anything productive or extra using video collaborations. However, it was possible to use less rich media and be more productive depending on the needs of the meeting. The respondents noted that meeting organizers must decide which form of media will be the most productive for the goals they wish to accomplish. For example, they stated that even though an audio-only phone call engages fewer senses and is less "media rich" (Daft & Lengel, 1986), there are times when a phone call can be more effective than a video session. Because video sessions are still new to business use, platform login times can increase meeting length compared to a phone call. The respondents recognized that users must check audio and video connections, which can take time to begin a meeting. A live video meeting can also open the session to unnecessary disruptions. These disruptions would not be experienced by a phone call, such as Wi-Fi issues or bad video communication skills. These disruptions can lead to unorganized, frustrating meetings that take more time to hold compared to a phone call. Disruptions can also lead to lower engagement and copresence levels.

The interview respondents in this study expressed frustration when video sessions were unorganized with constant interruptions. Respondents mentioned that sometimes video recordings or an email with a PowerPoint attachment could have summed up many video collaboration sessions. The respondents recognized that some video sessions consisted of a host presenting a PowerPoint presentation. The host would turn off their video, mute the audience, and present. The host morphed the session from a two-way collaboration into one-way communication that limited engagement removing the audience's ability to respond.

When the host turns off their video, they become an omniscient speaker without visuals. It was impossible to view their nonverbal communication, such as facial expressions or hand motions. A lack of visuals prompted the audience also to turn off their video. As a result, the two parties failed to visually engage each, defeating the purpose of using a "rich media" that allows for video (Daft & Lengel, 1986). Respondent 24 discussed this scenario as"Death by PowerPoint." They added that many hosts overload the presentation with too many slides and too much information. Respondent 24 stated that the lack of engagement made presentations boring. A lack of visuals eliminated eye gaze (Hall, 1966) that exists virtually as both users interact mediated between their computers.

## **Proxemics**

Hall (1966) recognized that proxemics engaged the senses. Spatial relationships through camera distance can affect video quality. Users that sit too close or far from the screen affect the video peripherals distorting eye gaze. Hall (1966) noted that eye gaze was necessary to maintain engagement. When individuals were focused eye-to-eye, they were engaged with each other. Video collaboration allows for mediated communication to virtually recreate eye gaze.

The interview respondents' had issues when hosts turned off their video while presenting with PowerPoint. Eye gaze and the host's nonverbal communication would be eliminated. Interview respondents noted turning off their video giving them the ability to disengage. Once disengaged, respondents noted that surfing the internet, folding laundry, and cooking dinner was common distractions. Not using video created a cycle that eliminated eye gaze (Hall, 1966). Eliminating visual and audio synchronicity also eliminated two-way, give-and-take communication between the users lowering engagement and copresence.

#### **Parasocial Relationships and The Performance**

Horton and Wohl (1956) recognized that the audience could feel connected to the performers on-screen based on their performance. The performer can modify their personality within their act to produce specific emotions from the audience. These reactions help the performer to relationship build with the audience. The performance is a form of persuasion and manipulation to gain an advantage over the audience. The performer can continue these actions to produce desired outcomes.

Triplett (1900) referred to "conjuring" and deception when discussing how a performer modifies their act to gain this advantage. Goffman (1969) referred to this same idea as a frontstage and backstage performance. An actor's frontstage performance will be for the audience, and backstage is their true persona. Aristotle (2001) recognized that the dynamic approach to achieving Pathos could involve the performer working to find a connection with the audience. Pathos, the emotional appeal, would help persuade the audience to the performer's point of view and perspective.

Goffman (1986) recognized that character adjustment needs for the performer to stay within a framework acceptable to an audience. Any personality changes or emotions deemed unacceptable by the audience would be too far outside the framework, hurting Ethos's credibility. Ethos (Aristotle, 2001) is gained when the audience believes in the character and finds the source trustworthy. The performers work to gain Ethos using Pathos and facts referred to as Logos. Aristotle's (2001) framework provides a performance outline to engage an audience and stay within their boundaries of understanding.

The study respondents stated that building business relationships helped video sessions. For example, a session that starts with personal chit-chat before discussing business information allows users to learn about each other and connect socially. Learning about the other party allowed the respondents to adjust their performance, reflecting Triplett's (1900) "conjuring" and Goffman's (1969) frontstage and framework (1986) discussions.

The interview respondents said that eliminating chit-chat at the beginning of the sessions would remove critical relationships and rapport-building conversations. Removing these conversations could hurt anyone in the meeting attempting to gain Ethos. The respondents noted that people should be encouraged to spend time with professional and personal conversations at the start of meetings. Parasocial relationships (Horton & Wohl, 1956) can form within these conversations.

#### Symbolic Interactionism

Blumer (1966) recognized that language and attitudes are symbolic and that nothing has value until people agree on meaning. Berger and Luckmann (1967) noted that worldview and personal lenses are shaped by the social groups people belong to through primary and secondary socialization. These shared norms and values will influence an individual's worldview. Group identity and worldview help shape message interpretation. Without shared meaning (Blumer 1966), video collaboration users can misunderstand each other's verbal and nonverbal communication. Therefore, the respondents noted that it was essential to find common ground and understanding with the other parties.

Learning about the other user and how they communicate helped decipher both verbal and nonverbal clues needed to help progress the conversation. The respondents said they could also take time to notice things like the other user's attire. The respondents recognized that they made judgments based on these. For example, attire was a clue whether the session would be overly professional or relaxed. The attire of their guest allowed them to make this judgment call.

The respondents also judged the video background. They argued that what one user considered professional may not be considered professional by another user. The respondents noticed that they preferred simple backgrounds compared to overly produced ones that attempted to portray professionalism. The respondents stated that books, degrees, and other awards could make users that produce their background seem intimidating instead of professional. Not sharing symbolism can create miscommunication between users.

#### **Research Questions**

The 30 respondents were interviewed and recorded on the Zoom video collaboration platform with individual sessions. Sessions ranged from 15 to 45 minutes, and the audio was transcribed digitally and double-checked manually. Information was coded for commonalities

and themes using AtlasTI software. Information was also manually coded with additional passes. Atlas TI allowed the common words to be recognized within the transcripts. These commonalities and words were compared to existing traditional communication theories for connections. The data and theories answered the research questions below.

**RQ1:** What nonverbal and verbal communication criteria affect understanding, meaning, and engagement between participants in video collaboration?

**RQ2:** How does the performance affect engagement levels between participants in video collaboration?

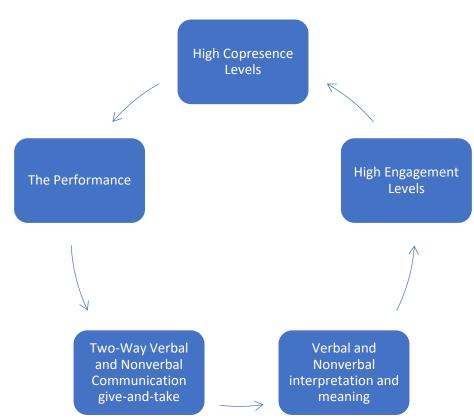
**RQ3**: What is the relationship between engagement and copresence in video collaboration?

The data found a relationship with the answers to the research questions. RQ1 and RQ2 represent the criteria necessary to understand RQ3. RQ1 and RQ2 answers will be discussed below to show the answer for RQ3. Users must be aware of how their performance affects their communication. The verbal and nonverbal communication elements will affect how the audience interprets and receives the messages. Understanding engagement and copresence requires the performer and the audience to read each other's verbal and nonverbal feedback. Two-way communication creates awareness among users.

Engagement is users being aware of each other and finding symbolic agreement with their messages. Users interpret messages based on their worldview, perspectives, and belonging to social groups (Berger and Luckmann, 1967). As engagement increases between users, they become more aware of each other. Triplett's (1898) copresence theory stated that behavior is affected by the awareness of others. Copresence and engagement can drop if the users fail to engage the audience with verbal and nonverbal communication. Any distractions can lower awareness, engagement, and copresence within the communication process.

Figure 4's rotational model shows the process for copresence, starting with the performance on the left and moving through the performer's communication to the audience. The model reflects an equilibrium rotation where each box must exist for high copresence levels. Any drop in one of the criteria can lower copresence levels.

#### Figure 4



#### Copresence Equilibrium Rotation Model

The respondents discussed that nonverbal communication was a strong indicator of whether they stayed engaged or let their attention wander. The respondents mentioned that facial expressions, hand motions, and eye gaze were key nonverbal communication elements. When these nonverbal clues faltered, engagement would lower. Verbal feedback, such as questions or comments, can allow the audience to receive direct feedback from the speaker. The respondents recognized that users could not ignore each other's verbal and nonverbal communication. Ignoring other users leads to a drop in engagement. When engagement lowers, the users become less aware of each other. When awareness drops off, copresence also lowers (Triplett, 1898). Video collaboration productivity suffers from lowered copresence caused by decreased engagement

This study examined a multitude of distractions and disruptions, both verbal and nonverbal. These performance interruptions lowered audience engagement and copresence. This period of lowered engagement is compared to Stichter's (2016) "breaking the fourth wall," describing theater performances that stop the play's momentum, disrupting the act. In addition, the respondents listed distractions such as pets, kids, and other environmental factors within the virtual home office. However, these distractions were forgiven if the attempt was made to minimize the distraction and any future distractions and get back to the task. The respondents recognized that distractions removed their attention from the session and broke their virtual eye gaze with the other user. As a result, users must reengage and work back towards goals. Constant distractions lower engagement, awareness, and copresence, lowering productivity.

Aristotle (2001) referred to the willing suspension of disbelief when a performance's strength allows the audience to separate from reality and temporarily accept the performance as reality. The respondents noticed that very productive video collaborations could be as productive as face-to-face meetings. When virtual users communicated effectively, the meeting was temporarily accepted as face-to-face. Engagement is the key to awareness and copresence.

#### **Delimitations and Limitations**

#### **Delimitations**

This study was conducted in the spring of 2021, and all thirty interview respondents were found through business networking and social media. The age groups represented ranged from 30-to 55 and did not qualify individuals younger or older. Due to COVID-19, all interviews were conducted on Zoom video collaboration software in a virtual environment of the researcher's choice. This choice was to help respondents with anxiety issues due to social distancing restrictions in different geographic areas of the country. Because the study was conducted during COVID-19, all interviewees' perspectives were influenced by their lived experiences during the pandemic. Pre-pandemic uses and experiences were not discussed separately. Post-pandemic uses and experiences were not discussed. Changes in a user's performance and experience would require multiple follow-up interviews.

## Limitations

Due to time constraints, the study was conducted one time and was not repeated at different intervals with the same or different individuals. The researcher conducted all interviews, and no other host interviewed respondents. Due to the time and budget restrictions, different intervals and other individuals could not be utilized for interviews. The time frame of this study and only having one researcher prevented mass interviews with varied age demographics from being conducted.

Social media posts and business networking found individuals willing to interview. A more complex recruiting system could help provide additional respondents. Increasing diversity, corporate positions, and additional demographics would have the potential for additional knowledge on this subject. Additional demographics from other countries and geographic regions could provide other insights into the topic. The researcher's education, business background, and performing arts background affect the lens and interpretation of the results. Outsider researchers' perspectives that do not share the researcher's experiences were not sought in this study. However, other researchers with different backgrounds and worldviews could potentially show other viewpoints on the information. Ethical procedures were followed for interviews and transcriptions to ensure accuracy with all data.

#### **Recommendations for Future Research**

Additional research styles could allow business professionals and scholars to gain more practical information about video collaboration communication. This study was conducted with a qualitative approach, but it could be repeated quantitatively. Using questionnaires with Likert scales could verify the information provided. Questionnaires allow for mass distribution of surveys and could provide more respondents. Although the information would provide numbersbased results, it could help verify the qualitative information provided in this study's interviews.

Interval interviews could also judge how the respondents feel as they gain new experiences with video collaboration. This study focused on interview subjects when they were new to the technology and when it was new to business communications due to COVID-19. Follow-up studies could be conducted to see how businesspeople change their performance over time. These changes could be due to secondary socialization, new trends, norms, acceptable styles, and changes in technology. Studying how performances shift as individuals learn the norms of new technology could lead to knowledge of how to train new users properly.

The Semiotics (Craig, 1999) approach allowed this study to understand that shared meaning is derived from the individuals. Changing to a Cybernetics (Craig, 1999) approach for the same study could analyze the effect of technology on the subject. Issues such as Wi-Fi

connectivity, screen pixel clarity, and camera definition could be topics approached with a Cybernetics (Craig, 1999) approach. This study noticed implications with lighting and external microphones. These criteria could influence the transmission of the message. Meyrowitz (1993) guided that the technology was a "conduit" for the message, but the failure of the technology to properly produce the message could affect interpretation and meaning. McLuhan et al. (1967) stated that "the medium is the message," and a Cybernetics (Craig, 1999) approach could test how the medium impacts the message.

This study was conducted in the spring of 2021 and was limited by the technology available. Just as this study found helpful ideas and concepts from studies on outdated technology, one day, the technology from this era will be outdated. Future researchers can look back at this research and find a starting place to examine new technologies such as networks, 3-D imagery, holograms, and sensory technology. Future technologies will influence networks to engage further technological advances that can engage other senses. Hall's (1966) attention to the senses and proximity can be a focus as the technology works to recreate face-to-face communication with new methods. Things not possible with video collaboration may be possible in the future with unseen and unknown technologies.

Social media influences, such as emojis, are making their way into video collaboration platforms. Emojis are animated emotions in an illustrated form used in digital platforms that can express human feelings (Danesi, 2016). These are now allowed in chat boxes which are symbolic communication. Emojis will have shared meaning and understanding, requiring Blumer's (1966) and Berger and Luckmann's (1967) research. The symbolic meaning of emojis will change as groups adjust their meaning. The meanings of emojis are fluid and will change as culture changes. Emojis can share meeting attendees' feelings and emojis to the audience. They can be shared privately with individuals or sent to everyone within a video collaboration session. Emojis can represent happiness, sadness, anger, boredom, and many other feelings. Studying emojis can be a topic for future researchers. Studies can find how people engage in emoji communication within video collaboration platforms.

Using video collaboration platforms, social media influences such as emojis will play roles in the next generations. Millennials and Generation Z will bring new skill sets with their internet and social media experience. Their video skills will bring in new styles influenced by TikTok, Instagram, and Snapchat. These influences will feel foreign and different to Generation X and Baby Boomers that will remain in the workplace. Therefore, Generation X, Baby Boomers, Millennials, and Generation Z may all have to learn how to communicate together in video collaborations.

These four generations have a variety of experiences with significant differences in their worldviews. They may not share the same symbolism for verbal and nonverbal communication. Future studies need to examine how multiple generations can have different symbolism but find common ground when communicating virtually. As these new generations enter the workforce, scholarship needs to find ways to assist business leaders in understanding the best ways to merge different generations within one organization.

Scholars can also study how virtual communication can impact cultural change and societies as people begin to accept membership in virtual groups. "The technology of communication helps determine the shape or geometry of social space and the kinds of social influence processes that can take place within it. Thus, the changing technology of communication may profoundly affect the future evolution of culture" (Latané, 1996, p. 24). Virtual communication can allow for new concepts to be introduced to individuals separated by distance. Studying the cause-and-effect relationship between communication and technology will help researchers understand how this affects people's interpretations of meanings within virtual environments.

Culture is impacted by how individuals send, receive, and find meaning within messages (Zhao, 2003). Location is no longer a determining factor in shaping an individual's ability to create meaning. "By electronically extending their senses over the Internet, for example, physically separated individuals, who may be half a world apart, can stay in instant contact with each other" (Zhao, 2003, p. 447). Receivers in remote areas can be impacted by the sender's messages and culture. Researchers will need to recognize the relationship between the receiver's saturation level of new material and the role that verbal and nonverbal communication will play. Cause-and-effect will be important in recognizing these factors that can create changes in culture.

An additional study can further recognize that Aristotle's (2001) classical traditions can always lead researchers to understand that the performer must transmit the message. Regardless of the technology, the performer will need to develop Ethos, Pathos, and Logos. When examining new communication technology, a good starting place will be how the message is delivered and received by individuals. If humans communicate with an audience, Aristotle's (2001) principles can still apply. Future studies can begin with the classical traditions to answer questions about new technologies.

#### Summary

This study guided that video collaboration engagement and copresence levels will fluctuate based on two criteria. The first criteria are the performer's ability to communicate verbally and nonverbally with an audience. The second criteria are how that audience interprets and responds to those messages verbally and nonverbally. This research is essential to businesspeople because virtual work opportunities will continue to grow post-COVID-19 pandemic. It can help businesses learn how to plan and train their teams for video collaboration in virtual environments. Future academic research can build from this study by analyzing how interpersonal communication interacts with technology.

Business people need to understand classical rhetorical theory and learn how to properly achieve Ethos, Pathos, and Logos with their audience. Regardless of the technology chosen, performance will always be paramount when understanding engagement and copresence. It is essential for scholarship and practical experience to work together for these goals. Without applying research, businesspeople will rely on trial-and-error for video collaborations. Trial-anderror business communication concepts, such as sales persuasion, are rarely based on theory or research. This trial-and-error process becomes opinion-based and assumes one methodology will work for all organizations.

Keeping video collaboration based on scholarship allows for practical experience combined with traditional theories and solid research. The research helps understand and prove the theories. It also provides a framework for finding directions, ideas, and concepts for improvement. Studies such as this are valuable because the data can provide concepts necessary for designing a corporate video collaboration training program. This study does not offer a stepby-step guide, but the knowledge can lead an organization to design its own. This study provided new knowledge and understanding of how interpersonal communication affects engagement and copresence levels in video collaboration. As virtual work increases, this study can be a starting point to understand performance, audience engagement, and copresence within video collaborations.

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#### **APPENDIX A**

Greetings, business professionals!

My name is TJ Zito, Jr, and I am conducting my Ph.D. research on video collaboration platforms for business purposes, such as Google Hangout and Zoom. I want to invite you to be a research participant in my study. Participants will take part in a one-on-one Zoom session with me that will be recorded. This session will consist of me (the researcher) asking you (the participant) questions about your experiences with video collaboration platforms. In addition, we will talk about how people use various communication techniques to help others understand their messages when using video collaboration platforms. There will be no compensation for participation, and it is 100 percent voluntary.

The data will be used for my dissertation and then digitally stored (password protected) on a dedicated, personal external hard drive for three years for any challenges to the research. At the end of that time, all data will be erased. All data and participation will be anonymous, and your name or likeness will not be reproduced or used in any manner. The only information that will be used will be your data.

Any interested parties, please feel free to contact me! We will discuss interview times and further details.

TJ Zito, Jr Liberty University xxx-xxx-xxxx xxxxx@liberty.edu

#### **APPENDIX B**

Qualification questions for study:

Thank you for reading the invitation to participate in my video collaboration study. These questions must be emailed to me to qualify you for the study.

## **Qualification Question 1:**

Are you between the age of 25-55?

## **Qualification Question 2:**

Do you have experience using video collaboration (Zoom, Google Hangout, Facetime, etc.) for any business or education purpose, have familiarity with its use, and have the means to participate?

## **Qualification Question 3:**

Are you willing to share your experiences with video collaboration software in how communication attempts succeeded or failed during your business sessions?

#### **Qualification Question 4:**

Do you promise to be truthful in all answers, understanding that any fabrications can affect the validity of this research?

### **Qualification Question 5:**

Do you object to being recorded for the sole purpose of transcribing all dialogue for authenticity?

## **Qualification Question 6:**

Do you object to your interview and information being stored for three years on a passwordprotected digital external hard drive? The purpose of the storage is to answer any authenticity challenges for the data.

## **APPENDIX C**

## **Research Subject Audio/ Photo/Video Consent Form:**

Title of Study:	Video Collaboration Study
Principal Investigator:	TJ Zito, Jr Ph.D. Student Liberty University xxx-xxx-xxxx xxxx@liberty.edu

## Use of Study Audio/Video Recordings:

Each session will include *Zoom Video* recordings (A/V recordings). These recordings will be labeled only with a code number, kept in the Investigator's files. This will be used for academic purposes as outlined to the Internal Review Board of Liberty University. The digital files will be stored on an external digital hard drive for three years, password protected.

If you agree to participate in this study, your signature on this consent form gives the researchers permission to make and retain the audio/video recordings for this study.

## You agree to use the A/V recordings only when you sign this form for study purposes. This means that you have read the consent form, your questions have been answered, and you have decided to volunteer.

Name of Subject (Print)

Signature of Subject

Date

Name of Person Obtaining Consent (Print)

Signature of Person Obtaining Consent

Date

#### **APPENDIX D**

Thank you for returning your qualification questions! You have been chosen to participate in my video collaboration study. Attached is your private link that we will participate in a question-and-answer session, as noted in the previous messages. This link will be conducted via Zoom software and will be recorded. The information will be stored on a password-protected external hard drive for three years.

Please click the link below to begin your session on XXXX XXXX, 2021, at Xpm. The session will end when all questions are answered in their entirety. Please remember to answer all questions truthfully and in as much detail as possible.

Link:

Thank you for your participation TJ Zito, Jr Liberty University xxx-xxx-xxxx

xxxxx@liberty.edu

## **APPENDIX E**

Thank you for participating in my study. Please state your name, age, and that it is acceptable to use this interview in my research.

Please answer that you accept this research will be used for academic purposes only in TJ Zito, Jr's dissertation for Liberty University's Ph.D. Communication program. Data will be anonymous in the research and stored for up to 3 years on an external digital hard drive for any research credibility questions. After three years, the videos and transcripts will be destroyed.

#### **APPENDIX F**

#### **Session Questions**

- 1. What role does appearance play in credibility and performance?
- 2. How do you feel when someone sits too close or too far away from the camera?
- 3. How does that affect your ability to understand people when they sit too close or too far away?
- 4. What effect do light and audio have on the presentation?
- 5. Should people use extra lighting and external microphones for their presentation?
- 6. How do people's expressions, eye contact, and hand movements help their presentation? (Revised from "Tell me about people's nonverbal communication")
- 7. How do these expressions and movements affect things when we communicate with different groups, cultures, etc.?
- 8. How does a boring subject versus one you are interested in affect your session?
- 9. What are things that distract you during a zoom call?
- 10. When do you know when to speak versus listen?
- 11. Tell me about a session where someone else dominates the conversation and you do not feel like you have a chance to speak or participate.
- 12. Tell me about someone who seemed in character for a session and how it made you feel about them and their credibility?
- 13. What impact does it have on the session when the session leader is organized?
- 14. Tell me about your experiences when people chit-chat at the start of a session versus getting right to business.
- 15. What do people talk about in chit chat and why?

- 16. When conducting a session with someone unfamiliar, what things can be done to build trust and have an enjoyable experience?
- 17. Do you have to know someone first in person to be effective?
- 18. What is the difference between fun and boring people in a session, and how does it affect how you interact?
- 19. What factors made a Zoom/video session better than a face-to-face?
- 20. Are there advantages and disadvantages of meeting over video compared to face-to-face?
- 21. Describe things you wish other people would do differently on video sessions to keep you interested and what things you wish you did better.
- 22. How do you feel people will train and use video collaboration for business purposes in the future?
- 23. How do you feel companies will train people, and what should be the focus?
- 24. What things should companies not train people on for video collaborations?
- 25. Is there anything you would like to add to your video collaboration business experiences?

Appendix G

# LIBERTY UNIVERSITY.

March 15, 2021

Thomas Zito Robert Mott

Re: IRB Exemption - IRB-FY20-21-652 Copresence Model for Business Video Collaboration

Dear Thomas Zito, Robert Mott:

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required. Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Category 3.(i). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met:

(C) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account. If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at xxx@liberty.edu.

Sincerely, G. Michele Baker, MA, CIP Administrative Chair of Institutional Research Research Ethics Office