

**COMMUNICATION & COMMUNITY: THE IMPACT OF CLOSED FACEBOOK
GROUPS ON ATHLETIC TRAINERS**

By

Allison M. Schwartz-Strickland, Ph.D., M.Ed., LAT, ATC

Liberty University

A Dissertation Proposal in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

School of Communication and the Arts

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ABSTRACT

This qualitative research study will use semi-structured interviews to explore the motivations of athletic trainers using social media for professional collaboration. The socio-psychological tradition is used to frame the study. Communities of practice, uses and gratification theory, and the Wisdom of the Crowd model are used as the guiding theoretical perspectives as they provide a framework for understanding how and why athletic trainers use social media. This qualitative study sought to show the impact of closed Facebook Group participation on athletic trainers. How athletic trainers understand patient privacy laws when participating in closed Facebook groups for athletic trainers will also be explored.

Keywords: community of practice, uses and gratifications, wisdom of the crowd, athletic trainers, patient privacy

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Dedication

This one's for me.

“I want to thank me for believing in me, I want to thank me for doing all this hard work. I wanna thank me for having no days off. I wanna thank me for never quitting. I wanna thank me for always being a giver and trying to give more than I receive. I wanna thank me for trying to do more right than wrong. I wanna thank me for being me at all times” (Broadus, 2018).

Acknowledgments

I want to thank my husband, Joey, for his love, and support, and for taking on the role of default parent for our children during this journey. I would never have been able to start or finish with toddlers at home during a pandemic without him. This work is also a testament to his accomplishments as a father and loving spouse. I want to thank my sons, Shea and Jamie for the privilege of being your mom, despite missing snuggles on the weekend or bedtime while I worked. Thank you to my parents for instilling in me eldest daughter syndrome, without which I would never have had the drive to always do my best, be bossy, be a leader, and prove everyone wrong. Finally, thank you to my little brother, Michael, for always being a friendly competitor and gifting me my mini-me. I promise to always be the best role model I can be for her.

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List of Abbreviations

American Medical Association (AMA)

Athletic Trainer/Athletic Training (AT)

Board of Certification (BOC)

Centers for Disease Control (CDC)

Centers for Medicare and Medicaid Services (CMS)

Commission on Accreditation of Athletic Training Education (CAATE)

Communication Network Centralization (CNC)

Communication Privacy Management Theory (CPM)

Community(ies) of Practice (CoP)

Consensual Qualitative Research (CQR)

Continuing Education Unit (CEU)

Family Educational Rights and Privacy Act (FERPA)

Health Insurance Portability and Accountability Act (HIPAA)

Learning Management System (LMS)

National Athletic Trainers' Association (NATA)

National Football League (NFL)

Social Learning Theory (SLT)

U.S. Department of Health and Human Services (HHS)

Wisdom of the Crowd (WoC)

Women in Athletic Training (WAT)

World Health Organization (WHO)

CHAPTER ONE: INTRODUCTION

In a popular closed Facebook Group for secondary school athletic trainers (AT) titled *Secondary School Athletic Trainers*, a member of the group asked how others in the group felt about asking for advice regarding patient care, posting images of injuries, or sharing experiences as it relates to patient privacy (Walters, 2022). The post gained more than 117 comments as of September 2022, with many in the group disagreeing with one another or strongly voicing their opinion about the question that was asked. Some ATs went so far as to insinuate that others in the group were breaking patient-privacy laws through some of their posts. The dynamics of the group range from being a helpful collaborator to flat-out name-calling. In the About section of the group, it reads “The intention of this page is to give A.T.s a place to share knowledge & ask for professional advice and connect with A.T.s in similar situations” (Secondary School Athletic Trainers, n.d.). Many closed Facebook Groups exist to bring people together of similar likes, interests, professions, or connections to share stories or seek out support from others going through the same experiences as themselves.

In this instance, there were disagreements regarding how collaboration regarding patient care should occur professionally and ethically within the group. Some felt that a quick Google search of an AT’s place of employment and an examination of the local news could easily be used to identify an athlete being treated by that AT. Others felt that by not showing the patient’s face the AT was protecting patient privacy. ATs often work in settings where the patients are members of an athletic team, and their injuries are being discussed in the media (Winkelmann, Neil, & Eberman, 2018). This raises questions about professional collaboration, patient privacy, and the legality of posting potentially identifiable patient information on the internet.

The Isolation Problem

Although closed Facebook Groups are private, posts could easily be screenshot and shared outside of the group (Ide, 2019). Another closed Facebook Group for ATs, titled *Women in Athletic Training*, includes similar discussions regarding patient care, job postings, and general career advice. The mission of this group is stated as “Founded on the need for female peer companionship in authentic and safe spaces; Women in Athletic Training (WAT) seeks to break down barriers and build women up. Driven by education and empowerment, the WAT community champions each other. We respectfully advocate for ourselves and others in the continual advancement of the athletic training profession” (Women in Athletic Training, n.d.). A unique aspect of this specialty AT group is that women often ask for personal support, such as this post that a member posted anonymously:

Hi all! I know this is the time of the fall season we all feel burnout. But this year hits more difficult than last year. I am still young in the profession, and I’m trying to maintain my work/life boundaries and recognize when I start to feel burnout. I try to get one step ahead then something happens, and I feel 3 steps behind. I’m trying very hard to find the “good things” in the profession these days. But sometimes I just want to flat quit and go to another profession. (Anonymous, 2022)

ATs are often alone at their clinical sites, and the story that this AT tells is not unique.

Athletic Trainer Burnout

Burnout and retention issues are rampant in the AT profession, especially for women who must balance career and family life (Mazerolle & Gavin, 2013). In-person support can be challenging compared to other healthcare professions, such as nursing or physical therapy, where practitioners work collaboratively on-site. Another member of the WAT group posted:

Hi all, I'm reaching out in regard to mental health. I struggle with depression and anxiety and have for years now...I am the sole AT for 500+ athletes at a large high school. I have been there 3 years. Most days I don't even have a second to step aside and take a breath let alone get to eat. I am salary-based and get paid for 40 hours, but most weeks I work well over that with no compensation. Due to being the only AT, I also don't get to take much vacation time...The appreciation for my time and services is often little to none and that just adds to the lows in my mental health. (Anonymous, 2021)

Again, the problem that this AT faces is a common story. Few healthcare professions exist that would place a single practitioner in charge of a 500+ potential patient load. ATs understand that any person could become a patient at any moment.

Combating Burnout through Support

Isolation, stress, long hours, lack of support, and work-family conflicts are common reasons for burnout in ATs (Cayton & McLeod, 2020). Often these reasons are coupled with low pay and a role that has high emotional involvement (p. 227). As AT students transition to the professional world, these burnout factors can be exacerbated when there is a lack of support from other ATs (Harper, Singe, & Ostrowski, 2022). Building relationships and a supportive network, whether in-person or online is an important skill for ATs to possess. Professional feedback and support are vital for any organization, and when the professional is isolated, online communication can fill this gap. For ATs, social media supports networking and professional collaboration, although little research has been completed on this topic.

Need for Additional Research

Wenger and Wenger-Trayner (2015) defined a community of practice (CoP) as a “group of people who share a concern or a passion for something they do and learn how to do it better as

they interact regularly” (para. 4). The study of social media use by ATs as a CoP is remarkably absent from current literature. This creates the need for a communication-based study that examines the motivations of ATs using social media in a professional capacity to interact with their peers. This qualitative research study aimed to examine the uses and gratifications of certified ATs using social media as a (CoP). Understanding ATs’ motivations for using social media could provide further insights as to how professional collaboration could potentially be achieved in a manner that would close knowledge-to-practice gaps.

Overview

Currently, around 30,000 ATs are practicing in the United States (BLS, 2022). The field of AT is significantly smaller, and more niche compared to other healthcare professions. ATs are a professional community where socialization is key for quality professional, educational, and personal development (Mazerolle, Bowman, & Dodge, 2014). ATs who work in the same school district or collegiate conference will often form good relationships with one another. Professional networks and communication are crucial to providing opportunities for emotional support, personal growth, friendship, and a way to give back to others in the profession (Colbert, Bono, & Purvanova, 2015).

Healthcare professionals have turned to online communication to develop professional networks (Wagner et al., 2017). Professional collaboration with other healthcare providers is important because it leads to more innovative, improved patient care, and enhanced clinical decision-making (Cuchna, Manspeaker, & Wix, 2021). While healthcare innovation has traditionally been an expensive and time-consuming endeavor, today’s communication technologies are primed to help healthcare providers collaborate. New communication tools have allowed healthcare practices to globalize. Healthcare providers typically work within the systems

they have trained. Global communication has allowed for cross-national conversations that expand healthcare knowledge and practices to other systems of care (Storey, 2021). The growth of online collaboration between healthcare providers has a low barrier to entry. This aspect of online collaboration is important because many providers do not feel comfortable with interprofessional collaboration and are wary of stepping outside of their training and specialty area (Clayton et al., 2021).

Social media platforms are associated with sending and receiving messages globally, which can help facilitate online collaboration (Ventola, 2014). Online collaboration between healthcare providers is efficient and often meaningful for the end users who choose to participate in professional and interprofessional collaboration (Hammond, Jaffe, & Kush, 2009). CoPs have formed on social media platforms to enable shared conversations that are easily accessible to the end user, including CoPs focused on healthcare. The speed at which knowledge can be transferred on social media is ideal for healthcare-centered CoPs considering the evidence-to-practice gap that slows the implementation of medical research evidence into clinical practice (Kudchadkar & Carroll, 2020).

The gap between research evidence and current clinical practices can be brought closer together through the creation, sharing, and dissemination of knowledge through peer influence, the informality of social media, and the power of the community itself (Kier et al., 2021). While aspects of social media vary by platform, social media was described as an internet-based application that allows users to exchange content, such as stories, images, and other aspects of their lives (Aichner et al., 2021). As one of the world's most popular free social media platforms, Facebook is widely accessed globally by healthcare providers for both personal and professional use (Lofters et al., 2016).

Healthcare Provider Social Media Use

Healthcare professionals use social media for personal use just like laypeople (Gagnon & Sabus, 2015). Common personal uses of social media are consuming information, entertainment, or marketing content, interacting with family members or friends, or finding and participating in virtual communities (Pelletier et al., 2020). However, even if healthcare providers are using social media for personal use, they still must be mindful of their online presence. Patients frequently make decisions about their healthcare providers using online searchers, directories, review sites, or looking for their healthcare provider's personal social media account (Gagnon & Sabus, 2015). Even outside of social media, consumers are increasingly looking for health-related information and support systems online (p. 407). Knowing this, healthcare providers have grown mindful of their social media presence, even if they are only using social media for personal use. Gagnon & Sabus (2015) refer to this phenomenon as *dual citizenship* and propose healthcare providers create separate personal and professional identities on social media (p. 411).

Professional participation on social media by healthcare providers is becoming more regulated because of patient-consumer behavior (Thompson et al., 2008). In a study of physicians using social media, those who were against social media use preferred more traditional forms of communication and collaboration or were concerned about personal and patient privacy (Wagner et al., 2017). To guide healthcare professionals, the American Medical Association (AMA) developed social media guidelines in 2010 to provide a set of social media best practices that all healthcare providers should follow (Gagnon & Sabus, 2015). Many healthcare organizations have also implemented social media policies that their providers must follow. This flexible approach recognizes that there is value in professional social media use. Healthcare organizations and educational programs have chosen to support rather than inhibit

social media use by developing digital professional competencies regarding social media (p. 412-13).

Professional Social Media Communities

While social media has introduced legal, ethical, and professional challenges for healthcare providers, digital professionalism practices have allowed for responsible social media engagement (Gagnon & Sabus, 2015). Professional mentorship and collaboration are common reasons that healthcare providers use social media (Petrescu-Prahova et al., 2015). Based on Wenger's (1998) concept of CoPs and the wisdom of the crowd effect (Surowiecki, 2005), there has been a notable rise in healthcare providers, including ATs, utilizing closed Facebook Groups specific to their profession as a means of participating in interprofessional collaboration. Social media has become an outlet for individuals globally to share knowledge, ideas, and produce content. When discussing the use of a closed Facebook Group for ATs as a CoP, one user wrote (Luther, 2022):

While it may not be the best form of advice seeking, some of these threads offer an opportunity to consider things in a different perspective than what you were taught or trained to do. Everyone has an "expertise" with particular injuries/sports/etc. so it doesn't hurt to have a platform to engage in open discussion if it means opening another professional up to another style of thinking or a different approach to injury management. Facebook Groups have become a valuable way to share and learn from other ATs who work in isolation. Another AT posted the following about why she values her participation in a closed AT Facebook Group:

As high school ATs sometimes, we are very isolated in terms of fellow ATs (I'm one of the only ones in my district) this site has given me new ideas and it's private, so I don't

find it an issue to gain other people's wisdom. On more public platforms I believe if it isn't bashing the patients, it actually makes us more publicly known and gives us credibility amongst our school. (Awiszus, 2022)

A female AT from a high school commented on the previous post, sharing how she benefited from her own experience using closed Facebook Groups, saying:

Many of us have very solitary jobs, not very many other ATs to look to for help or advice. I also love the opportunity of seeing how different people think about or approach an injury or condition. I personally think it has greatly benefitted my knowledge and provided new perspectives. (Cowan, 2022)

There are many similar stories and experiences of ATs who have found social media to be a valuable tool when utilized as a CoP (Avcı et al., 2015). An AT posted in a closed Facebook Group about a situation where he called 911 to spine board and transport a hockey player due to a potential cervical spine injury. When the paramedics arrived, they had no idea how to spine board on ice nor how to manage the hockey equipment the player was wearing (Robinson, 2022). The AT explained how he rarely has access to another healthcare professional. Learning through the experiences of others prepared him for this situation because he had recently read another post about how to best communicate with paramedics during crises such as these (Robinson, 2022).

Researchers have begun recognizing that the previous hockey situation is a common problem ATs face due to a lack of collaboration (Breitbach, 2016; Manspecker & Hankemeir, 2019; Meskimen et al., 2022 Geisler, 2015). There has been a clear and loud, cry from these isolated ATs across the U.S. that are telling their administrators, team owners, medical directors, and athletic directors that they need help improving professional collaboration. Collaboration

with others is often needed for more complex diagnoses, managing communication situations unique to the profession, or simply taking time off to recover and spend time with family. Britbach (2016) specifically stressed the need for the AT profession to participate in more interprofessional education opportunities by overcoming current psychological, sociological, and structural factors that are barriers for many (p. 139). These challenges, such as isolation and communication barriers, have been previously identified as barriers to collaboration (Manspeaker & Hankemeir, 2019). Communication, infrastructure, and learning have also been determined to be themes surrounding interprofessional and collaborative practice (Meskimen et al., 2022). Geisler (2015) thoroughly believed that “much more evidence needs to be generated to substantiate the claims made about enhanced patient outcomes and professional respect/communication before new prescriptive policies can be put into place for future AT students and professionals” (p. 3).

Seeking Out Collaboration Solutions

Chapter One explores the problem of the uses and gratifications of ATs using social media networks as a CoP to participate in interprofessional collaboration, along with its background, history, and recent scholarship on health communication. It covers organizational and individual challenges that ATs face when choosing to use social media in a professional capacity (Neil, Winkelmann, & Eberman, 2017). It also presents the problems associated with the uses and gratifications of ATs using social media as a CoP (Hamilton, Neil, & Eberman, 2021). A brief explanation of the reasons for conducting this research study and the researcher’s philosophical assumptions and research paradigm are also discussed. Chapter One concludes with a problem statement, purpose statement, research questions, and definitions. As online communication and social media continue to develop, ATs must be prepared to not only use

social media as a CoP effectively but be mindful of professional and legal responsibilities when participating in these communities.

Background of the Study

When attempting to study ATs' perceptions of use, it is necessary to understand how ATs use social media. However, there is a lack of evidence or literature related to ATs' perceptions of social media use. Social media use continues to rise globally, and ATs are not exempt from this phenomenon (Hamilton, Neil, & Eberman, 2021). ATs use social media for a range of purposes, including networking, information sharing and gathering, advocacy, collaboration, and organizational practices (p. 179). While it is known that ATs are using social media, little is known about their perceptions of social media for the purposes reported.

Evolution of Social Media

The use of social media platforms, such as Facebook, Instagram, and Twitter, exploded in the early 2000s, and their extensive presence in everyday life will likely continue (Langmia & Tyree, 2017). Social media's fundamental use has been described as a channel that establishes personal connections and is used to tell our stories virtually. However, other uses of social media have been identified, such as sharing information, establishing communities, and developing brand relationships (Freberg, 2019). Driven by these uses, social media is now a popular and to some extent, indispensable part of our daily lives. In the healthcare industry, social media can offer many benefits, including virtual communities where stories and experiences with different healthcare organizations and professionals can be shared (Belbey, 2016). From a regulatory perspective, no healthcare provider should be sharing private patient information, information that could be used to identify a patient, posting slanderous comments about patients, or making

derogatory comments about other healthcare providers or healthcare organizations (Belbey, 2015a).

The American College of Physicians and the Federation of State Medical Boards have published a policy statement outlining how social media should be used by healthcare providers and organizations professionally, extending to online educational resources (Farnan et al., 2013). This policy states that the protection of patient privacy is the most common challenge and concern for the healthcare industry. Noncompliance is damaging for both the individual healthcare provider and the healthcare organization. The healthcare industry is vulnerable to expensive lawsuits when privacy is compromised even outside of social networking (Belbey, 2015). As social media became more a part of an AT's daily life, concerns about knowledge-seeking behavior and patient privacy have developed. However, AT is a young profession that is constantly evolving, and no two ATs will have the same experience.

Athletic Training History

According to the National Athletic Trainers' Association (Athletic Training, 2021):

ATs are highly qualified, multi-skilled health care professionals who render service or treatment, under the direction of or in collaboration with a physician, in accordance with their education, training, and the state's statutes, rules, and regulations. As a part of the health care team, services provided by ATs include primary care, injury and illness prevention, wellness promotion and education, emergent care, examination and clinical diagnosis, therapeutic intervention, and rehabilitation of injuries and medical conditions (para. 2).

In countries outside of the United States, the role of an AT may also be referred to as an athletic therapist, physiotherapist, or sports rehabilitator (BOC, 2022). ATs work in various professional

settings, including colleges/universities, secondary schools, hospitals and clinics, professional sports, performing arts, public safety, occupational health, and the military (Job Settings, 2021).

Unlike other healthcare professions, AT often covers the full spectrum of care for many patients who might otherwise not have access to affordable healthcare (BOC, 2022). The AT may be the only healthcare provider a patient will see from the time of injury until their full return to activities. For example, a secondary school AT may spend an entire school year with the school's student-athletes, treating students before, during, and after practices and games (AATE, 2021). An AT working in an environment such as a warehouse, factory, military, or public safety will even help prepare workers for intense training or combat scenarios (para 8). ATs support optimal performance and risk reduction before injury or illness, diagnose and care for the patient often seconds following the injury, and guide the patient through every moment of their recovery and rehabilitation as part of their everyday role (para. 1).

Organizations benefit financially by having an AT on staff because ATs help to prevent costly injuries. Injuries could potentially keep an athlete or worker on the sideline, missing weeks or even months of athletic play or work. ATs remove the need for billing insurance for the care an injured person receives (para. 7). Additionally, ATs help to reduce litigation risks that could be filed against an organization by ensuring that patients are following prescribed guidelines for injury prevention and rehabilitation (para. 8). The removal of third-party reimbursement makes ATs valuable members of the healthcare team for active populations. A reason that most ATs have continued to practice without third-party reimbursement is that many professional, collegiate, and secondary school ATs follow the athletic model instead of the medical model of care within their job setting (Courson et al., 2014).

Athletic & Medical Models of Care

The athletic model has the AT reporting to an athletic director or coach (Courson et al, 2014). In contrast, the medical model positions the AT to report to a physician or healthcare organization (p.128). The medical model is well-evidenced to improve patient health outcomes through enhanced patient ratios, patient access to care, health outcomes, and clinician job satisfaction (Baugh et al., 2020). There are many extensively researched issues with the athletic model such as time demands, salary concerns, limited autonomy over work schedules, and conflicts of interest between what is best for the patient in the viewpoint of the AT and the coach (Goodman, Mazerolle, & Eason, 2017; Courson et al., 2014).

The athletic model remains the more prevalent model of care and has been found to limit interprofessional collaboration opportunities for ATs (Hankemeier & Manspeaker, 2017). This limitation is furthered by how ATs are recognized as healthcare providers. The Centers for Medicare and Medicaid Services (CMS) allows ATs to have a National Provider Identifier taxonomy as part of the National Plan and Provider Enumeration System. ATs are not currently recognized as providers by CMS as well (NATA, 2017). The AMA began to recognize ATs as an allied health profession in 1991 (AMA, 2017). The AMA Current Procedural Terminology 2017 Professional Edition Codebook (2017) includes codes specific to AT evaluation and re-evaluation services. Despite having common AT service codes included, many insurance providers will not reimburse for AT services due to what is defined as *medical necessity* as part of *Incident-to* services (AMA, 2017).

Incident-to & Athletic Trainer Reimbursement

Medicare *Incident-to* policies do not recognize ATs as an *Incident-to* provider (AMA, 2017) ATs are not recognized because “*Incident-to* requires services rendered in conjunction

with a physician visit, not services rendered under physician standing orders. All ATs work with physician oversight, but in most circumstances not as an *Incident-to* provider because ATs practice independently off-site. Many ATs work as independent practitioners at the facility where they work and render services (CMS, 2016). Independent practice further limits the interactions that an AT will have with another healthcare provider regularly. Not having access to other providers limits interprofessional knowledge-sharing and learning experiences for ATs (Driban & Laursen, 2019). Instead, ATs have historically relied on their continuing education requirements to fill knowledge gaps (p. 41).

Athletic Training Continuing Education

All ATs must complete continuing education to maintain their certification and/or licensure through the Athletic Training Board of Certification (BOC) and the state in which the individual AT is practicing (BOC, 2022a). Currently, ATs must complete fifty hours of continuing education (CEUs) every two years (p. 6). CEUs can be completed in a variety of ways, including attending professional conferences and meetings, virtual courses, on-demand online courses, serving as a clinical preceptor or speaker, and attending other educational events that fall within the professional domains of AT. Armstrong and Weidner (2011) found that most ATs prefer hands-on clinical workshops and professional networking to complete their continuing education requirements. Still, many complained of barriers such as cost, travel, and lack of applicability or versatility in available continuing education offerings. A lack of adequate, affordable continuing education options prevents ATs from staying current on specific best practices, such as how to use social media appropriately to protect patient privacy (Welch Bacon, Lacy, & Lam, 2021).

HIPAA & FERPA Dilemma

In 2015, National Football League (NFL) player Jason Pierre-Paul injured his hand, which eventually led to a sports broadcaster tweeting an image of Pierre-Paul's medical records without his prior authorization (Petchesky, 2016). Subsequently, two healthcare professionals were fired as a result of inappropriately accessing Pierre-Paul's records. A similar case regarding patient privacy occurred in 2016 when an AT for the then NFL team, the Washington Redskins (now referred to as the Washington Commanders) was traveling with an unencrypted laptop, a flash drive that was not protected, and paper healthcare records (Allen, 2016). The devices contained medical records for the team from 2004-2016 and were stolen from a locked vehicle. Situations like Pierre-Paul's and the Washington NFL team detail why patient health information privacy is a dilemma many healthcare providers face.

HIPAA

HIPAA is meant to protect personally identifiable healthcare information, including how that information is sent and received. While there are many components of HIPAA, the Privacy Rule, which became effective in April 2003, regulates how "covered entities", such as healthcare providers and insurers, protect and disclose protected health information without the patient's express written authorization (HHS, 2022). When HIPAA, also known as the Kennedy-Kassebaum Act, became law in 1996, openness and sharing online became more common as the internet grew into our everyday lives (Atchinson & Fox, 1997). According to the U.S. Department of Health and Human Services (2022), a patient must be notified if their information will be disclosed, and the disclosure must include only the minimum necessary information to achieve the purpose of the disclosure and authorization from the patient regarding the disclosure must be obtained in writing.

FERPA

For healthcare providers that work for educational institutions, such as secondary school ATs, the Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the Buckley Amendment, must also be upheld (US Department of Education, n.d.). In many healthcare professional education programs, students are taught that HIPAA and FERPA compliance is the *right information to the right person for the right reasons*, which extends to social media (CNA Training Advisor, 2017). While HIPAA and FERPA are laws that must be upheld, privacy violations also extend to a breach of trust between the patient and the healthcare provider (Bouldrick, 2015).

Application of HIPAA & FERPA by Athletic Trainers

Safekeeping student records are often complicated when many stakeholders, such as administration, coaches, and other athletes, are involved, particularly considering the uniquely close relationships athletic teams have with one another (Greim, Hobbs, & Swink, 2016). Additionally, many AT facilities in school settings are open, with many individuals funneling in and out while examinations, rehabilitation, or pre-participation taping and bandaging occur. Often, there are little to no measures taken to protect patient privacy due to the layout and function of these facilities (Berkowitz, 2015). When the Privacy Rule of HIPAA was first developed, the National ATs' Association (NATA) voiced concerns that the law would place unnecessary burdens on ATs as the NATA felt that other healthcare providers would be unable to share health information with the AT who was treating a patient regularly (Berkowitz, 2015). The lack of clarity on the intentions of HIPAA and how it relates to the field of AT has been a challenge since each law's inception. Depending on the practice model the AT follows, HIPAA

may not even technically apply in some instances if the AT does not work for a healthcare system and does not bill health insurers.

Athletic Trainers' Knowledge of HIPAA & FERPA

Neil, Winkelmann, and Eberman (2017) researched ATs' knowledge of legal practice within social media. The study specifically focused on knowledge of HIPAA and FERPA laws, as posting any protected health information on social media would violate these laws. Participants in the study completed a knowledge assessment regarding HIPAA and FERPA laws, and 59.2 percent of participants scored poorly on the assessment, indicating they lacked knowledge of laws and regulations about protected health information (Neil, Winkelmann, & Eberman, 2017). This statistic is concerning given the professional and personal implications of a HIPAA or FERPA violation that could result from improperly posting protected health information on social media. The NATA (2017a) provided best practice guidelines for AT documentation. Specifically, it noted that social media could become a source of HIPAA and FERPA violations, especially if photos are taken in the AT facility and shared online. Additionally, current AT education standards and competencies do not have language specific to professional behaviors in the context of social media (NATA, 2011; CAATE, 2020).

The HIPAA and FERPA dilemmas with social media are not unique to ATs. Other healthcare professions have similar concerns and have developed their own best practice guidelines as well, which showcase how easily a de-identified post could potentially become identifiable through traceable media mentions of an incident, the date and time of patient treatment, instances of a rare illness, or identifiable geographic information (Newsome, McKenney, & Elkbuli, 2022). ATs are in a unique position as healthcare providers because, in many settings, their patients are easily identifiable athletes. If an athlete is hurt on national

television and the AT is actively treating them on the field, all eyes are on them at that moment. It could be argued that any social media post made by an AT in the sports setting is easily identifiable because of the availability of information such as team rosters, photos, and media articles. The HIPAA and FERPA dilemmas are not well researched, and a communications lens would provide a good framework for studying how ATs are managing and responding to this dilemma currently.

Communication Perspective and Theoretical Approach

A study must be written approaching the question of why ATs might be motivated to explore the uses and gratifications of finding a CoP within social media. Expanding on Hamilton, Neil, and Eberman's (2021) research regarding how ATs participate on social media, this study will seek to understand ATs using private social media groups as a CoP. It is also essential to acknowledge ATs' role in understanding HIPAA and FERPA laws when posting on social media. A communications lens provided the framework to study ATs' engagement and emerging themes using social media as a CoP and how those behaviors align with HIPAA, FERPA, and other patient privacy laws.

In communication research, theories help explain and describe phenomena identified by researchers (Littlejohn, Foss, & Oetzel, 2017). Theories help to guide communication researchers in the development of their research study and the study's guiding principles (p. 19). For this research study, the Uses and Gratifications Theory (Blumler & Katz, 1974), the Communities of Practice (CoP) model (Wenger, 1998), and the Wisdom of the Crowd effect (Surowiecki, 2005) will be used to help understand how ATs utilize social media as allied healthcare professionals. The CoP model provides a way to understand how ATs engage with other ATs on social media. The uses and gratifications theory illustrates how ATs use social

media to fulfill a specific need. The wisdom of the crowd effect demonstrates how crowdsourcing, communication network centralization and shared task experience play a role in the interprofessional collaboration that occurs within AT CoP on social media. Through these theories, the uses and gratifications of ATs using social media as a CoP will be better understood.

Communities of Practice Model

Communities of practice (CoP) are comprised of people who regularly interact to share common interests and develop skills, knowledge, and capabilities regarding a particular issue (Wenger & Wenger-Trayner, 2015). Developed by anthropologists Jean Lave and Etienne Wenger while studying learning models, the original concept of CoP was articulated as a living, dynamic curriculum for each learner within the community (Wenger & Wenger-Trayner, 2015). The common thread of CoP is a passion for something and wanting to improve at the topic of focus through collective learning. Knowledge is readily shared because of the autonomy, informality, and practitioner focus that the CoP can provide to its members (Wenger & Wenger-Trayner, 2015).

It is vital to make the distinction between a community and a CoP. A community, such as a neighborhood or mixed classroom, is not a CoP because it lacks the characteristics that designate what comprises a CoP. Wenger (1998) stated that a CoP must have three crucial elements: domain, community, and practice. The domain is the shared interest that defines the scope of the CoP and gives the community its focus (CDC, 2021). Community refers to the group of people that make up the CoP and share common interests, bringing a sense of belonging and collaboration to the CoP (CDC, 2021). Finally, the practice is the agreed-upon way of

formalizing and implementing the collectively developed knowledge that contributes to the CoP's overall mission (CDC, 2021).

What is challenging for the AT profession is that many ATs work in isolation with no support from other healthcare professionals and the employment model under which an AT works may limit their ability to implement new evidence-supported knowledge and techniques into their clinical practice due to a lack of support from administration or coaches (Sortedahl, 2012). Keeley et al. (2016) encouraged ATs in either of these situations to build a community of other healthcare providers in their area, such as their team physician, school nurse, or a physical therapy team they regularly refer athletes out to for care. This recommendation included connecting with other ATs through online technology to form a community of practice, although social media was not specifically mentioned as the communication medium of choice (Keeley, 2016).

Uses and Gratifications Theory

Relationships within social media-based CoPs are focused on the user, rather than the message, which relates to Katz's uses and gratifications theory (Blumler & Katz, 1974). Uses and gratifications are based upon a user being an active consumer of media to achieve their own goals (Littlejohn, Foss, & Oetzel, 2017). There are five assumptions in uses and gratifications theory, which are:

1. Users actively select from various media;
2. Audiences are active and goal-directed;
3. Various media compete for user attention;
4. Social and contextual elements shape audience activity;
5. The effects of media and audience use of media are interrelated (p. 175).

Further research by Denis McQuail (1987) identified four types of gratifications that individuals receive from media: entertainment; information; personal identity; and integration and social interaction. Other researchers have supported additional gratifications to include general information, social integration, parasocial interaction, conflict, and valuation of the protagonists (Li, Chen, & Nakazawa, 2013). Other theorists, such as Philip Palmgreen and Terry Daugherty, have applied the uses and gratifications theory to expectancy-value theory as well, which suggests that individual characteristics can predict the consumption of user-generated content and subsequently predict the expected outcome (Palmgreen, 1985; Daugherty, 2010). Previous researchers have also used uses and gratifications to investigate social media, communities and relationship building, and knowledge-sharing (Quinn, 2016; Pelletier et al., 2020; Quan-Haase & Young, 2010; Gagnon & Sabus, 2015, Hayes et al., 2019).

Motivations of Athletic Trainers Using Social Media

Any communication method that ATs use to collaborate about patient care must consider the implications of disclosing potentially protected patient information. Information as an assumption of uses and gratifications can be affected if the information could or should be protected by HIPAA or FERPA laws. Petronio's (2002) communication privacy management (CPM) theory considers this dilemma and the process people engage in when deciding to post private information. The CPM theory argues that decisions about revealing private information are not always straightforward, and any degree of risk is based on the perceived repercussions for revealing or concealing that information (Petronio, 2002). The group can also affect this due to cultural expectations, social circles, and intergroup dynamics (Mansour & Francke, 2021). Why ATs choose to use social media for professional collaboration may be affected by their

perception of privacy and risk within a social media group and their understanding of how social media platforms and their members use the information within a closed group.

Wisdom of the Crowd Effect

The knowledge-to-practice gap is often closed by healthcare providers turning to colleagues they trust and believe have the required expertise (Sims et al., 2019). Information-seeking behavior in healthcare is influenced by time pressures, the convenience of access, the career state of the provider, and the perceived applicability of the information regarding the clinical question (Perley, 2006). With these barriers, healthcare providers such as ATs choose to initiate peer-supported knowledge creation through social media. Within an in-person setting, terms such as “curbside” or “water cooler” consultations are common terms to refer to these informal exchanges, in addition to the phrase “bouncing ideas around” (Perley, 2006, p. 139).

What is distinct about curbside consultations on social media is that these knowledge-seeking efforts are usually posted for the group or the public to view. Continuing education is not a static concept in healthcare – it is consistently growing and changing as new research and best practices emerge. Seeking out feedback from others can be a valuable tool for increasing knowledge. A study by Eberman and Tripp (2011) found that while feedback did not significantly affect perceived knowledge, feedback increased the likelihood for an AT to pursue continuing education and demonstrated how it could facilitate an AT’s recognition of needing to seek out information. The AT profession generally recognizes that there is value in informal learning such as roundtable discussions and professional networking and socialization (Armstrong & Weidner, 2010). Because of the global reach of social media, informal learning through CoP can now quickly and easily reach ATs across the country.

Introduction to the Problem

Many ATs work independently with limited in-person oversight and few opportunities for collaboration with other healthcare providers regularly. An issue that occurs even outside of the AT profession is that healthcare professionals in different disciplines often lack awareness of what other disciplines are doing (Parrott & Kreuter, 2011). In health communications research, multi- and inter-disciplinary research is often lacking in place of an independent approach. Manspecker and Hankemeier (2019) found that interprofessional collaborative practice was lacking for ATs, primarily due to communication challenges with other relevant members of the multidisciplinary healthcare team.

Interprofessional collaboration is vital for healthcare providers as it promotes a multi-faceted, patient-centered approach to healthcare (WHO, 2010). Waiting for teachable moments to identify knowledge gaps can be challenging for ATs when continuing education has barriers or if continuing education offerings do not fill knowledge gaps or reflect new research (Eberman & Tripp, 2011). Eberman & Tripp (2011) explained that “external feedback has been shown as an effective means of initiating such awareness and exploring C.E. opportunities in various professions” but acknowledged further research needs to be completed on knowledge-seeking behavior for ATs (p. 70).

Problem Statement

Many ATs use social media to network and share knowledge with other ATs. A recent study of AT students showed that 93.4 percent had an active Facebook account, and 80.4 percent had an active Instagram account (Winkelmann, Neil, & Eberman, 2018, p. 5). Hamilton, Neil, and Eberman (2021) found that most ATs use social media for various professional reasons,

including information gathering, sharing, networking, and peer-to-peer collaboration. This is not surprising considering that nearly one-fifth of ATs work independently in a secondary school setting and lack on-site mentorship and collaboration at their location (Job settings, 2021).

It can be difficult to discern which groups are valuable as a CoP for ATs because of the sheer number of social media communities available and the number of individuals who participate (Vincent et al., 2018). ATs also must abide by patient privacy laws on social media and frequently lack social media training (Winkelmann, Neil, & Eberman, 2018). HIPAA and FERPA privacy laws must be followed by ATs on and off social media (Blechner & Butera, 2002, Kiel & Knoblauch, 2010). ATs are currently using social media to participate in professional collaboration, frequently posting information that could be considered a HIPAA or FERPA violation (Hamilton, Neil, & Eberman, 2021). The problem is that ATs' intentions to use Facebook Groups as a CoP to fill knowledge gaps are currently not well understood. This problem could potentially have further-reaching effects on HIPAA and FERPA best practices when using social media.

Purpose Statement

This qualitative study aims to examine the motivations of ATs using closed Facebook Groups as a CoP to fill knowledge gaps through professional collaboration. At this stage in the research, the use of closed Facebook Groups by ATs will be defined as using the closed Facebook Group to communicate with other ATs for an identifiable purpose. The communication tradition guiding this study is the socio-psychological tradition (Littlejohn, Foss, & Oetzel, 2017). The socio-psychological tradition is appropriate for this study because of the focus on interpersonal interaction on social media and the emphasis on human behavior (Craig, 1999). The uses and gratifications theory will be used to better understand the motivations of

ATs using social media for professional collaboration. Previously identified uses of social media by ATs align with Wenger's (2015) Community of Practice concept for further exploration in this study. Additionally, Surowiecki's (2005) Wisdom of the Crowd model will be used to better understand how ATs are using social media to fill knowledge gaps.

Significance of the Study

Eberman and Tripp (2011) believed that further study of ATs' knowledge-seeking behaviors is needed, particularly when new practices could be employed to guide educational activities in the future. It is essential to understand why ATs are using social media as a CoP, whether it be for professional, academic, or personal reasons. An improved understanding could be used to inform future opportunities for education and growth for both the individual AT and the profession itself (Hamilton, Neil, & Eberman, 2021). Knowing how ATs use social media as a CoP could also improve future continuing education initiatives and professional competencies for social media, which are lacking in current practice (Winkelmann, Neil, & Eberman, 2021). It is also necessary to understand how ATs consider HIPAA and FERPA laws when participating in AT-related Facebook Groups (Rapp & Ingersoll, 2019). If an AT posts private patient information online, they put both themselves and the patient at risk. This study can aid health communication scholars in understanding how allied health professionals, such as ATs, use closed Facebook Groups to participate in CoP and maintain compliance with HIPAA and FERPA laws when actively participating in these communities.

Research Questions

This study seeks to find the answers to the following research questions:

RQ1: Are athletic trainers utilizing social media-based athletic training groups as communities of practice?

The purpose of R.Q. 1. is to understand how ATs are using social media to participate in professional collaboration with other ATs. While previous research has identified collaboration as a reason that ATs use social media, why and how that collaboration occurs has not been previously explored (Hamilton, Neil, & Eberman, 2021).

RQ2: What uses and gratifications are athletic trainers communicating as reasons for engaging with social media-based athletic training groups?

There are seven identified assumptions about the uses and gratifications of media (Blumler & Katz, 1974). The purpose of R.Q. 2. is to determine which assumption ATs best align with as reasoning for engaging with other ATs in AT-specific social media groups. It can be hypothesized that identifying the primary assumptions of why ATs use social media groups could improve understanding of the usefulness of social media for professional collaboration. This question will also explore how professional collaboration might close knowledge-to-practice gaps.

RQ3: What privacy concerns do athletic trainers participating in social media-based athletic training groups perceive when disclosing information regarding a patient in the group?

Sharing stories and images is a primary use of social media. However, healthcare professionals, including ATs, must be mindful not to violate HIPAA and FERPA privacy laws when using social media. The intent of RQ3. is to improve the understanding of how ATs participating in social media-based AT groups perceive risks associated with privacy laws. How

those perceived risks affect their participation in social media will also be explored through this question.

Definition of Key Terms

The following terms are defined to aid the reader in understanding each word's context in this research study.

1. *American Medical Association (AMA)* – The American Medical Association (AMA) is a professional association that serves to promote medicine and the betterment of public health in the United States.
2. *Board of Certification (BOC)* – The BOC is the national credentialing body for athletic trainers in the United States and establishes the standards for practice and continuing education requirements for BOC-certified athletic trainers (BOC, 2022).
3. *Closed Facebook Group* – A closed Facebook Group is a type of Facebook Group where admission to the group is based upon approval by an administrator or an invitation by a current member. Users not in the closed Facebook Group cannot see the content posted and shared within the group.
4. *Commission on Accreditation of Athletic Training Education (CAATE)* – The CAATE is responsible for accrediting AT education programs and developing, maintaining, and promoting minimum education standards. The CAATE regularly evaluates programs' compliance with these standards to ensure students are appropriately prepared to practice as certified athletic trainers. (CAATE, 2020).
5. *Competencies* - The Athletic Training Educational Competencies (Competencies) is a set of skills, knowledge, and clinical proficiencies that every AT student must master while completing their AT education program. The Competencies were developed by the

Professional Education Council of the National Athletic Trainers' Association, which is currently in its fifth edition (NATA, 2011).

6. *National Athletic Trainers' Association (NATA)* - The NATA is a professional association that works to promote and protect the profession of AT (NATA, 2022).
7. *Social media/networks* – Social media, or social networking, sites are used to network and communicate with others online. These sites may include but are not limited to, Facebook, Instagram, Twitter, LinkedIn, TikTok, Snapchat, online forums, and blogs (Freberg, 2019).

Summary

Chapter One explored the background of AT as a profession and social media-based groups. It also included a discussion about the history of communities of practice and how ATs are currently utilizing social media for this purpose. This chapter outlined the motives of ATs for using social media and analyzed how HIPAA and FERPA laws have a role in how ATs participate on social media channels.

This study will contain five chapters. Chapter Two is a literature review examining existing Communication theories about social media use by healthcare professionals that apply to uses and gratifications and introduces communities of practice as a usage model. In Chapter Three, the method for the study will be presented, including the qualitative interview research design and how the qualitative interviews were conducted. The research results are provided in Chapter Four. In Chapter Five, the results will be discussed, as well as the implications of the results and ideas for further academic research.

CHAPTER TWO: LITERATURE REVIEW

Overview

Chapter One introduced the problem statement, purpose statement, research questions, and the topic of athletic trainers (AT) and communities of practice (CoP) on social media. Chapter Two will build on the ideas outlined in the previous chapter to explore social media-aided CoPs, applicable theories, and other factors that contribute to the uses and gratifications of ATs using social media. This study draws primarily from communication scholarship and other fields, including sociology, psychology, and education. The field of communications is interdisciplinary and frequently intersects with other disciplines. Theoretical works based on communication are often applied in practical ways, such as health communications or political science.

Chapter Two will review the literature pertinent to study the uses and gratifications of ATs using social media as a CoP. First, CoP and uses and gratifications theory are presented as theoretical perspectives to understand how ATs utilize social media as a CoP. Then, a history of social media is considered, and a review of how social media and learning intersect is provided. Finally, AT CoP and how ATs currently use social media are discussed, including the limitations that ATs have when utilizing social media, such as legal and patient privacy implications. Current gaps in the literature, a chapter summary, and a preview of Chapter Three will also be presented.

Theoretical Framework

In communication research, theory is used to develop explanations that help researchers understand phenomena (Littlejohn, Foss, & Oetzel, 2017). It is through communication theories

that we can better understand our experiences, improve communication methods, and better understand social and cultural differences, behaviors, thinking patterns, and speech acts. By knowing and understanding communication theories, we can better understand and improve communication in our day-to-day lives. Theories are then applied to the study and research of many aspects of communication to continuously improve our understanding or gain new insights into new communication methods. As part of communication theory, we can also identify the flow of information, such as how information travels from sender to receiver (van Ruler, 2018). Communication improves the ability of individuals and organizations to present, negotiate, construct, or reconstruct messages that influence our daily lives (p. 379).

Theory is used in this study to provide a framework for understanding the uses and gratifications of ATs using social media as a CoP, which is the primary issue that will be examined (Punch, 2014). As tools for scholars to understand human interaction and the world around us, theories give context and a framework for human behavior. Craig (1999) explained that, through theory, we could develop a better understanding and view of our world. Theories are methodologically grounded and will be used in this study to guide the research process and create a perspective that will be used to understand the research results, which are discussed in Chapter Four. The theories in this study are situated in a communication tradition. Littlejohn, Foss, and Oetzel (2017) wrote that “theories are opportunities to reflect on problems and principles employed by actual communicators in various situations and, at their best, suggest new and constructive ways of interpreting situations” (p. 18). The following section will outline Craig’s (1999) work and deliver an overview of the Socio-psychological tradition.

Communication Theory as a Field

To help scholars understand how theory could be used, Craig (1999) created a map for communication theories, which includes seven traditions. These seven traditions organize communication theories, allowing communication researchers a more focused approach. With the seven traditions as a signpost, researchers can focus on which theory is most relevant to their intended study. The seven traditions are:

- **cybernetic:** information processing
- **socio-psychological:** interpersonal interaction and human behavior
- **socio-cultural:** context, culture, and social practices
- **critical:** language and ideology
- **rhetorical:** public speech and rhetoric
- **phenomenological:** communication process and dialogue
- **semiotic:** signs and symbols as communication

Despite their independence, these theories are deeply interconnected, as they each provide explanations and answers to specific challenges from a particular viewpoint. These theories are profoundly interlinked, as they each offer causes and solutions to individual challenges from a specific perspective of human communication. The solutions found within communication theories offer insight into how humans continue to evolve connections with one another globally.

The Global Village

Human communication transcends the boundaries between people through the interaction between nature, objects, technology, and the divine. Communication theorist Marshall McLuhan (1964) developed the idea that "the medium is the message" to change human communication from content to form (p. 7). The methods of human communication continue to evolve

drastically as technology advances. A two-way telephone has evolved into a sophisticated minicomputer that you carry in your pocket or access via a smartwatch. The Medium Theory is still being tested using current technologies (Littlejohn, Foss, & Oetzel, 2017). Conversations and texts sent and received by cellphones are less critical than their invention. Social impact and method of delivery take precedence over content. A simple message or video shared online can forever alter cultures, such as viral videos that cause nationwide protests or political statements (West, 2011). Media ecology highlights the interconnectedness of communications through the medium (Littlejohn, Foss, & Oetzel, 2017). Additionally, media ecology continues to support McLuhan's words and concept of the *global village*.

Professionals in the healthcare field are increasingly using social media to connect with others with similar interests (Schafer, 2017). Health and media ecology are well integrated as individual disciplines. Due to social media, healthcare professionals have brought their unique needs to the ecological landscape as the global village has grown online. In these communities, healthcare professionals can find support, participate in knowledge sharing, or seek out help from each other through social media groups, online forums, or professional membership groups. These communities have become so vital to healthcare professionals that the Centers for Disease Control (CDC) now offers resources, tools, and support for healthcare professionals to launch and sustain their communities with the aim of strengthening public health in their communities' focus areas (CDC, 2021).

Dialogue models are standard in these communities because they encourage listening and learning through bidirectional communication (Besley et al., 2018). This dialogue model is based on three pillars: shared knowledge, investing in relationships, and listening and learning (Reincke, Bredenoord, & van Mil, 2020). Dialogue models rely on peer-to-peer support to

develop relationships, which may change individuals' beliefs and attitudes (Foster, 2016). When individuals live in a smaller community, they behave and act in ways like those around them who hold the same beliefs as themselves (Contractor & DeChurch, 2014). Healthcare professionals can use communication technology in many ways, including social media, to share information, improve participation, and collaborate with others (Antheunis, Tates, and Nieboer, 2013; Puspitasari and Firdauzy, 2019).

Media Ecology

In the 1960s, McLuhan defined the concept of the global village as the daily creation and consumption of media by a universally connected global audience (McLuhan, 1964). During McLuhan's lifetime, which did not extend to the birth of the internet as it is known today, the speed at which messages could be sent through technology shaped communities across the globe. When messages can be sent efficiently across a global audience, those messages have the potential to shape the environment where they are received profoundly. Media ecology, first coined by Neil Postman in 1968, explores how communications and media affect our understanding of perceptions and feelings as they relate to the environment (Postman, 1970). Postman (1970) believed that media environments have explicit specifications that allow media to make people feel and act a certain way or contribute to the roles people play in their daily lives.

Through the lens of media ecology, it is essential to understand why healthcare professionals interact on social media and how those interactions affect their perceptions, understandings, and patient care. Creating new ways to communicate and share experiences is a way to improve the evidence-based practice that underpins healthcare. It would also be beneficial to research the impact of these social media practices on clinical preceptorship and traditional mentorship

further. The answers to these questions could lead to the development of new learning and knowledge-sharing models for the next generation of healthcare professionals. Formal healthcare education has relied heavily on knowledge succession through active participation and oral communication. The use of social media allows healthcare professionals to share narratives of their professional practice and experiences, shifting knowledge succession to a more literate model.

Technological Determinism

The technology of social media has undeniably altered global healthcare practices through continuous communication and innovation (Ticau, Ruxandra, & Hadad, 2021). Technological determinism is a communication theory that questions the degree to which technology can shape and determine trends in social changes and how this may affect the way people think and act (p. 149). Technology, such as social media, is viewed as a driving force in our society that leads to traceable changes (Dafoe, 2015). If changes in human behavior occur because of technology, it is important to understand the motivations that drive people to use that technology. The uses and gratifications of social media use are primarily concerned with why people choose to use social media for various reasons such as interpersonal interaction between other users. As a communication theory, uses and gratifications are best understood through the socio-psychological tradition.

Socio-psychological Tradition

Craig (1999) defined the socio-psychological tradition as “a process in which the behavior of humans or other complex organisms expresses psychological mechanisms, states, and traits and, through interaction with similar expressions of other individuals, produces a range of cognitive, emotional, and behavioral effects” (p. 143). In the health communication field, the

socio-psychological tradition is most prevalent in the tensions between values and (un)certainty, risk perception, fear appeals, compliance, social support, expectations and uncertainties, and problematic integration (Babrow & Mattson, 2011). Craig (1999) wrote that theories in this tradition appeal to the commonly accepted ideas that communication reflects our beliefs, personality, feelings of bias, judgments, and how individuals within groups affect each other.

The socio-psychological tradition is separated into three categories:

- **behavioral:** how people behave
- **cognitive:** how people acquire, store, and process information leading to behavioral outputs
- **biological:** effects of brain function and genetic factors explain human behavior

(Littlejohn, Foss, & Oetzel, 2017).

When simplified, Craig (1999) believed the socio-psychological tradition encompassed “...problems of communication theorized as situations requiring the manipulation of causes of behavior to achieve specified outcomes” (p. 133).

What is interesting about the socio-psychological tradition that pertains to this research study is Craig’s belief that the tradition challenged the idea that people are rational (p. 143). Regarding social media, many people post words they would never say to another person face-to-face. In a study of public opinion and the effects of social media that was grounded in the socio-psychological tradition, it was proposed that the proliferation of social media offered everyday people the ability to influence others in a way that had only been accessible to dominant media organizations or those with influence (Leong, 2022).

Our values guide our behaviors, attitudes, and perceptions, often going beyond situational boundaries that may exist (Marini et al., 2018). Because values are so closely tied to decisions

and actions, especially concerning uncertainty and risk, there are many benefits for focusing this study within the socio-psychological tradition – namely, the complex dynamics of how people shape and interact with their environments (p. 4). When ATs participate on social media, there is some level of personal and professional risk because their posts and interactions reflect their values and behavior as healthcare professionals.

ATs' experiences allow the research to be viewed through the sociopsychological tradition because of the values ATs hold regarding professional conduct. The sociopsychological tradition perspective will impact how ATs view social media in a professional sense, including how they interact on social media with other ATs. Interactions on social media include actions such as shares, likes, and comments. These interactions are considered to be mediated social interactions because they occur through a system (Watkins et al., 2014). Miller et al. (2021) found that adults from Generation X now have as many interactions on social media as they do face-to-face.

Many ATs may choose not to interact or get involved in social media but instead interact as a 'lurker,' defined as "...a user who is silent most of the time" (Gong, Lim, & Zhu, 2021). In online social media groups, lurkers may also be called free riders (Kollock & Smith, 1996). In an online community setting, free-riding can have negative connotations because communities inherently collaborate and produce content amongst the users (Zhu et al., 2013). However, some researchers believe lurkers are merely contributing passively, connecting with the content as a member of a wider audience (Antin & Cheshire, 2010). Communities of practice in AT that are carried out on social media groups are one of those environments that this research study will attempt to understand better.

Communities of Practice

Lifelong learning for personal or work-related reasons is vital to around 74 percent of Americans, traditionally occurring at home, work, conferences, libraries, or, most recently, the internet (Horrigan, 2016). Of those learners, nearly two-thirds identified themselves as professional learners meaning they had sought out additional knowledge to improve their job skills or advance in their careers (p. 2). Of the learners surveyed in Horrigan's (2016) study, over 80 percent stated they pursued knowledge in an area of personal interest because it helped them live a more enjoyable, fulfilling life (p. 4). Additional reasons included learning something that would allow them to help others more effectively, having time to pursue interests, turning a hobby into an income-generator, or learning things that would help them keep up with the schoolwork of the children in their lives (p. 4). Communities are favorable for many reasons including creating a space for belonging, low cost, and as a method of knowledge transmission.

CoP Characteristics

CoPs develop for a variety of reasons, but the common denominator is a shared practice (Wenger, 2015). Businesses, academic institutions, and other organizations alike have found value in the development of CoPs because they provide a practical way to manage knowledge-sharing and learning (Wenger, McDermott, & Snyder, 2002). While some CoPs are created intentionally, others grow organically when individuals with shared interests begin to meet and work together because they find the interactions valuable (p. 4). The social structures and sense of belonging are also key for fostering learning and managing knowledge within the group (p. 11).

Belonging

For a CoP to exist, there must be a community where members can engage in discussions, share information, and help each other solve problems (Wenger, 2015). Cultivating community through networking, friendships, and strong interpersonal bonds is the foundation for sustaining a CoP long-term (Wenger-Trayner et al., 2022). These connections are important considering that most successful CoPs are not intentionally developed but instead grow holistically (Waring et al., 2013). When CoPs form naturally through shared interests, new ideas, and shared learning are improved because members can learn by thinking together through more casual exchanges (Pyrko, Dorfler, & Eden, 2016). AT CoPs occur naturally because of the implied shared interest in improving professional knowledge and best practices in the field of AT. Coming together through holistic, casual means also leads to most CoPs being a low-cost way to share knowledge.

Low Cost

A benefit of many CoPs is the relatively little- to no-cost of developing and sustaining the group (Wenger et al., 2002). While a CoP could accrue costs if the group were to rent physical space or pay to have a formal web presence as examples, in general, a CoP does not cost anything to its members. Low costs have been a reason why many organizations have turned to CoP to address business problems that would be better solved through cross-sectional teams (Wenger, McDermott, & Snyder, 2002). ATs participate in CoP in many ways, such as social media. Since social media platforms are free to use, this makes social media an affordable place for ATs to collaborate and share knowledge.

Knowledge Transmission

A shared practice where members are mutually engaged to focus on their members' needs and make community-based decisions is a defining characteristic of a CoP (CDC, 2021). What is unique about CoPs is the relational network that promotes learning through co-participation and knowledge production rather than a 'before and after' model of learning (Murillo, 2011). Wenger et al., (2022) proposed seven design principles for developing CoP, while Probst & Borzillo (2008) describe a governance model for CoPs that was based on the success of 57 CoPs from leading businesses. This model included setting clear objectives, sponsorship, leadership, designation of leadership roles, creating links beyond the boundaries of the community, providing a risk-free environment, and a way to measure the value of the CoP (p. 335-336).

More recently, the concept of CoP has evolved to have an increased emphasis on learning capabilities through systems of practice and how relationships exist within those systems (Omidvar & Kislov, 2014). Relationships are key when individuals come together to collaborate toward a shared goal (Bright et al., 2017). Bright et al. (2017) noted that it is not uncommon for groups to work together toward the same mission through parallel but uncoordinated efforts, which can be problematic on social media (p. 339). However, effective relationships are key indicators for the ability of a community to achieve its goals, making more profound and meaningful relationships necessary for community engagement and collaboration (p. 344).

Relationships on social media are sometimes referred to as social capital, which is the relationships built and maintained with others through either weak or strong ties (Garcia et al., 2015). A weak tie is described as an acquaintance or someone known through a more extensive network, and strong ties are defined as those where individuals know each other, are accessible, and provide emotional support (p. 289). Social media allows both ties to exist and often extend

into online learning communities, making social media platforms a natural environment for CoPs to exist (Selwyn, 2009; Antonacci et al., 2017).

Collaborative learning through CoPs on social media allows users to exploit the skills, information, knowledge, and resources of others in a way that benefits the entire community (Ajegbomogun & Oduwole, 2017). Social media allows collaboration to be spontaneous, which for some professionals or students, is helpful for quickly accessing needed information (p. 10). The most popular social media platforms permit collaborative discussions and information or idea sharing with others in the community, boosted through peer feedback, interaction, and learning in a social context (p. 11).

Wenger (2000) has noted that most CoPs are self-organized, which may be a determinant for CoPs developing online. Online CoPs are becoming increasingly popular for healthcare providers because they can optimize knowledge, skills, and the implementation of evidence-based practice globally (Shaw et al., 2022). While social media is a common space for CoPs to exist, other successful CoPs such as the Project Extension for Community Healthcare Outcomes (ECHO) or Free Open Access Medical education (FOAM) for critical care and emergency medicine providers (Nickson & Cadogan, 2014). The educational component of a CoP in healthcare is valuable because of the ability to facilitate learning emerging evidence-based practices regardless of where the provider is located (Ranmuthugala et al., 2011).

Online CoPs allow healthcare providers to learn synchronously and asynchronously, although the best methods for establishing a healthcare CoP online have yet to be established (Shaw et al., 2022). In a study of virtual healthcare CoPs, Shaw et al. (2022) found that several methods, such as webinars, online discussions, blogs, live case study discussions, and social media, were regularly used to develop and maintain the CoP (p. 9). Online discussion forums,

such as those on social media, were popular because they are social and help build a sense of community among the CoP group members (p. 10). These findings are supported by the previous work of Alali & Salim (2013), who found that healthcare professionals are satisfied by the quality of shared knowledge in online CoPs, mainly when the platform is easy to use and contains a social component for learning (p. 180).

Social Learning Theory

Developed by Bandura (1971), Social Learning Theory (SLT) is learning that takes place in a social context through the support of other individuals in the group learning from one another. In both formal and informal settings, peer-to-peer learning is one of the most common methods of learning. Peer learning is defined as the acquisition of knowledge, skills, and information through active collaboration, participation, and support among the group (Topping, 2005). As people in social groups come together and help each other learn, individuals in the group can learn themselves as well (Dabbaugh & Kitsantas, 2012). The growth of social networking platforms has extended social learning to the internet. Social media can be used as a collaborative knowledge-sharing tool that promotes discovery, connectivity, and social support between users (Mazman & Usluel, 2010).

As part of a CoP, Wenger (2010) argued that learning is an intrinsically social process. Four components - meaning, practice, community, and identity – encompass the conceptual framework of social learning (Wenger, 1998). Wenger & Wenger-Trayner (2020) drew upon social learning theory as an extension of Wenger's work on CoPs and distinguished them in a few key ways:

- identification with a shared domain;
- commitment to plying, developing, and improving a shared practice;

- longevity and continuity as a social structure;
- definition of a regime of competence over time;
- recognition of membership and construction of identity-based on the regime of competence (p. 32).

While Wenger and Wenger-Trayner (2020) noted that social learning does not need to require a CoP to exist, many elements of social learning do occur inside of a CoP, such as engagement and participation, making social learning a natural occurrence within them.

Bandura (1971) described social learning in several ways that apply to ATs and CoP. New behavior patterns could be acquired by observing the behaviors of others or through direct experience (p. 3). AT education is extremely hands-on as the curriculum includes clinical experiences. Learning can also happen through modeling, external and internal reinforcement, and reciprocal influence (p. 39). Wenger and Snyder (2010) recognized that social learning could extend beyond in-person communication as CoP grew to a global scale via the internet, writing, “the complexity and intelligence of such a social learning system must match the complexity of world-design challenges and the knowledge requirement associated with them...The challenge to intentionally and systematically design and develop the world as a learning system must be a global, diverse, interwoven social movement” (p. 124). This challenge extends itself to interprofessional collaboration as well.

Interprofessional Collaboration

In Probst & Borzillo’s (2008) CoP governance model, two governance mechanisms referenced seeking knowledge externally by feeding external expertise into the group or promoting access to other intra- or inter-organizational networks. According to the World Health Organization (2010), interprofessional collaborative practice “happens when multiple health

workers from different professional backgrounds work together with patients, families, careers, and communities to deliver the highest quality of care across settings” (p. 7).

Since the Crossing the Quality Chasm report of 2001, there has been an increased focus on interprofessional collaboration because it has been shown to improve patient outcomes, quality of life, and quality of patient-centered care on behalf of the provider (Institute of Medicine, 2001; IEC, 2011). Previous research on interprofessional collaboration has included a broad scope of healthcare professionals, including ATs. The barriers for ATs to participate in interprofessional collaboration include poor communication, work setting, schedules, attitudes, and knowledge limitations about other healthcare providers (Kraemer, Keeley, & Breitbach, 2019). A primary barrier for many ATs is working in a setting such as a secondary school where there is little to no access to other healthcare providers due to an isolative environment (Kirby, Walker, & Mazerolle, 2018).

Meskimen et al. (2022) found that communication, learning, and infrastructure were challenges that secondary school ATs experienced regarding interprofessional collaboration. From these identified challenges, sub-themes emerged that expand on the unique challenges that ATs face when attempting to collaborate with other healthcare professionals. Communication challenges included frequency, access (confidentiality), unified software, and AT initiative (p. 17). The learning challenges identified were roles, idea sharing, trust/respect, and patient outcomes, while the infrastructure challenges included access (geographical), providers beyond the physician, efficiency, ego, and parents (p. 17). Patient privacy was a common communication barrier. One research participant stated, “If any athlete of mine is receiving physical therapy from a different health care entity, they are not always eager to collaborate, and they cite confidentiality concerns. The same can be true of physicians that are not familiar with me” (p.

15). Meskimen et al. (2022) noted that future research should explore internal limitations to interprofessional collaboration for ATs, such as implementing solutions that aim to improve interprofessional and collaborative practice (p. 19).

During the COVID-19 pandemic, interprofessional collaboration became a valuable skill set that could flourish for some ATs, potentially creating a bridge toward future improvements (Madden, Kneavel, & Bowman, 2022). ATs were called during the pandemic to participate in the healthcare field in ways that many hadn't previously, such as symptom screenings, collecting test samples, running lab tests, contact tracing, care coordination, administering vaccinations, or reporting data to public health departments (p. 19). By pivoting during the pandemic, ATs were able, in some circumstances, to improve the perceived value of ATs as part of the healthcare interdisciplinary team (Breitbach, Muchow & Gallegos, 2020). How ATs responded during the pandemic can strengthen how other healthcare professions collaborate with ATs in the future (Madden, Kneavel, & Bowman, 2022). Because of this, interprofessional collaboration is emphasized in AT education or continuing education will be essential to continue the momentum. Current CAATE standards address interprofessional collaboration education, but further growth is needed for continuing interprofessional education, where two or more healthcare professions can learn and collaborate (CAATE, 2020; Welsch, Rutledge, & Hoch, 2017).

Uses & Gratifications

The uses and gratifications theory was developed by Katz and is based on users being active consumers of media to achieve their own goals (Blumler & Katz, 1974). The theory is based upon five assumptions, which include users actively selecting from various media, audiences being active and goal-oriented, various media competing for user attention, the social

and contextual elements that shape audience activity, and the effects of media and audience use of media is related (Littlejohn, Foss, & Oetzel, 2017). Research on uses and gratifications of media use is reliant on the perspective of the media user to understand why a certain media, such as social media, is used and the user's reasons for using it (Hayes et al., 2019). Quan-Haase and Young (2010) argued that social media can blur the distinction between the media consumer and the producer. The social media blur is best described as the user having control over how media is distributed, and content is produced, meaning that the user is both creating and consuming the content (Ritzer & Jurgenson, 2010).

Seeking out information or self-educating has been identified as a use and gratification of social media (Papacharissi & Rubin, 2000, Korgaonkar & Wolin, 1999). This practice can take the form of getting how-to instruction or learning new things (Whiting & Williams, 2013). For ATs, the uses and gratifications of using social media for interprofessional collaboration are curious because of the inherently public nature of social media. Given the numerous ways ATs could connect, social media is a potentially riskier choice than other interprofessional collaboration platforms, such as the NATA Gather forum, which is restricted to ATs and not readily available to the public. It has been argued that some characteristics of new technologies, such as social media, strengthen the uses and gratifications theory because of the interactivity, demassification, and asynchronicity that occurs on the platform (Ezumah, 2013).

Some scholars have even reinforced the idea of privacy attitudes and social media being closely related because users perceive the exchange of information as a necessary evil to realize their goals when benefitting from the use of social media (Ellison et al., 2011). Smith and Anderson (2018) have documented several reasons why people use social media, such as engaging with family and friends, getting news, performing job-related activities, getting and

sharing health information, and participating in political activities. However, when those same individuals were surveyed, 91 percent felt that they had lost control over their privacy on social media (p. 7). Researchers have several arguments for why people continue to use social media despite their privacy concerns. The convenience of social media and its role in staying connected to both people and organizations are believed to be reasons that people find it difficult to fully unplug (Raine, 2018).

Consumer motivations for using the top three social media platforms, Facebook, Twitter, and Instagram, have been shown to have significant differences (Pelletier et al., 2020). In an exploratory study, it was found that Twitter was most used for informational purposes, Twitter and Instagram were used for social purposes, Instagram was used for entertainment and co-creation, and Facebook was used for social purposes but only for a tighter, existing social circle (p. 279). The researchers hypothesized for future research that tighter connections within Facebook were needed due to the sheer number of people on the platform and the communication mechanisms it affords when compared to the other platforms (p. 279). Understanding the intrinsic needs of ATs using social media will be significant since Facebook is the most widely used platform for AT CoPs.

When considering learning and interprofessional collaboration, Quinn (2016) has suggested that further research is needed on information gathering, professional use, and the uses and gratifications of social media. Information as a use and gratification is important for the AT audience because of the knowledge-to-practice gap in healthcare settings (Balas & Boren, 2000). There are many forms of information dissemination, including social media, which leads to an uptake of the information into practice (Farkas et al., 2003). By understanding that uses and gratifications relate to the benefits people have for using media and the gratifications sought, we

can further explore how social media and the activities that take place before, during, and after its use relate to CoP (Quinn, 2016). A study of privacy concerning the uses and gratifications of social media found that social media use was only affected when privacy was a concern if the user was using social media in a professional capacity (p. 82).

Communication Privacy Management Theory

Privacy is a challenging social process, and the nature of privacy is thought of in many ways by different people (Petronio & Child, 2020). Communication Privacy Management (CPM) theory, developed by Petronio, attempts to understand how we conceptualize our private information and control it (p. 76). The information owner decides their privacy boundaries and extends trust and rights to access specified confidential information while also interpreting feelings of risk or susceptibility when private information is disclosed to others (p. 76-77). Privacy rules vary from person to person and are judged and established by the information owner depending on their privacy rule criteria and core values (p. 77). Social media has created a messy landscape for personal information and privacy, as it may not always be clear when one's privacy boundaries are broken. DeGroot & Vik (2017) define this phenomenon as privacy turbulence when mistakes that impact communication disrupt privacy rules and boundaries, ownership, and control.

CPM theory is essential to consider when understanding the uses and gratifications of social media use because even in closed Facebook Groups, the chances of invasion of privacy and the collecting and sharing of personal data without consent are high (Kordzadeh et al., 2016; Liu et al., 2017). In a study of Facebook medical support groups, members who identified information and social support as uses and gratification of using the group frequently disclosed private information (Yang et al., 2019). Disclosures often occur when users desire to develop

closeness and intimacy with the group, define identity, alleviate distress, or look for confidants (p. 10-12). Typically, people will not disclose private information to others if they believe that the information will not be misused or that sharing the information will not cause them any harm (Kim et al., 2015).

Members of closed support groups on social media often disclose private information more frequently than on public areas of social media (Avizohar, Gazit, & Aharony, 2022). The group serves as a privacy boundary because members expect and trust other members not to take private information out of the group, showing that trust is an essential component of private social media groups (p. 6). Additionally, members of private social media groups were more likely to disclose private information to gain social capital. In contrast, members who were more concerned about their privacy were less likely to engage with the group (p. 13). The benefit of disclosing private information on social media must outweigh the risk for the user. This makes understanding why ATs use social media as a CoP increasingly relevant, given that private patient information is frequently discussed.

Wisdom of the Crowd

Knowledge creation, sharing, and interprofessional collaboration are important components of CoP. For healthcare providers, collaboration often acts as a way to participate in informal knowledge exchange (Lofters et al., 2016). By 2017, over 1 million journal articles had been shared publicly on Facebook, with most being shared by online communities or academic organizations, facilitating the flow of knowledge between the public and professionals (Mohammadi, Barahmand, & Thelwall, 2019).

Reactive to the COVID-19 pandemic, the use of virtual spaces to host CoP only continues to grow. Some healthcare profession educators have recently begun adopting social

media as an education delivery platform to share information on specific knowledge or skills (Chang, Guo, & Lin, 2017). McKimm et al. (2020) noted that healthcare providers benefit from professional connections and mentorship that cross geographical boundaries to share ideas and solutions for educational challenges. These connections and mentorship acts facilitate social learning within a CoP (McKimm et al., 2020).

Popularized by Surowiecki (2005), the wisdom of the crowd (WoC) is the idea that decisions across many individuals can lead to group answers through the aggregation of group responses. The aggregation of the crowd's knowledge is a statistical phenomenon. In social media terms, this is often referred to as crowdsourcing, a relatively new concept that was first introduced in 2006 and began appearing in academic literature in 2009 (Gordon, 2021). However, WoC is an ancient concept that Aristotle mentioned in his 4th-century work, *Politics* (St John-Matthews et al., 2019). As a knowledge-seeking and problem-solving technique, crowdsourcing can often deliver more accurate conclusions and manage ethical issues more effectively than an individual could on their own (Dinur, Aharoni, & Karniel, 2021). This is the case even when an individual is recognized as an expert in their field (Westrate et al., 2019).

An equally ancient model in healthcare is curbside consultations, which are professional communication and interactions between healthcare providers that aim to improve patient care (Lin et al., 2016). This form of crowdsourcing is specific because it is: (a) an informal process, (2) occurs between more than one healthcare provider, (3) between healthcare providers who do not have a previously established relationship with the patient in question, (4) does not involve an on-call provider or consultant, (5) does not lead to contact between the other providers and the patient, and (7) does not result in a financial charge to the patient (p. 2). However, in today's digital environment where curbside consultations can occur via email, text message, or social

media platforms, there are questions regarding patient information privacy and a paper trail of the interaction, which could lead to potential litigation in the instance of a medical malpractice lawsuit (p. 4). Recent reforms on medical malpractice tort have addressed curbside consultations, making it more challenging to prosecute any involved providers outside of the healthcare provider in question (p. 4).

Crowdsourcing

As a practice, crowdsourcing is valuable for quickly allowing people to source information through a ‘global search’ that harnesses the expertise and skills of others (Bauer & Gegenhuber, 2015). Relying on two-way communication, crowdsourcing is only possible when the person who wants a problem solved can receive contributions back (p. 663). Several identified motivations for those who contribute include entertainment, self-actualization, meaning, belonging and recognition, skill development, and financial reward (p. 668-9). Journalism professor Jeff Howe originally coined the term crowdsourcing in a 2006 article regarding the use of open calls for a musical as a form of crowdsourcing to find untapped talent pools (Parvanta, Roth, & Keller, 2013). In healthcare, crowdsourcing is a valuable tool, especially for medical diagnosis (Wazny, 2018). Known for being low to no-cost, flexible, and rapid, medical crowdsourcing reaches beyond healthcare providers and has allowed laypeople to participate in healthcare-related conversations. This includes many public health interests such as smoking cessation, physical activity, obesity, nutrition, and maternal health issues such as breastfeeding (p. 11). CoPs, comprised of laypeople with similar health conditions, including cancer, diabetes, and more, also rely on crowdsourcing to discuss treatments and experiences (p. 14).

Conversations about challenges and solutions are a primary use case of healthcare providers using online platforms to participate in crowdsourcing (McKimm et al., 2020). While some do not occur within a CoP, many of these conversations do. Gordon (2021) identified several extrinsic and intrinsic motivations for crowdsourcing, with knowledge gain being the most popular extrinsic motivation and reputation building being the most popular intrinsic motivation. Other extrinsic motivations included satisfaction, contribution, skill development, and enjoyment (p. 4379). Kpokiri et al. (2021) identified crowdsourcing as an effective way to address medical education development, public awareness regarding important healthcare topics such as antimicrobial resistance and antibiotic stewardship, or emerging knowledge about new and timely healthcare topics, such as COVID-19. Crowdsourcing for medical education development mitigates many of the time-consuming, expensive, and organizational burdens that the healthcare community faces (p. 5).

Outside of education, crowdsourcing is an effective way to find solutions for healthcare providers, especially when a complex diagnosis or patient case (Dissanayake et al., 2019). How healthcare providers participate in crowdsourcing in CoP varies (Si, Wu, & Liu, 2020). In a study of physicians participating in online crowdsourcing, participating was highly dependent on the first respondent to the question that had been asked (p. 11). The physicians' behavior was influenced by the response of the first physician to comment, showing that social influence was affecting how others were participating within the group (p. 11). This finding will be important to note when considering how communication in CoP occurs and the effects of social influence on that communication.

Communication Network Centralization & Shared Task Experience

Research on the WoC has identified communication network centralization (CNC) and shared task experience as two communication effects that have resulted from online communities (Yan et al., 2021). CNC occurs when individuals within a community have been shown to have common patterns in a wide variety of communications due to preferential attachment (Noriega-Campero et al., 2018). Certain community members are more likely to be influencers within the group, causing a 'rich get richer' effect that puts those members in an elevated status within the group (Yan et al., 2021). Prior studies of CNC in online communities have shown mixed results. A negative of CNC is a reduction in the diversity and accuracy of the crowd and a distortion of independence among group members (Becker et al., 2017). However, CNC can also improve collaborative learning processes because it facilitates the sharing of information in the group, allowing others to benefit from shared expertise (Noriega-Campero et al., 2018). This can help other group members make more informed decisions quickly with better accuracy (Yan et al., 2018).

Shared task experiences represent how group members interact with the community, meaning they decide which tasks they choose to complete (Yan et al., 2018). Crowdsourcing is considered a shared task. A task can be logging into the platform, interacting with the community, searching for information, or contributing to the community (p. 803). The shared task is one that all group members are co-participating in during a similar time frame. After participating in several tasks, those shared experiences in the community become part of the collective experience to impact communication and group performance (Robert & Romero, 2016). Several phenomena have resulted from studies of online communities and shared task experiences. Some members may be more likely to contribute, which can increase cohesion

between those members but put the group at risk of social influence due to a stronger pull for members to give into peer pressure and conform to the collective group (Hong et al., 2020).

Peer Pressure

Peer pressure can lead to errors within the group long-term, although, some researchers believe shared community communication can improve collective learning despite social influence because feedback is still shared about successes and failures (Arrow, 1962). Virtual peer pressure and peer influence are risks of online CoPs because of the peer-to-peer learning component of a CoP (Bridwell-Mitchell, 2016). Collaboration and cohesion in CoPs are important, but too much peer influence can lead to groupthink or minimally diverse groups that become stagnant and fail to create and gather new knowledge (Roberts, 2006). Power structures and levels of trust within the CoP can play a role in peer pressure and influence development (p. 627). However, if a CoP is unstructured, members may find it easier to be more active and have a voice within the group (p. 628). More diverse voices and decentralized power allow for improved collaboration between members.

Collaboration Improvement

To combat the adverse effects of CNC increases in shared task experience offer the opportunity for community members to learn from a robust community with more diversity and variety in feedback. (Noriega-Campero et al., 2018). High shared task experience within a community that has CNC can collectively learn and gain more experience together because social influence is likely lower (Hong et al., 2020). Depending on the CoP, some online AT CoPs may flourish if they have higher shared task experiences, while others may potentially suffer the effects of CNC. Driban & Laursen (2019) recommended improvements in collaboration between ATs in clinical practice and those participating in AT research to strengthen communication.

Clinicians should share their experience and wisdom, while researchers should be putting themselves out there more to discuss research findings and how findings can best fit into real-world clinical practice (p. 42).

Social Influence & Collective Learning

Social influence and collective learning are components of WoC that generate opposite effects (Yan et al., 2021). The social influence effect occurs when community members are swayed by other members' opinions, predictions, or evaluations, which can lead to less diverse information (p. 797). While the WoC is based on the statistics of individual estimates, social influence contributes to individual decision-making and in turn affects the estimates (Lorenz et al., 2011). If a person notices the estimates of others, they may decide to change their estimate. Awareness of others' estimates can lead to estimate revisions due to peer pressure, following the WoC, or a suspicion that others have better information (p. 9020). On social media, users can see others' responses before they decide to respond, which could lead to social influence affecting an individual's response.

The collective learning effect shows the contrary – individuals within the community share complementary knowledge that builds upon each member's experience and contribution (Yan et al., 2018). Frey and Van de Rijt (2021) argued groups face a social dilemma because people are wiser versus when they allow themselves to be influenced by the majority who think differently, but the group is wiser when composed of independent voices. Collective learning and decision-making require not only semantic knowledge from the group, but the ability to integrate knowledge into the situation, evaluate all options, and select the appropriate choice (Hamada, Nakayama, & Saiki, 2020). Collective learning works best to overcome social influence when the problem requires expert knowledge (p. 48). ATs are considered experts in their respective

fields and may be able to overcome social influence due to their shared expertise in their area of practice. However, there are other issues that social influence may cause within a group.

A challenge of crowdsourcing and the effect of social influence is the phenomenon of crowd-hijacking, which occurs when a group responds to crowdsourcing to serve their agenda (St John-Matthews, 2019). An example of this in popular culture was the failed crowdsourcing initiative by the National Environment Research Committee to name a new research boat. The most popular choice through the consensus of the crowd was Boaty McBoatface (Wilson, Robson, & Botha, 2017). Compliance and social influence when participating in crowdsourcing have been shown to increase the impact on group members through mechanisms such as negativity bias or the consensus effect (Dai et al., 2019). Collective learning is a goal in a CoP and is therefore affected by social influence (Yan et al., 2021). However, this is potentially overcome with time spent within the CoP.

Network dynamics built over time play an important role in a CoP and how decisions are made within the group (Becker, Brackbill, & Centola, 2017). Members of the CoP may begin to identify those who have more social influence within the group, recognize who is considered a true expert rather than a strategic player, and begin to take advantage of the group structure for crowdsourcing purposes (Yan et al., 2021). In a niche field, such as AT, knowing other ATs in a CoP and identifying those who have been considered experts in the field is a valuable practice to develop. When social influence can be overcome, it can lead to improved patient care and outcomes through the collective knowledge and experience of the group versus what an AT could accomplish in isolation (Krafft et al., 2021).

Related Literature

The previous section examined the Sociopsychological Tradition, Communities of Practice, Uses and Gratifications Theory, and the Wisdom of the Crowd model as the underlying framework for this study. The uses and gratifications of using social media as a CoP are the central problems identified in this study. This section will examine the literature related to social media and CoP to close the gaps between the Sociopsychological Tradition and the theoretical framework of this study and recent literature related to the issue of uses and gratifications of social media and CoP. This study examines the uses and gratifications of ATs using social media as a CoP for interprofessional collaboration, including how these behaviors affect professional and ethical requirements.

Social Media

This study focuses on how ATs communicate in an online environment. Since communication is occurring online, exploring the evolution of social networking and social media is beneficial. Freberg (2016) defined social media as a way to "...provide a personalized, online networking hub of information, dialogue, and relationship management. These new communication technology tools allow individual users and organizations to engage with, reach, persuade, and target key audiences more effectively across multiple platforms" (p. 773). Social media websites give their users three abilities, according to Boyd and Ellison (2007) The first ability is being able to create a profile on the platform that is public or semi-public (p. 211). The second ability is maintaining a list of other platform users who have a shared connection, such as the friends list on Facebook or the followers list on Instagram (p. 211). The third ability is being able to view and interact with those connections on the social media platform (p. 211).

Social Media Platforms

One of the first social media sites on the web was SixDegrees.com, which was introduced in 1997 (Lim & Richardson, 2016). Over time, other social media platforms have been developed and become part of mainstream culture. These platforms include Facebook, Twitter, LinkedIn, Instagram, YouTube, TikTok, and Wikipedia, with Facebook being one of the most visited sites in the United States, ranking only second to Google (Auxier & Anderson, 2021). Today, 72 percent of Americans report using social media (p. 5).

Social media sites have continued to grow in popularity since their introduction in the late 1990s and are now used for many purposes (Lim & Richardson, 2016). People utilize social media for professional networking and socialization, marketing and engaging with consumers of goods and information, and learning from shared content on the platforms (p. 35). Social media has allowed new technologies and methods of communication to develop, especially those related to health care education (Kamel Boulos & Wheeler, 2007).

Platforms like Twitter and Facebook have created environments that allow groups to develop that allow for the sharing of user content, images, and documents, making social media an ideal platform for communicating efficiently with others. Collaboration on social media has been shown to improve the development of creative ideas by those using the sites, leading to an increase in participation and engagement compared to traditional communication or teaching models (Greenhow, 2011; Albayrak & Yildirim, 2015). Research has supported the use of social media as an educational tool, but the public nature of the platforms may present challenges for the users, particularly those in healthcare.

Indirect Communication

Communication researchers Nagy and Neff (2015) believed that imagination is a key component of users' affordances – our perceptions, attitudes, and expectations - and how people interact with technology based on what their imaginations tell them what the technology is for and how the technology should be used. The way we perceive technology has an impact on how we use that technology (p. 1-2). Social media users utilize a wide array of social media platforms for a variety of personal, academic, and professional reasons. Technology has changed over recent decades, as have learning methods and participation.

The proliferation of broadband internet has facilitated networked information and knowledge, while mobile connectivity has altered learning venues and expectations (Rainie, 2013). Social media has aided peer-to-peer and self-paced learning, allowing new learners to emerge with access to a unique point of knowledge (p. 20). Users having easy access to knowledge has led to increased user-created social learning networks primed for collaboration with other likeminded users, such as ATs. Other healthcare professions have also turned to social media to develop spaces to learn and share knowledge with peers (Deane & Clunie, 2021). Ratner (1997) believed that the future of learning would be a transition from learning as a transaction where knowledge is objective and certain to learning as a process where knowledge is subjective, provisional, and based on our networks. Learning as a process is organized “ecologically,” with disciplines being more integrated and interactive (Ratner, 1997). Today, Facebook is one of the most highly used social media ecologies for learning purposes (Arshavskiy, 2021).

Facebook

While Facebook was originally designed as a way for college students to connect, the platform has evolved to become more about broadcasting and posting content than networking

(Burroughs, 2014). To date, Facebook is the most popular social media platform globally (Perrin & Anderson, 2019). Despite this, many interpersonal features of Facebook remain popular, such as interpersonal communication through individual profiles and Groups. Facebook also fosters relationships between people and brands, creating a new channel for brands to communicate with consumers (Arvidsson & Caliandro, 2016). Adults, including healthcare professionals, use Facebook for personal and professional reasons (George, 2011). The healthcare culture values confidentiality, privacy, individual one-on-one connection, and professionalism, while social media leans toward community, openness, and informality (p. 215). While there are limited studies on social media use for ATs, Facebook is the platform that ATs use most for learning purposes (Hamilton, Neil, & Eberman, 2021).

Facebook has slowly found its way into formal education to disseminate information to students or have group discussion threads (Doherty-Restrepo, 2012). Today's newest ATs have grown up with social media as part of everyday life, changing the landscape of how ATs learn and connect (p. 148). For formal learning, AT educators have begun embracing social media platforms, such as Facebook, to supplement clinical experiences and enhance student collaboration (p. 147). As an example, Facebook Groups can be used to support formal discussions just as a learning management system would. Social media is also used by AT educators and professional ATs to support informal learning as well (Pike Lacy, Lam, & Welch Bacon, 2022). Social media connects groups of ATs to expand their knowledge and support one another to improve their clinical practice or troubleshoot issues seen in the field (p. 179). However, when participating in an informal group, ATs must be mindful of maintaining professionalism online.

Recent research has focused on how healthcare providers present themselves online professionally because healthcare professionals are, in a sense, public figures. Patients or other healthcare professionals may be searching out their healthcare providers online on platforms such as Facebook. Thompson et al. (2008) found that many patients search for personal information on their healthcare provider, discovering information that is often not disclosed as a part of a healthcare provider-patient relationship. ATs, depending on their setting, have the potential to be a public-facing figure.

Influencers, public figures that market themselves as consumable brands, have begun actively using platforms like Facebook to promote products and develop large followings online in various niches (Wellman, 2020). On Facebook, influencers share aspects of their everyday life while attempting to build relationships with their followers that are built on a sense of intimacy, authenticity, and credibility (p. 3560). This consumer-influencer relationship often leads to parasocial relationships on Facebook. Following the NFL Miami Dolphins quarterback Tua Tagovailoa's decorticate incident, many searched for or commented on the AT staff and their role in the incident. Situations like this showcase how ATs can play the role of a public figure in the sports industry.

Parasocial Relationships

Horton and Wohl (1956) developed the idea of parasocial relationships, which are defined as one-sided relationships, most seen between people who extend their time and energy to the other persona while the person or persona is unaware of the other person's existence. Parasocial relationships on Facebook are commonly seen between celebrities, organizations, and influencers. It is normal for relationships on social media to exist offline, with Boyd and Ellison (2007) noting, "what makes social network sites unique is not that they allow individuals to meet

strangers, but rather that they enable users to articulate and make visible their social networks” (p 211). This is important for educational purposes and collaborating with others because of how people interact on social media and offline.

Selwyn (2009) wrote that Facebook is “primarily for maintaining strong links between people already in relatively tight-knit, emotionally close offline relationships, rather than creating new points of contact” (p. 170). Although parasocial relationships are common through social media, it is also possible for parasocial relationships to exist between social media members interacting within the same networks and groups. While ATs are not necessarily celebrities, they may be public figures depending on their role. Regarding healthcare, parasocial relationships have been known to promote healthy behaviors and prevent risky behaviors (Hoffner & Bond, 2022). However, parasocial relationships with healthcare influencers can also have adverse outcomes, such as spreading misinformation or causing anxiety through social comparisons (p. 3).

Parasocial Relationships & Athletic Trainers

The question that remains open for healthcare professionals and ATs is how best to balance professionalism online, personal privacy, and parasocial relationships as public figures (Hoffner & Bond, 2022). People often develop parasocial relationships with television characters (Littlejohn, Foss, & Oetzel, 2017). In the 2004 film *Friday Night Lights*, the Permian High School AT is shown numerous times giving illegal injections to help the star player overcome a knee injury (Grazer, 2004). Stories such as these may affect how the public perceives and interacts with ATs when they do not know them personally. The public does not sufficiently understand misconceptions about the AT’s role and unique skill set. In many instances, ATs are confused with personal trainers, massage therapists, equipment managers, or coaches, leaving the

public with an unclear picture of the true nature of the individuals within the profession if they do not know them directly (NATA, 2013).

Parasocial relationships with healthcare professionals have grown rapidly in light of the COVID-19 pandemic (de Berail & Bungener, 2022). The internet and social media have been established as useful tools for health education (Chu et al., 2017). During the pandemic, the British and Finnish governments formally employed influencers to disseminate health information on social media to reach a younger audience base (Abidin et al., 2021). Influencers broadcasting health information through social media became increasingly popular and led to parasocial relationships between the influencers and their audience (de Berail & Bungener, 2022). What ATs must be mindful of is the public potentially searching for them online and finding their social media profiles. If the AT is posting information that is considered private on their personal profile or within a group, this information can be found by the public.

Facebook Groups

Facebook Groups are a popular feature of Facebook because they allow users to communicate about shared interests with others in a well-defined setting (Facebook, n.d.). Closed or private Facebook Groups, which require admission by the group administrator to view and interact with the group, have become increasingly popular. Over half of the 1.8 billion people who use Facebook belong to more than five Facebook Groups (Facebook, 2020, para. 4). A closed Facebook Group's content is not visible to non-members. Whatever the topic of interest is, there is likely to be a Facebook Group available as social media provides different affordances to different individuals based on identity and interests (Highfield, 2016). In a study of female Facebook Groups, one participant said, "I like being in a group for women because it feels safe. No weirdos are sending me messages because I shared something I wrote about breastfeeding"

(Pruchniewska, 2019, p. 1370). Pruchniewska (2019) found that Facebook Groups create a space for discussion and sharing personal experiences, which for professionals is valuable for networking, sharing resources, and support.

Members of Facebook Groups are more likely to self-disclose within those groups, creating questions about privacy, intimacy, connection, and parasocial relationships (Chu, 2011). In a study of parasocial relationships within Facebook Groups, it was found that many groups are self-sustaining since there is the encouragement to disclose personal information as an act of trust between users (Wellman, 2021). The intimate narratives posted led to a perceived sense of connection amongst group members, most of whom are presumably strangers (p. 3564). While the Facebook group in Wellman's (2021) study is private, it is acknowledged that individual posts could easily be screenshotted and shared outside of the group, shedding light on the fact that nothing on the internet is never truly private.

Because of patient privacy laws and the need for provider policies, Facebook Groups used by different healthcare professionals have been well-researched. As a result, many different use cases of Facebook Groups by healthcare professionals have been identified. In a study of female physiatrists participating in a closed Facebook Group, it was found that 82.2 percent of users used the group as an educational tool to discuss patient cases, and 56.4 percent used the group to seek advice or discuss complex patients (Capizzi et al., 2021, p. 999). Other uses by the group participants included seeking knowledge about certification maintenance, continuing education requirements, networking, advocacy, and emotional support (p. 999). A similar study by Luc, Stamp, and Antonoff (2018) researched how female cardiothoracic surgeons used social media to network and find mentorship. The field of cardiothoracic surgery faces a shortage in the near future, and most cardiothoracic surgeons are over 55 years old (p. 496). A closed Facebook

Group allowed for easy, dyssynchronous interactions for the female surgeons since most users were spread across the globe (p. 496). Through group participation, the surgeons were able to find mentorship with others that they otherwise would not have been able to find in their immediate settings.

Facebook Groups and Learning

Facebook has become a tool where information can easily be exchanged, particularly in Groups (Ebardo, Tuazon, & Suarez, 2020). Participating in an online community, such as a Facebook Group, has been shown to provide social support and social connectedness to its members (Wannatrong, Yoannok, & Srisuk, 2018, Anderson, 2019). Facebook Groups offer the opportunity to develop relationships with others and participate in informal knowledge exchange. Prior research has shown that over half of learners prefer social media over traditional learning management systems in an academic setting due to the more natural learning environment and engagement social media provides (Hong & Gardner, 2018). Chai and Kim (2012) developed a research model for sharing knowledge on social media that used cultural and ethical behavior as the main drivers for Facebook Group participation. A sense of belonging, social ties, an ethical culture, and the structural assurances of service providers and the internet are well-researched benchmarks for measuring knowledge-sharing behavior on social media, including Facebook Groups (p. 121).

For healthcare education and continuing education purposes, social media offers an opportunity to support collaborative learning for professional practice (Gray, Annabell, & Kennedy, 2010). Healthcare students also take their networks with them after they enter the workforce, extending their communication and learning on social media to their professional lives (p. 972). From a case study of healthcare students, 87 percent used Facebook, and of those

students, half indicated using it for educational purposes (p. 972). One participant stated that the discussions within the social media groups were “a million times better than [the university’s LMS] discussion threads” (p. 973). Despite the university learning management system (LMS) having the same group management, threaded discussion, messaging, and file-sharing capabilities as Facebook, the students preferred using Facebook over the LMS system because it was more straightforward and easier to use for their purposes (p. 974-975).

A study by Pi, Chou, and Liao (2013) found several intentions, such as fairness and openness, and attitudes, including a sense of self-worth regarding knowledge sharing in Facebook Groups. There was an effect between knowledge-sharing attitudes in Facebook Groups and the choice to share knowledge, in addition to an anticipated reputation positively influencing attitudes toward knowledge-sharing (p. 1976). It was also found that the culture of the Facebook Group played a role in knowledge sharing, with a more equal and positive culture leading to increased knowledge sharing (p. 1976). The reasons for sharing knowledge in Facebook Groups vary. A study by Lee and Suzuki (2020) found that group members who had previously asked questions were more active in sharing information than group members who had not. The findings of this study showed that professional reputation and reciprocity played a role in sharing knowledge in Facebook Groups, mainly when the Group functions as a CoP (p. 9). The authors suggested that within a CoP, there were similar motives to exchange information with other members because it would contribute to the community's overall growth (p. 9).

Communities of Practice on Social Media

Facebook Groups are often considered virtual CoPs, with members distributed across the globe rather than traditional CoPs that meet face-to-face (Wasko, 2005). A social media CoP will exist if participation in the community is valuable to its members (Antonacci et al., 2017). If

members are actively contributing, passive members will benefit by taking advantage of the knowledge of the community, even if they don't ever contribute (p. 8). Because Facebook Groups bring in a global audience, the size of the CoP and the activity of its members are crucial for maintaining the value of the group as a CoP (p. 24). Recent literature on CoP and social media is abundant, with the focus of the CoPs varying widely. A CoP based on smoking cessation found that the focus on community-building and social togetherness, while not in-person, helped members of the group adhere to their smoking cessation attempt more than individuals who were not in a CoP (Myneni, Cobb, & Cohen, 2016).

In a review of online health communities comprised of laypersons, emotional and social support, information seeking, and networking with others were valuable aspects of online CoPs (Reuger, Dolfma, & Aalbers, 2021). Ironically, online health-focused CoPs for laypeople often challenge healthcare professionals because of misinformation or advice that may oppose what the healthcare provider is recommending to the patient (p. 7). Many patients will now come prepared to appointments with their healthcare providers with information gathered on the Internet before their visit (Bujnowski-Pedak & Wegierek, 2020). However, in many instances, the information the patient found is from an unreliable source or misinformation (Jutel, 2017). ATs often treat younger populations, and 80 percent of young adults report trusting online health information they have searched for (Bujnowski-Pedak & Wegierek, 2020).

Benefits of Social Media for Healthcare Communities of Practice

Despite its challenges, social media is a suitable environment for healthcare professional-focused CoPs because it serves as a “free open access medical education” where knowledge flows freely, and a sense of community can exist (Roland, Spurr, & Cabrera, 2017). Members of a CoP on social media rely on other members to participate in the knowledge exchange process

to meet the community's goals (Aveling et al., 2017). Facebook is a good fit for this process to occur because of the ability to ask open-ended questions that spur active discussions between users (Lofters et al., 2016). Users are also able to upload files, images, or videos to support their questions.

Enabling efficient, quick decision-making is a benefit to using social media to host a CoP because of the improved responsiveness of others, which to some degree, may improve the quality of patient care (p. 101). In a study of Twitter CoPs, it was found that community members were engaged in disseminating and sharing healthcare-related knowledge, supported using hashtags and retweets (Roland, Spurr, & Cabrera, 2017). The CoP had robust interactions with users, who had strong ties with one another (p. 9). A common purpose and group synergy were well-established within the CoP, and many sub-communities were found because of the study (p. 9). This led the researchers to suggest that some aspects of harnessing the power and collective wisdom of the community were evident within the CoP, further emphasizing the Wisdom of the Crowd effect within social media CoPs.

A similar study of female hematology/oncology physicians in a closed Facebook Group found that education and advice on complex cases were the most common uses of group members (Graff et al., 2018). Graff et al. (2018) found that the closed Facebook group provided an opportunity for education, clinical support, and emotional support (p. 769). Participation in the closed Facebook Group led to better networking, a reduction in burnout, and improved career satisfaction while offering a venue for bouncing ideas off one another to augment patient care via advice and knowledge shared within the group (p. 769). This is not unlike how ATs are using closed Facebook Groups currently.

Social Media & Social Learning

Facebook Groups are valuable for social learning because they allow users to connect with others with similar interests (Hong & Gardner, 2018). Members can post and comment in Facebook Groups and participate in other activities such as creating events, creating polls, sharing photos or videos, and attaching documents (Ainin et al., 2015). Mazman and Usuel (2010) found that the functionalities of Facebook groups complemented traditional learning methods, which may have caused Facebook Groups to thrive as a social learning method. Because learners consistently interact, Facebook Groups work to increase knowledge and strengthen relationships between the learners in the group (Ainin et al., 2015). This has led many instructors, including AT educators, to begin using social media to facilitate informal learning in addition to formal learning opportunities.

Community of Inquiry

Hamid et al. (2015) found that learners participating in an instructor-led social media community could express themselves socially and emotionally through the informal learning opportunity, referring to this as a Community of Inquiry. The community of inquiry is similar to a CoP but includes a teaching presence to sustain the group and drive engagement (p. 2). Without an instructor, social learning thrives on social media when there is a level of initial trust, which is vital for knowledge sharing and online interactions with others (Shin, 2010). Despite this, many organizations are beginning to utilize closed Facebook Groups for educational content eligible for continuing education credits (Ghanem et al., 2019). However, ATs are currently not using social media educational content for continuing education credits.

In a study of students using social media to participate in social learning, 64 percent stated they had joined a Facebook Group for learning purposes (Hong & Gardner, 2018). The

students reported feeling more optimistic about their learning outcomes and perceived an increase in knowledge because of being in the Facebook Group (p. 1840). While trust and privacy were a factor in the students' perceptions of usefulness and engagement in a Facebook Group, privacy was not a significant concern because of an expectation of trust within the group, which was supported by the actions and quality of information shared by others in the group (p. 1840). What is unique about social media is that many individuals are using the available platforms to socialize with others. When learners regularly socialize informally, communities such as Facebook Groups become a natural extension of a learners' social environment. A study of students using Facebook Groups found that students balanced using a Facebook Group meant for student communication for social and academic purposes (Dalsgaard, 2016). This finding supports the use of Facebook Groups for peer-to-peer social learning. Yet, AT students are more limited in their use of Facebook Groups for social learning because of their exposure to private health information during their education.

Athletic Training

The National Athletic Trainers' Association (NATA) was founded in 1950, and the first AT educational curriculum was developed in 1959 (Delforge & Behnke, 1999). Depending on your perspective, the field of AT is either ancient or relatively new. Medical providers were known to be a part of the first Olympics in ancient Greece. Still, the American Medical Association (AMA) did not recognize AT as an allied health profession until 1990 (p. 58). As the profession continues to grow and develop, ATs' recognition and professional identity also change (p. 61).

Professional identity, a concept that allows a person to have an identity with their profession, has long been a challenge for ATs (Eason et al., 2018). Beliefs, values, motives,

attributes, and experiences have all been previously defined as aspects of one's professional identity (p. 72). ATs are trained in many different areas of orthopedic, general, emergency, and rehabilitative, wearing many hats during their workday. Some ATs will serve dual roles, such as a team equipment manager, a strength and conditioning coach, a sports nutritionist, or a sports psychologist. A secondary school AT might ensure each team has water stations available before practice begins, complete injury evaluations and rehabilitation, serve as an equipment manager, fix a broken scoreboard, drive a bus to an away game, provide preventative taping and bandaging, or aid an athlete going through a mental health crisis in a span of a few hours.

The athletic versus medical model of care can affect professional identity as the medical model may emphasize the patient's health. The athletic model may focus on teams winning, success, and profit (p. 74). While many ATs choose the profession to care for patients, especially athletes, the varying professional identities and values of those in the profession can affect professional engagement, socialization, and collaboration with others (p. 78). AT students spend many hours working and learning from each other during their professional education, fostering a sense of community and belonging. Time spent together allows these communities to develop during the student years (Cavallario & Van Lunen, 2015). The use of CoP may potentially be an outgrowth of this issue because of the close connections and shared learning experiences AT students have together during their formal education.

Athletic Training & Communities of Practice

Since the beginning of the AT profession, communities of practice such as journal clubs or work groups have naturally formed to promote learning and interprofessional collaboration (Driban, 2016). AT as a profession makes working with other healthcare providers such as physicians, physical therapists, pharmacists, and nurses the norm, yet previous studies have

shown that less than half of ATs practice in an interprofessional manner (Hankemeier & Manspecker, 2017). This is unsurprising given that many ATs work independently at their work sites. Additional barriers to interprofessional collaboration exist, including the inability to engage with others due to geographical or obstacles to opportunity, a perceived lack of knowledge regarding the role and scope of an AT by other healthcare professions, factors affecting team collaboration, and time (Manspecker & Hankemeier, 2019). Interprofessional collaboration between healthcare providers is a crucial component of patient care. When ATs collaborate, patient outcomes are improved, and there is an increased emphasis on both professional behaviors and implementing evidence-based practice (Breitbach & Richardson, 2015). However, little to no research specifically regarding ATs and CoP.

An essential aspect of CoPs for ATs is legitimate peripheral participation, which allows individuals to become a part of a CoP (Lave & Wenger, 1991). This may be through joining a closed Facebook Group for ATs, committing to a journal club, or the act of moving from AT student to AT professional. AT students make this shift by learning in an academic and clinical setting, developing new skills, and finally passing their BOC exam by shifting their identity from student to professional – gaining legitimacy within the AT community. AT students will spend years together before joining the professional community, and time spent allows for an opportunity for a CoP to develop naturally (Cavallario & Van Lunen, 2015). Once the student becomes certified and employed, mentorship becomes more crucial because of the support and guidance that a mentor provides (Slayback, 2017).

Wenger (1998) believed that identity was important because it is developed through participation and experiences found in a CoP. Once a student has fully transitioned into the profession, psychological ownership of the AT profession becomes crucial to development

(Young et al., 2022). By working with others in the profession and learning from one another, ATs continue to develop psychological ownership through a sense of belonging, self-efficacy, and self-identity, which has been shown to improve professional retention (p. 296) positively. Support from others and feedback, reassurance, and encouragement continue to reinforce this throughout an AT's career (p. 296).

A recent study of ATs who formed an intergroup dialogue workgroup to improve cultural knowledge and awareness showed how collaboration toward a shared goal could be helpful in AT (Claiborne, Kochanek, & Pangani, 2022). The ATs in the workgroup completed cultural awareness and sensitivity training to improve culturally competent care at their workplace. Of the ATs that participated, there was evidence that showed sustained behavior changes that promoted culturally competent care (p. 10). This study is an excellent example of how ATs can develop CoP around a shared goal.

Athletic Trainers & Social Media

ATs are well known to have hectic schedules and limited days each year to interact with other ATs, making social media a valuable resource for discussing ideas (Driban, 2016). Driban (2016) observed that ATs interact on social media with one another, "...while blogs and social media help make information accessible, sometimes you just need to answer a question or find out about a test" (p. 2). Social media has opened a communication channel for dialogue between ATs where questions can quickly be asked and answered by those participating.

When attempting to study ATs' perceptions of social media use, there is a significant lack of related literature and evidence on this topic. However, limited research exists on how non-certified AT students use social media (Winkelmann, Neil, & Eberman, 2018). A web-based survey study by Winkelmann, Neil, and Eberman (2018) examined how AT students use social

media in their personal and professional lives and found that over 69 percent of students had six or more active social media accounts with Facebook, Snapchat, and Instagram being the most popular platforms. Of those students, 93.4 percent reported no images of themselves providing patient care, and 24.2 percent stated that their AT program had a strictly enforced social media policy (p. 6). The students in the study also completed a knowledge assessment, asking students to identify if sample social media posts were a potential HIPAA violation. The results showed that students with previous HIPAA education scored significantly better on the knowledge assessment than those without formal HIPAA education. However, the students who had received prior education still scored below 40 percent on the assessment (p. 6-7). The authors noted that “training in regard to HIPAA, specifically as it relates to social media, either is not specifically occurring or is failing” (p.7).

Hamilton, Neil, and Eberman (2021) created a social media study comprised of an AT focus group to understand how ATs use social media. Their research included thirty ATs in the focus group with a content analysis of the focus group transcripts. In addition, the study analyzed the methods that ATs use to understand the effects of social media. The study recognized three themes to categorize why ATs use social media: mechanisms, motives, and considerations.

Hamilton, Neil, and Eberman (2021) stated, “...it is apparent that ATs are currently using social media to influence their practice(s), but some ATs may not be aware of the considerations needed to effectively and legally interact on these platforms” (p. e181). In this instance, Hamilton, Neil, and Eberman (2021) are referring to the considerations and risks of healthcare professionals that use social media, such as the Health Information Portability and Accountability Act (HIPAA) and, depending on the professional setting, the Family Educational Rights and Privacy Act (FERPA) (Neil, Winkelmann, & Eberman, 2017). All ATs must follow

HIPAA regulations, but only ATs in educational settings must abide by FERPA laws. Since many ATs are not receiving formal education on how to use social media professionally, HIPAA laws may or may not be followed appropriately when participating in knowledge-sharing on social media.

Motivation to Contribute to Social Learning

Wenger (2010) believed participation or non-participation in social learning aligned with our identities. He wrote, “We not only produce our identities through the practices we do not engage in. Our identities are constituted not only by what we are but also by what we are not” (p. 140). Through our identities, we are motivated to seek out the CoP and social learning opportunities that are meaningful to us. In a series of case studies of nursing CoPs and social learning, the use of curbside consults and judgment calls is explored (Gobbi, 2010). Judgment calls for any profession are not learned through formal education but through informal, often social means that cannot be found in textbooks.

Gobbi (2010) explained that learning is embedded within experiences found through role modeling, observation, and advice from others (p. 147). Referred to as professional capital – the knowledge gained through experience – healthcare providers have come to expect social learning to maintain relationships, craft professional identities, and provide structure to the community (p. 149). Gobbi noted that “clinical freedom comes with the authority and accountability that is held or accorded to the professional by the community of the profession” (p. 150). Because of this, continuing to improve professional capital, develop identity, and cultivate relationships within the CoP are all motivations for healthcare providers to contribute to social learning. ATs continue to learn throughout their career to maintain their professional certification and license, and to stay on top of the newest evidence-based practices in their clinical practice.

AT students learn many clinical skills from their peers while completing their professional education (Henning et al., 2006). As students become professionals, adequate socialization is needed for the continued development of clinical skills (Klossner, 2008). Not only does social learning help to facilitate professional socialization, but it also builds relationships that foster professional identity and legitimacy within the professional community. Healthcare is unpredictable, making outcomes-based performance a poor way to judge knowledge and skills (Kolb, 1984). Social learning allows ATs to incorporate new knowledge and skills into their professional identity (Kolb, 1984). Not considering social media, social learning for ATs and other healthcare professionals in a clinical setting helps the professional develop greater confidence and close knowledge gaps, leading to improved performance (Klossner, 2008).

Closing knowledge gaps is a critical component of social learning. Welch Bacon et al. (2021) argued that passive knowledge transfer, such as reading journal publications or attending noninteractive conferences, may lead to challenges for ATs as they attempt to close the knowledge-to-practice gap. Resources and tools to effectively translate knowledge to practice must be readily available and publicized for ATs to overcome any real or perceived barriers to clinical implementation (Welch Bacon et al., 2021). The lack of dialogue between AT researchers and clinicians occurs due to a lack of collaboration since these groups operate in isolation (Driban & Laursen, 2019). Building new or bolstering current lines of communication that meet the uses and gratifications of ATs will be needed in the future to close the knowledge-to-practice gap further.

Privacy Boundaries, HIPAA, and FERPA

The World Health Organization has recommended Access to patient information as a component of interprofessional collaboration to increase communication and collaboration between healthcare providers (WHO, 2010). However, in the United States, the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the Family Education Rights and Privacy Act (FERPA) affect patient information sharing between healthcare professionals. Stories of medical students sharing images of themselves online posing with cadavers, nurses posting photos with a human placenta on Facebook, and ER personnel losing their jobs because of identifiable stories shared on social media are just a few real-life examples of how healthcare professionals are taking risks on social media when it comes to patient privacy (George, Rovniak, & Kraschnewski, 2013).

Research has shown that unprofessional posting on social media occurs among other healthcare providers, medical students, and residents (Chretien et al., 2009; Nyangeni et al., 2015; Thompson et al., 2008; White et al., 2013). This is concerning because unprofessional use of social media can potentially violate a patient's right to privacy (Thompson et al., 2011). In an archival study of 651 Facebook profiles belonging to medical students, ten had posted images that contained the patient's face while providing healthcare services to patients, violating their right to privacy. An additional study of the content of online blogs written by physicians and nurses found identifying patient information, including descriptions of patient interactions, photographs, and negative comments about being a healthcare professional (Lagu, Kaufman, & Asch, 2008). A survey of executive officers of organizations employing nurses reported that most had managed complaints regarding unprofessional behavior or misuse of social media by

their nurses. The majority also reported repeated violations and disciplinary action for those involved (NCSBN, 2010; NCSBN, 2012).

To combat unprofessional behavior on social media by healthcare professionals, some have suggested that learning how to professionally use social media should be a part of the healthcare education curriculum (Davis, Ho, & Last, 2015). Megele (2015) recommended designing a healthcare education curriculum regarding social media as both a learning and an assessment tool. The study developed learning modules that required the learner to use Twitter to debate a topic, followed by an online learner forum and group to share their experiences using Twitter. Using the basic tenants of social learning as a framework, those developing the curriculum hoped to develop the learners' professionalism on social media by exposing them to situations that would challenge them and their ability to stay respectful during a heated exchange with others on Twitter. The study's results showed that the learners felt they had an increased awareness of professionalism on social media following the activity (Megele, 2015).

Irrespective of its place in healthcare professional education curriculum, social media use for professional purposes is standard, with many academic and healthcare organizations using social media to reach intended audiences (Djuricich, 2014). In AT, social media has been used to create awareness and distribute information about the profession and within the profession, with organizations such as the NATA, BOC, and the CAATE all utilizing social media to communicate with members. Social media has become the norm and not an exception in everyday society. Overall, there is a consistent recommendation that healthcare education curricula contain formal social media professionalism training consistent with current social media trends and patient privacy laws (Nyangeni et al., 2015).

Information Privacy

Information privacy is essential for people across many areas, including their personal health information, and as healthcare professionals have begun using social media, many questions regarding information privacy have arisen (George, Rovniak, & Kraschnewski, 2013). Patients who are minors, who are the primary patient population for many ATs working in secondary school or club sports settings, value privacy online, with about 62 percent of U.S. teens stating they feel being safe online is more important than free speech (McClain, 2022). This same sentiment is held by only 47 percent of U.S. adults, showing that younger generations may be more conservative with their information and privacy than before (para. 2). Yet, ATs are often posting images, sharing stories, or asking for advice regarding a patient encounter in closed Facebook Groups.

Some healthcare providers may be ignorant of their professional responsibility to protect information privacy when using social media (Westrick, 2016). A significant gap in health profession education programs is the lack of training on participating in social media as an individual and a professional. A group of nurses posting pictures of themselves at work may not realize that patient information is visible on the computer monitor in the image or neglect to remove a patient's face from the image if they are in the background. These inadvertent breaches of privacy, coupled with other information sought out by a person, can result in a person being identifiable when they are entitled to privacy (p. 17). Although these disclosures are unintentional, they still violate patient information privacy.

The model that ATs fall under, whether it be the athletic or the medical model, affects information privacy and legal risks associated with protected health information because of how ATs are individually managed as employees (Rapp & Ingersoll, 2019). Those practicing under the athletic model have the potential to have medical decisions influenced by coaches,

administration, or the media (p. 1237). The athletic model of care increases the chance of misfeasance and nonfeasance when decisions are affected by interests outside of the patient's medical well-being, such as winning championships or records or putting certain players on the field to appease alums who make large donations (p. 1238). Pressures from athletics may cause ATs to cut corners, occasionally leading to situations where the patient lacks informed consent regarding return-to-play matters or treatment options that might be available (p. 1238). The tight-knit relationships between athletic organizations and the media also lead to more transparency regarding athlete health status, leaving many patients vulnerable to violating their privacy rights (p.1239). These scenarios all create conflicts of interest for ATs and the medical privacy of their patients.

Privacy in Communities of Practice

There is limited research regarding the privacy of information within CoPs, although the previously discussed study focuses on social media (Walters-Salas, 2012). However, Wenger (2010) did focus on boundaries as a critical aspect of CoP and social learning systems. Wenger (2010) defines boundaries as “sources of new opportunities as well as potential difficulties. In a learning system, communities and boundaries can be learning assets (and liabilities) in complementary ways” (p. 126). For ATs, this tension can be felt as there is a defined need for gathering information to fill a knowledge gap, but potentially at the expense of violating privacy laws. This tension was felt despite the complementary nature of the CoP and their boundaries. Wenger (1998) expands on this tension, saying:

Deep expertise depends on the convergence between experience and competence, but innovative learning requires their divergence. In either case, you need strong competencies to anchor the process. But these competencies also need to interact. A

social learning system's learning and innovation potential lies in its configuration of strong core practices and active boundary processes (p. 127).

Because of the HIPAA and FERPA dilemmas that ATs face, the boundaries within CoPs are often blurry.

Previous literature has suggested that privacy behaviors on social media may be related to social gratifications (Joinson, 2008). If an individual posts something private on social media, there must be social gratification gained for the individual to determine the privacy violation as a non-issue. A negative connection between privacy and levels of disclosure on social media and social capital benefits has been linked (Stutzman et al., 2012). Ellison et al. (2011) found that social media users perceived it as necessary to divulge personal information to attain social capital benefits and realize social goals, understanding the risk of disclosure was mitigated by convenience. In AT, it may be more convenient for an AT to post on a Facebook Group to ask a question rather than wait to connect with their overseeing physician.

It has been suggested that boundaries and privacy strategies are often employed to appear more conscious of privacy when using social media (Lewis, Kaufman, & Christakis, 2008). This phenomenon is well-documented in the closed Facebook Groups for ATs. Before posting information or an image of a patient within the group, many ATs will preface the post with the comment "shared with permission" or "posted with permission." If informed consent is obtained in writing from the patient or a minor patient's parent or guardian is generally unknown to the group members.

Gaps in Current Literature

Based on the reviewed literature, there are many gaps within the communication and AT literature related to CoP, both on and off social media. ATs are seemingly using closed Facebook

Groups, but their intentions are not well identified, nor are their attitudes about protecting patient privacy within these groups. Winkelmann, Neil, and Eberman (2018) attempted to define how ATs used social media, but only in a generic sense as they did not seek to understand how ATs used social media as a CoP or to seek out professional knowledge. There are currently several gaps in the literature, including how ATs participate in CoP and how social media plays a role in this behavior. The uses and gratifications of ATs using social media as a CoP are not well known, representing the gap addressed in the current study. There must be a better understanding of the interactions ATs have with one another in closed Facebook groups for ATs, which may influence patient privacy.

Another gap in the literature relates to crowdsourcing within CoP. While some researchers have attempted to define the conditions for crowdsourcing, the relationship between CoP and these conditions is not well understood (Bassi et al., 2020). In a systematic review of the literature on crowdsourcing for health and medical use, there has not been a well-developed framework for examining the benefits of crowdsourcing (p. 298). Patient outcomes or the development of solutions that may fill a knowledge gap or lead to future research that results from crowdsourcing are also relatively unknown and missing from the current literature for AT specifically (Dissanayake et al., 2019). The quality of information that results from crowdsourcing in a CoP is also generally unknown (Yan et al., 2021). Additionally, the uses and gratifications of ATs' crowdsourcing within a CoP have not been a focus of research in the past. These relationships are essential to understand in connection with one another as a sense of community plays a role in harnessing the crowd's wisdom, collaborative knowledge creation, and the perceived value of crowdsourcing (Al-Omouh, Orero-Blat, & Ribeiro-Soriano, 2021).

Summary

Chapter Two analyzed the current literature about the topics needed to understand uses and gratifications, CoP, the WoC, and how these related to the current practices of ATs with existing theories. Through the study of Uses and Gratifications, CoP, and WoC, a better understanding of how ATs participate in closed Facebook Groups for ATs is explored through a communication lens. Chapter Three will explain the method used to conduct the research. Chapter Four will provide the research samples and connect them to the discussed Communication theories within the literature review. Finally, Chapter Five summarizes the results and responds to the research questions.

CHAPTER THREE: METHODS

Overview

As communication increasingly becomes more common through online methods, athletic trainers (ATs) have begun collaborating professionally with each other on social media. Some of the larger Facebook Groups for ATs include *Secondary School Athletic Trainers*, which has about 10,200 members. The *Women in Athletic Training* (n.d.) group has around 9,200 members while the *Athletic Trainers Professional Development* (n.d.) has just over 6,000 members. A Twitter account known as *Anonymous AT* (n.d.), posts messages on behalf of ATs, leading to discussions between ATs on the platform. The account has over 12,300 followers. There are many more, smaller groups of ATs on social media that are focused on a certain area of practice, or geographic region.

Because of this gathering of likeminded professionals on social media, a study of how ATs are using social media to collaborate demands further research for several reasons. While we know that communities of ATs exist on social media, we do not fully understand their motivations for using social media. There is also a lack of understanding regarding how ATs use social media to collaborate about their professional practices and how patient privacy is understood when participating in these groups. If patient privacy is not being respected in the name of professional collaboration, there are implications for the individual AT, their organization, and the patient in question.

The purpose of this study is to understand and evaluate the motivations of ATs using social media as a community of practice (CoP) to professionally collaborate. A CoP is comprised of a group of individuals who share a common interest or domain, collaborate to improve their practice in the domain, and develop new knowledge and shared resources (Wenger & Wenger-

Trayner, 2015). CoPs are commonly used in organizations to cultivate expertise, by utilizing a diverse range of approaches to problem-solving, gathering information, consulting with more experienced peers, repurposing resources, and fostering peer-to-peer collaboration through the participation of an array of individuals (Lave, 1991). According to social learning theorists, communities serve as a fundamental platform for the dissemination of knowledge, primarily by observing and emulating others (Li et al., 2009). Social constructivist Paul Cobb and his colleagues believe learning is an individual responsibility, with the community acting as a conduit through which individuals acquire knowledge via a secure and conducive environment where people can learn through observation, active interaction, and engagement with peers (Cobb, 1994).

The research methodology used in this study is qualitative, and the qualitative data obtained will provide information on why ATs choose to use social media and how ATs participate in CoP on social media. Based on the data, this study also aims to investigate the relationships between ATs' social media use and their understanding of protected patient health information. The evolution of social media has created new challenges and opportunities for professional collaboration and knowledge-sharing for ATs (Hamilton, Neil & Eberman, 2021; Winkelmann, Neil, & Eberman, 2018; Eberman & Tripp, 2011). Therefore, a qualitative research study is needed to ask questions regarding how and why ATs are choosing to professionally collaborate on social media. The following chapter will outline the study's methodology, design, procedures, and ethical considerations on AT CoPs on social media.

Research Questions

In qualitative research, research questions specify the expectations of what the study intends to describe or explain (Keyton, 2019). This study seeks to find the answers to the following research questions:

RQ1: Are athletic trainers utilizing social media-based athletic training groups as communities of practice?

RQ2: What uses and gratifications are athletic trainers communicating as reasons for engaging with social media-based athletic training groups?

RQ3: What privacy concerns do athletic trainers participating in social media-based athletic training groups perceive when disclosing information regarding a patient in the group?

Research Method and Design

Qualitative research guides the research methodology and design that will help to answer the research questions (Creswell & Poth, 2018). The following section will outline the use of qualitative research design, the methodology, design, procedures, and ethical considerations for the study.

Qualitative Research Design

The paradigm of qualitative research was chosen because this study will seek to obtain detailed information from the experiences of ATs using social media. Qualitative research is based on the following rationales: (a) research questions begin by asking *how* and *what*, (b) the topic requires further investigation because of multiple variables and/or a lack of an appropriate theory, and (c) a natural setting is required (Creswell & Poth, 2018). How and why ATs use social

media to professionally collaborate is a crucial question being asked, and the topic is significantly absent from the present literature, making qualitative methodology a natural fit. Keyton (2019) wrote, “Qualitative research preserves the form and content of human interaction. Often in the form of text, audio, or video, these data are analyzed for their characteristics as they occur in natural settings (p. 244). Because how ATs interact with one another will be studied through text, audio, and video, the decision to utilize the qualitative method was appropriate for the study.

The grounded theory methodology will be used to create meaning about how and why athletic trainers use social media to professionally collaborate. Many forms of qualitative research exist, including narrative, case study, ethnography, phenomenology, and grounded theory, guiding qualitative researchers to position their work within a tradition (Creswell & Poth, 2018). While phenomenology may have also been used for this study, the current literature does not currently explain the phenomenon of ATs’ professional collaboration on social media and how this impacts patient privacy. Since qualitative thematic interviews will be conducted to uncover themes for discussion and future study, grounded theory was an appropriate choice.

Consensual Qualitative Research Methodology and Grounded Theory

ATs are currently interacting with one another on social media, and those interactions require further study to identify the impact on individual athletic trainers and patient privacy. In research and social sciences, theories exist to support quality research. Grounded theory is intended to provide a general explanation of a process, or how people interact in qualitative research (Creswell & Baez, 2021). A common use case in qualitative research is analyzing textual data, such as interview transcripts, and a typical form of data collection in grounded theory research is interviews (p. 274). Textual data is then coded to develop inductive categories, which are subsequently analyzed to discover common themes (Keyton, 2019).

Thematic analysis of semi-structured interviews will be used to uncover themes related to why and how ATs use social media. Furthermore, this research aims to explore the decision-making process of ATs when it comes to sharing patient information on social media, employing a grounded theory approach. Because interviews will be utilized to collect data, consensual qualitative research methodology, which was developed from grounded theory, will be used. This comprehensive approach allows for a nuanced understanding of the underlying factors influencing ATs' engagement with social media and their decision-making regarding patient information, contributing to the growing body of knowledge in this field. By employing a grounded theory approach, the research strives to generate new insights that are firmly grounded in the experiences and perspectives of ATs.

As an outgrowth of grounded theory, the consensual qualitative research (CQR) method was chosen because the details of the motivations of athletic trainers using social media and participating in CoPs are not present in the current literature (Winkelmann, Neil, & Eberman, 2018; Bassi et al., 2020; Dissanayake et al., 2019; Yan et al., 2021). CQR is described as “predominantly constructivist with some post-positivist elements” because researchers must rely on naturalistic and interactive methods consistent with constructivism (Hill et al., 2005, p.197). Constructivism recognizes that people form their realities and that subjective participant views matter (Creswell & Baez, 2021). In CQR research, the phenomenon is explored as it naturally occurs rather than attempting to manipulate it (Hill & Knox, 2021).

Interviews are used to gather data from participants from which meaning is derived (Hill & Knox, 2021, p. 15). Because those in the AT profession will be the focus, the constructivist paradigm is appropriate because constructivism recognizes participants as the experts in the study who will help primary themes develop (p. 44). Post-positivists believe that a single reality

exists and that the researcher is independent of what is being researched (p. 44). In CQR, the post-positivist elements emerge through the pursuit of consensus with those developing a representation of the data (Hill & Knox, 2021). Through data-gathering interviews, researchers can derive meaning from the participants' words and create context (Hill & Knox, 2021).

Consensual qualitative research examines inner experiences, attitudes, and beliefs, making it an ideal method for conducting qualitative interviews (Hill & Knox, 2021). Engaging with ATs through interviews is necessary to fully understand what motivates ATs to use social media for professional collaboration. However, some ATs may feel uncomfortable discussing how they participate on social media or their experiences with patient privacy disclosures. The CQR method is useful in interviewing participants' inner events where the participant may have suppressed feelings or be ambivalent about the subject (p. 17). Additionally, CQR methodology is effective for topics that have either not been previously studied or have no psychometrically sound instruments available for use (p 17). There have been no studies completed on how and why ATs professionally collaborate on social media. Therefore, CQR is a good fit for the interviews that will be conducted.

Consensual qualitative research (CQR) methodology is valuable when participant interviews are conducted to gather textual data (p. 14). CQR is especially useful for research topics that have not been adequately addressed or studied previously and thus do not have identified psychometric data collection measures available (p. 17). An additional key feature of CQR is the ability to organize interview data from participants into domains, which are further analyzed to answer the research questions. A benefit of the CQR methodology for participant interviews is the acknowledgment of the mutual influence of the participant and researcher. The interviewer can learn about the phenomenon from the participant while also helping the

participant discover their experience with the phenomenon (p. 15). To achieve the benefits of CQR interviews, the researcher needs to create a good setting for the interview and build rapport with the participant (p. 37).

Setting

Qualitative interviews are less structured than quantitative approaches, and observations unfold naturally (Punch, 2014). The interviews were completed through the videoconferencing platform Zoom. The researcher conducted the interviews in their home office using both audio and video, keeping the office free from distractions. Headphones were used to minimize background noise and protect the interviewee from being overheard. Because qualitative interviews are thought of as a moral inquiry, it is important to keep the physical and psychological safety of the participant in mind (Creswell & Creswell, 2020).

Sensitive interview topics may be stressful for participants because they might question how their statements will be interpreted, how critically they are questioned during the interview, and what the consequences of the interview and the group they belong to might be (p. 150). Using a CQR interview methodology, interviews recorded through videoconferencing allow participants to feel more physically and psychologically comfortable in their setting, which can lead to the participants speaking more freely (Hill & Knox, 2021). The participants were instructed to dress comfortably for their interview unless they were participating while at work.

Keeping participants comfortable is important for qualitative interviews because if participants are comfortable they may be more willing to share their own lived experiences and articulately share experiences (Hill & Knox, 2021, p. 9) The researcher informed each participant of the casual nature of the interview to put them at ease and develop an early rapport with the participant. Each participant was asked a standard set of questions to collect consistent data from

all participants, with unscripted questions added to probe participant responses further. To minimize the effects of participant fatigue during the conversation, interviews were kept to one hour (Florell, 2020).

Participants

Sample Size

To properly examine the intentions of ATs using social media, 20 individuals were qualitatively interviewed. The participant pool was comprised of individuals 18 years old and older who participated in at least one AT-specific social media group on Facebook within the last 12 months. Additionally, each participant must have been practicing as a certified AT for 12 months or more. These requirements helped the findings be both generalizable and transferable to the general population of athletic trainers practicing in the U.S. (p. 25). Participants must also have been willing to speak to the interviewer for at least 60 minutes about their experience within athletic training Facebook Groups. Each of these criteria supports the aim of conducting ethical research to ensure the participant provided their qualitative lived experience. This experience is vital for answering the research questions.

Participant Selection & Screening Process

Participants were purposefully recruited on social media in AT-specific Facebook Groups. The snowball recruitment method was also utilized to find additional participants. The snowball recruitment method allowed participants to recruit additional participants and leverage existing participants' knowledge of other potential participants who would be a good fit for the research study (Creswell & Poth, 2018). For this study, 20 participants were recruited. In CQR

methodology, it is recommended to use 13 to 15 participants to provide a large enough sample if the sample is relatively homogenous in terms of their experiences (Hill & Knox, 2021). ATs practicing in the U.S. are considered a homogenous group. A larger sample of 15-19 participants is sometimes used in CQR when there is a possibility that subgroups may emerge from the sample (p. 43). Hill & Knox (2021) noted that data analysis and data consistency challenges often arise when participant samples are larger than twenty (p. 44). Because the sample was homogenous, saturation occurred, making more than 20 participants unnecessary (p. 44).

Each participant was screened before the interview to verify they met the criteria and were considered eligible to participate in the study. A Pre-screening Questionnaire (Appendix A) collected basic demographic and psychographic information, which was securely stored and encrypted. If a participant did not meet the screening criteria, their data was deleted. Ineligible participants disqualified from participation were not contacted again. The identified participants who met the criteria were given an Informed Consent Form (Appendix B) to be electronically signed and invited to schedule their interview. Participants had to agree to the procedures of the interview process and complete their Informed Consent Form before the interview. The following section outlines the interview procedures and best practices for CQR-based interviews.

Procedures

Conducting Interviews

All interviews were scheduled at a time convenient for the participants and interviewer by utilizing the digital scheduling software Calendly. After choosing an interview time, the participant was sent a Zoom link via email and a calendar invitation. A follow-up reminder of the scheduled interview was sent to the participant one day and one hour before the scheduled

interview time via Calendly. Once the interview began, the researcher used the Interview Guide (Appendix C) to conduct the interview. Each interview began by reviewing the Informed Consent Form (Appendix B) and ensuring the participants fully understood the research project, their role, and how the interview process would work. The participant was also informed that the interview was being recorded by Zoom and digitally transcribed by Otter.ai, a digital transcription software that automatically joins Zoom meetings as an attendee. Next, the interview began with questions about demographics, followed by specific qualitative research questions from the Interview Guide (Appendix C). Once the interview was complete, the participant was thanked for their time and given the researcher's contact information should they have any questions or concerns.

Interview Best Practices

The CQR interview process is used to gather detailed information from the participant that provides an in-depth description of the participant's individual experience (Hill & Knox, 2021). It was used to explore how ATs use social media, their participation in online CoPs, and how they understand the role of protecting patient privacy on social media. Open-ended, probing, and structural questions were used and delivered in a calm, affirming environment (Creswell & Poth, 2018). In CQR, no more than 8 to 10 open-ended, scripted interview questions are recommended to be mindful of the time and maintain consistent data collection across all participants (Hill & Knox, 2021). Superficial data can result from asking too many interview questions, leading to a lack of in-depth descriptions and inconsistency between participant interviews (p. 37). The CQR interview aimed to answer the research questions of this study and can be found in the Interview Guide (Appendix C).

The interviews conducted used a semi-structured approach, utilizing the questions found in the Interview Guide (Appendix C). A thematic analysis to identify common themes from the interview transcriptions was completed using In-Vivo coding. The In-Vivo coding will be completed using the online coding application Delve. The following section will explore the role of the researcher and the interviewer.

The Researcher's Role

The researcher was a non-participant and did not embed herself in the community with any participants or communicate with stakeholders during the research study. The non-participant role of the researcher was required due to the CQR interview design, which necessitates the researcher to minimize an impact on the data collected. During the study, the researcher strived to keep their own bias and ideas out of the interview discussions. The interviews focused on the lived experiences of the athletic trainers who participated in the study.

Disclosure Statement

I recognize my perspective is limited to my understanding, previous studies, and familiarities. As a certified AT, I acknowledge that I am biased toward my own lived experiences within the profession. I sought to ensure I did not dismiss the experiences and feelings of others as invalid simply because they are unfamiliar to me or challenge my assumptions of how other ATs practice. I aimed to keep my perspectives, experience, and biases out of this work. Through the research process, I held myself accountable to my dissertation chair. All interviews used a standardized format and a standardized pre-screening questionnaire to ensure my perspectives did not interfere with the research study.

Data Collection

Each participant took part in a single semi-structured interview as the primary data collection method. The researcher interviewed participants via a virtual Zoom call. The interview questions were designed based on the literature on motivations for social media use, intentions for participating in a CoP, and knowledge of patient privacy laws from the perspective of an athletic trainer (Appendix C). Data collected during the interviews were recorded, transcribed, coded, and analyzed. The data collection process began at the start of the first interview and concluded after all data was transcribed, checked for reliability, and approved for coding. Otter.ai software was used to transcribe each interview and was then checked for accuracy by comparing the interview and the provided transcription. After the data collection process was complete, data analysis began. The following section will detail the data analysis process.

Data Analysis

Interviews

Every interview transcript was coded to identify different themes until saturation was achieved. When data analysis no longer generates new information, saturation is considered to have been achieved (Creswell & Poth, 2018). Saturation is important in CQR because it indicates that the data is stable, and further similar interviews would not drastically change the findings (Hill & Knox, 2021). The study included 20 participants, who completed the interview process to yield textual data for analysis. Saturation was achieved, so no additional participants needed to be recruited. Any themes that emerged from the data analysis were reviewed and any synonyms or descriptive words used by participants were identified.

The CQR data analysis process recommends that no more than 10 to 15 themes, or domains, be identified when initially developing a list of proposed themes (p. 54). Any subdomains that emerge should be identified as well during the data analysis process. Once the proposed themes were found, these themes were placed in a logical order and a number was assigned to each theme to assist in continued data analysis (p. 55). Any irrelevant textual data, such as greetings or reviewing informed consent were excluded in the data analysis. After the initial theme identification process was complete, the coding of the data began.

Coding

In the coding process, data goes through both open and axial coding to identify and differentiate between concepts that have been labeled and sorted (Keyton, 2019). As a result, meaning can be inferred from the data that adequately analyzes what the participants have said (Creswell & Baez, 2021). Coding was completed through computer-aided qualitative data analysis software. Qualitative data management software helps sort and label qualitative data sets. The textual data was first analyzed through open coding, which is an unrestricted first pass through the data (Keyton, 2019). Following the first pass of open coding, axial coding was used to combine any identified themes or relabel them into fewer categories (p. 312). The coding process continued until saturation was achieved and the data could be reviewed for core ideas.

Core Ideas

CQR data analysis of interviews concludes with developing core ideas, which are summaries that collapse participants' words more concisely (Hill & Knox, 2021). The development of core ideas is necessary because participants often give unclear, contradictory, repetitive statements or use jargon or shorthand (p. 64). As a result, core ideas allow the data to

be transformed in a clearer, more consistent manner that reflects what each participant has said, always using the participants' words whenever possible (p. 64). After the core ideas were identified, they were categorized within the identified themes resulting from the coding process. The frequency of each theme and core idea was noted, and a frequency label was applied. Hill & Knox (2021) recommended using the frequency labels *general*, *typical*, and *variant* (p. 79). Generally, having either predominantly general or variant labels should be avoided as it indicates that the sample was too heterogeneous, or the thematic analysis was inadequate (p. 80-81).

Trustworthiness

In any research study, published work should always be as valid, reliable, and transferable as practicably possible. There are many ways that qualitative researchers can ensure that their research is sound. Validity refers to the accuracy of the measurement, while reliability refers to consistency in data collection procedures (Keyton, 2019). Transferability is the utility of the study in other contexts (Creswell & Poth, 2018). These concepts are explained further as validation methods for the research study in the following subsections.

Validity

In qualitative research, validity refers to the systems or methods used to validate the research. Several strategies are used to validate research, including triangulation, persistent observation, prolonged engagement, negative case analysis, referential adequacy, member checking, and peer debriefers (Creswell & Poth, 2018). Analyzing qualitative textual data from interviews requires personal interpretation, which makes data validation an essential part of the research and data analysis process (Creswell & Baez, 2021). To ensure the study is valid, the study used rich descriptions, disconfirming evidence, researcher reflexivity, and triangulation as validation strategies. Qualitative researchers can also improve the validity of textual analysis of

interview data by examining previous research examples that study similar issues and basing coding on theory (Keyton, 2019).

Rich descriptions detail the setting, people, and themes of a qualitative research report, giving the reader an additional level of detail (Creswell & Baez, 2021). These descriptions were captured during the interview process. The domains and themes developed are discussed from those rich descriptions in Chapters Four and Five. Disconfirming evidence requires the researcher to look closely at the data and decide if some participants present information that is contradictory to the developed domains and themes (p. 203). Any contradictions were reported and discussed as disconfirming validity evidence. Because all research contains elements of bias, researcher reflexivity was employed to convey the researcher's interest in the topic of study, and how this interest may potentially shape the interpretation of the data (p. 203). Finally, triangulation requires the researcher to review multiple sources of information to draw evidence to build a case for the themes that emerge (p. 203). Any triangulation methods will be mentioned to help establish validity.

Reliability

Reliability in qualitative research is the idea that the study is stable, trustworthy, and dependable (Keyton, 2019). Reliable measures are consistent and should give similar results every time the same methods are used. Although reliability is subjective, some methods can be used to enhance data reliability in qualitative research. Team research and code cross-analysis are not appropriate due to the nature of the dissertation process. Transcript checking and using and verifying clear code definitions will be used to ensure data reliability. Automated online transcription software was used to transcribe each interview collected. The researcher audited the transcription before the coding process. The transcription audit helped to reduce any

transcription errors. The codes were continuously reviewed throughout the data analysis process to prevent code drift or a shift in the meaning of a specific code during data analysis (Creswell & Poth, 2018).

Transferability

Transferability refers to how well a study's conclusions can transfer to other settings and research contexts (Punch, 2014). If a study is transferable, its utility and findings can be applied to studies in other situations. Rich, thick descriptions of the themes developed during the interview process are used to prove the transferability of this research study (Creswell & Poth, 2018). The codes that emerged are discussed in detail in Chapter Four and shared with research participants.

Ethical Considerations

This dissertation sought to understand how ATs use social media as a CoP, in addition to their understanding of patient privacy concerns. In qualitative research where people are involved, unethical research should not be undertaken as it could impact the study's participants (Punch, 2014). CQR methodology highlights the need to protect participant confidentiality by anonymizing data, storing data securely through encryption, ensuring the right of the participant to withdraw at any time, and practicing sensitivity to cultural issues (Hill & Knox, 2021). To ensure ethical conduct during the research study, the researcher achieved institutional review board (IRB) approval. The IRB process was completed before any interviews. The research methodology and interview process were reviewed for ethical concerns or human rights violations to ensure that the study met Liberty University's ethical research standards. In the following section, additional ethical considerations will be explored.

Secure, encrypted data storage was used to protect participant privacy, anonymity, and confidentiality. Any physical notes or documents only refer to participants by their participant number. Additionally, no lists were generated that could be used to connect a participant to the participant number used in the study.

Summary

This study sought to understand why ATs use social media to participate in CoP. Several methodologies could be used to approach the research topic. Still, due to the current research gaps, prior research shows a CQR interview approach fills any current gaps and adequately positions future researchers to study social media use and CoP for ATs. CoP and social media use has not been sufficiently explored in the field of AT. The study investigated these topics in further detail through qualitative interviews, creating opportunities for future studies. Chapters One, Two, and Three presented the problem of a lack of understanding of ATs' motivations for using social media as a CoP. A theoretical background for the study was discussed, and the methods used to collect and analyze the data were outlined. Chapter Four describes the interview participants and explains the data analysis and the theme development process. The results of the interviews are explained in the conclusion of Chapter Four.

CHAPTER FOUR: FINDINGS

Overview

In Chapter Four, the research findings obtained from the data analysis outlined in Chapter Three will be addressed. An overview of the participants, demographics, and profiles of the participants, the codes, and code analysis completed during the data analysis process will also be presented. Throughout Chapter Four, participant stories and expressions are shared, highlighting how the participants engage in the private Facebook groups for athletic trainers (ATs) through the lens of community, professional development, professional discussion and criticism, patient privacy, and e-professionalism. Throughout this Chapter, pseudonyms will be used for each participant. Chapter Four will conclude with a chapter summary and preview of Chapter Five.

Participants

This study's participant pool comprised 17 female and 3 male ATs. The participant age range varied between 23 and 54 years old, with an average age of 33.3 years. The average number of years the participants had been certified by the Board of Certification (BOC) for ATs was 13 years. The greatest number of years certified by the BOC was 32, and the least number of years was 1.5. Eighteen participants were employed full-time, and the remaining 2 were part-time or contract ATs. On average, the participants were members of 4-5 closed Facebook groups for ATs. The National Athletic Trainers' Association divides ATs into distinct job settings (NATA, 2023). Participant job settings are included in Table 1, which also displays the demographic data.

Table 1*Athletic Trainer Participant Demographics*

| Athletic Trainer Participant | Gender | Age | Years Certified | Job Setting | # of Facebook Groups |
|---------------------------------|--------|-----|--------------------|--------------------|----------------------------|
| Ned | M | 43 | 21 | Secondary School | 4 |
| Susie | F | 29 | 8 | College/University | 8 |
| Judy | F | 25 | 1.5 | Secondary School | 3 |
| Britney | F | 32 | 9 | Student/Per Diem | 3 |
| Paul | M | 49 | 26 | Secondary School | 2 |
| Brynn | F | 27 | 6 | Secondary School | 3 |
| Sasha | F | 32 | 10 | Secondary School | 2 |
| Bob | M | 44 | 23 | Clinic | 2 |
| Bailey | F | 43 | 20 | Administration | 11 |
| Claire | F | 37 | 16 | College/University | 6 |
| Nora | F | 54 | 32 | Secondary School | 6 |
| Tanya | F | 35 | 14 | College/University | 6 |
| Melissa | F | 28 | 7 | College/University | 7 |
| Cassie | F | 42 | 21 | Clinical/Admin. | 4 |
| Alyssa | F | 36 | 15 | College/University | 2 |
| Elizabeth | F | 33 | 10 | Secondary School | 5 |
| Shannon | F | 46 | 24 | Industrial | 4 |
| Cindy | F | 26 | 5 | College/University | 4 |
| Ashley | F | 27 | 3 | Secondary School | 5 |
| Joy | F | 23 | 2 | College/University | 5 |

Average Participant Profile

The participants were between the ages of 23 and 54. Females comprised 85 percent of the participant pool. Additionally, most participants were employed full-time and worked in the secondary school or college/university job setting. Participants are members of 2-11 closed Facebook groups for ATs, with an average of 4.5 groups. The typical participant in this study engaged with the closed Facebook groups primarily passively, meaning they only viewed the group posts and comments through their Facebook news feed. All 20 participants described passively viewing group content in their Facebook newsfeeds daily. The participants, on average, actively participated in the closed Facebook groups by posting or commenting on a post on average 1-2 times per month.

Minority Findings

Generally, the participants of this research study were a homogenous group. The AT profession is not incredibly diverse, with about 57 percent of ATs being female and about 42 percent male (BOC, 2022). Nearly 70 percent of ATs are between 20-39 years of age, and 80 percent identify as White/Caucasian (p. 2-3). Of those working full-time as an AT, about 60 percent work at a secondary school, university, or clinical/hospital outreach setting (p. 3). The participants in the study were generally in alignment with these demographics, with the exception being gender. Females represented 85 percent of participants, and males comprised the remaining 15 percent.

Results

The research findings provide the study's culmination, incorporating theoretical perspectives and providing insight into the methodology used to address the research questions (Creswell & Creswell, 2018). Through the process of coding, the results of this investigation are organized into domains and thematic categories, offering a wealth of information about the personal experiences of individuals and their relationship with social media, specifically within the AT profession. These domains and themes are discussed in order of relevance to the study's objectives, with a final section dedicated to unexpected themes that emerged outside the original research scope.

Domains & Themes

In consensual qualitative research (CQR), the analysis of interview data is categorized into domains with subsequent themes and sub-themes (Hill & Knox, 2021). Domains are broad subject areas, or the main meaningful and distinct topics that interviewees talk about, while themes reflect the data within their respective domains (p. 54). During CQR data analysis, themes can cross domains, allowing researchers to characterize common patterns in the findings (p. 19). Themes are recurring ideas that are interconnected, even if the exact words used by participants in the research differ (Creswell & Creswell, 2018; Creswell & Poth, 2018). Themes are commonly analyzed in qualitative research, and in this study, themes are used to connect similar ideas across domains which were found within the participant interviews through direct coding analysis. The participant interview data was organized into five domains resulting from the data analysis. Each of the five domains had its distinct themes and sub-themes. The emerging domains found through the voices of the participants were: (a) the athletic training professional

community, (b) professional development and social learning, (c) professional discussion and criticisms, (d) patient privacy, and (e) e-professionalism. Table 2 provides the domains, related themes, and keywords or phrases that were found during data analysis.

Table 2*Domains & Themes*

| Domain | Theme | Key Words/Phrases/In Vivo Codes |
|--|--|---|
| Athletic Training | Networking, Community, Knowledge | Networking, collaboration, learning, sharing, others' experiences, [patient] cases/diagnoses, |
| Professional Community | sharing, Knowledge seeking | isolation/alone, bounce ideas |
| Professional Development and Social Learning | Knowledge sharing/seeking and isolation, Professional validation, Professional ego | Advice, answers, sharing expertise, collaborate, peers, learn from others, bounce ideas, different perspectives/experiences |
| Professional Discussion and Criticisms | Negativity and toxicity, Dominance | Attention, validation, ego, toxic, vent/venting, shame/shaming, consistent posters, backlash |
| Patient Privacy | HIPAA, Public patient, False sense of security | Private, HIPAA, posted with permission, anonymous, consent, legal, risk, false sense of security, patient identity, public, liability |
| e-Professionalism | Personal/professional reputation, Generational differences | Reputation, generational differences, false sense of security, repercussions, opinionated |

Domain 1: The Athletic Training Professional Community

All 20 participants described using closed Facebook groups for ATs to collaborate in some capacity with other ATs. The most prevalent domain of discussion during participant interviews was the AT professional community. Within this domain, the resulting themes found were networking, community, knowledge sharing, and knowledge seeking. Developing relationships and fostering a supportive network, both offline and online, are crucial skills for any professional to possess. Within an organization, professional feedback and support play a pivotal role, and when an AT find themselves isolated, online communication can help to bridge this gap.

Networking

One hundred percent of participants in the study cited using closed Facebook groups to network. Peer-to-peer networking helps professionals in any industry combat isolation, find belonging, and develop connections (Nabipour & Cole, 2021). The participants used various descriptors to define networking within the closed Facebook groups. Some felt closed Facebook groups provided a valuable resource for ATs who may not have an extensive network of other professionals or colleagues to rely on for support, advice, or information. Two participants believed by joining a closed Facebook group for ATs, they "now have a whole network of people to ask questions to and get help and seek advice" and "gained a good network of people" as their most significant outcome. A research analysis of 52 articles published between 2019-2021 also found that Facebook groups are uniquely beneficial for facilitating professional networking and providing a space to discuss industry-specific topics while connecting with others who share similar interests (Ali, Mirza, & Rizvi, 2022).

Community

Community building was another important outcome participants believed was gained by being in a closed Facebook group for ATs. Eight of the participants mentioned working in isolation, which is a unique aspect of the AT profession. Bailey is a former Division I AT and faculty member who now works in a leadership role for a large organization. She held many leadership roles within her state and district AT professional organizations and now offers leadership coaching and mentoring to others. She shared:

I think they come in looking for guidance, mentoring, networks, that sort of thing. A lot of times athletic trainers are practicing in isolation, kind of off by themselves. So, I think they're looking for that to fill some of that gap.

As an AT and associate athletic director working full-time at a Division I university, 37-year-old Claire considered expanding out to create a more extensive network as an important outcome of joining the closed Facebook groups:

They don't have that person to bounce off ideas, or maybe they're just starting out, so their network is small...I graduated with six... I'm the only one still practicing as an athletic trainer, and it's like that for a lot of people...I think your circle of who you can lean on shrinks, and so having [Facebook groups], you can go out to - because there's groups for secondary athletic trainers and things like that.

Claire has only worked in the university setting during her career and has never worked by herself. Primarily, she enjoys being helpful and being a mentor to others in the Facebook groups.

Participants frequently highlighted the supportive community these groups provide and described how social media can be used to find communities of like-minded individuals who share similar experiences and interests. All 20 participants appreciated the access to diverse perspectives and mentorship opportunities found within the groups. This supports Bali et al's

(2015) research which discusses the role of diverse participant perspectives as a benefit to online conversations.

Female participants described finding a sense of validation and camaraderie in what has traditionally been a male-dominant profession. While not asked specifically during the interview, six female participants disclosed being mothers and offered insights into the value they received by having a community of other ATs who were also mothers via a Facebook group called, *Athletic Training Moms: We Do It All!* Three participants described using a group to find a breast pump so they could discreetly use it in a locker room during halftime or other breaks in the day. Elizabeth works at a secondary school as an AT and a teacher. She participates in the mothers' AT group and describes the valuable connection she found with other AT mothers, saying "When I first had kids, it was like, *what's the best breast pump to take with me on a bus?* Not something I ever thought of, but this is good information." Social networking as a vehicle of support for women is well-established as a popular method for women to connect and encourage one another (Burgess, 2009). Women supporting women continued to be a common reason for seeking out community within the Facebook groups. All 17 female participants cited a specific closed Facebook group called *Women in Athletic Training* as a positive and supportive community for female ATs.

Knowledge Sharing & Knowledge Seeking

Knowledge seeking and sharing were also significant components of why ATs utilized Facebook groups within the AT community. All 20 participants had either engaged in knowledge-seeking themselves or observed other athletic trainers using the Facebook groups for this purpose. Joy is 23 years old and has been certified for two years. She was the study's

youngest participant and had the least number of years spent working as a certified AT. Joy, who works with several other athletic trainers at a Division I university, said:

Sometimes for me at the DI level, we are gone for a week. I'm by myself and want someone to bounce ideas off of. I tell my colleagues that I just need a trampoline. I need to build up to say it and hear it. I don't necessarily need their advisement. Their advice is good and helpful, but you kind of need that backboard to bounce ideas off of, so I think social media can be that for a lot of people.

Although Joy does not work in isolation, she found value in using the groups to expand her reach when looking for advice and validation from other ATs. Joy found the Facebook groups particularly helpful as a newer graduate and felt the conversations in the group made her feel 'not crazy,' meaning she felt validated in her experiences. In other instances, participants cited reasons for reaching out for or sharing knowledge with other ATs outside of the topic of patient care. Elizabeth shared other personal reasons besides finding connections with other mothers:

I feel like it's a place for people to go in and be like, 'you know what, I'm struggling with this'. Maybe it's finding khakis that are comfortable, and women feel comfortable going on there and being like, "I'm 5'4" and 250 lbs. Who has a good idea for khakis?".

Elizabeth appeared to find personal advice related to the profession, but not necessarily about a patient or administrative issue, as a valuable reason for participating in the group. Knowledge seeking and sharing were frequently cited by participants as going beyond direct patient care, reinforcing how Facebook groups served as a community for the participants. Social networking as a mode of communication for knowledge sharing and engagement with peers, particularly within academic communities, supports ATs using Facebook groups for this purpose (Koranteng & Wiafe, 2018).

Domain 2: Professional Development & Social Learning

Social media platforms have emerged as effective tools for collaborative knowledge sharing, facilitating the exploration of new ideas, fostering connections, and providing social support among users (Mazman & Usluel, 2010). Previous studies have indicated most learners express a preference for social media platforms over conventional learning management systems in academic environments because there is a perception that social media fosters a more organic learning atmosphere and encourages higher levels of engagement (Hong & Gardner, 2018). The second most common domain that emerged was professional development and social learning. A recurring theme in this domain was the importance of seeking advice and validation from other ATs because of the value of others' personal experiences. Valuing the advice and validation from others within Facebook groups is supported by Ainin et al (2015), who described Facebook groups as a communication method that enhances knowledge acquisition and fosters stronger relationships among group members.

Knowledge-Seeking, Knowledge-Sharing & Isolation

Every participant in the study noted the groups provided them with a platform to ask questions and get help from others. Knowledge seeking and sharing were described by the ATs who worked in isolation as valuable because they did not have access to colleagues in their workplace to talk to in-person. Being isolated was particularly relevant for those working in secondary schools or other settings where they may be the only AT at their worksite. Ashley practices in isolation at a secondary school and said, "I'm a young professional, so having those more experienced people to fall back on is really helpful, especially since I'm on an island at my current secondary school and I'm the only one here." Bailey told a similar story, elaborating on the safety often found in a social media group:

You go to your phone and put something in there and get a response from it. I think for many that's kind of a safety net. At least I've got somebody because I don't have anybody within physical proximity to me.... It feels safe to know that you've got an army of people that can kind of support you if you need it.

Participants mentioned sharing their own experiences and offering advice to others, which they found rewarding, and older ATs enjoyed providing guidance to younger or less experienced ATs. In contrast, younger participants described benefiting from the various perspectives and experiences represented within the groups, providing a broader perspective than they may have had otherwise. Research supports the social capital that people gain from offering advice to others on social media (Santos & Chaves, 2021). Guidance and perspectives were typically sought for clinical diagnoses, processing emotions related to work or difficult situations, handling difficult cases with coaches or parents, and understanding issues surrounding compensation and benefits packages others were receiving.

Professional Validation

Seeking peer validation and guidance to solve challenging cases and gain a global perspective on situations was frequently cited as a reason for participating in the groups. However, eight of the participants believed some ATs were using the groups to avoid referring patients to another provider. "I would say there's a mix probably of feeling comfortable going to those Facebook groups and asking a question, but also not being afraid to pick up the phone or call your team physician," said Sasha, an AT at a secondary school who was soon to be stepping down and working per diem. Three of the eight participants believed this was due to the pressure many ATs feel to have the correct answer. Brynn, who has been certified for six years and serves as an AT and teacher at a secondary school responded, "I think there are some parts of it

honestly, that a lot of people – at least consistent posters – I question if they’re doing it because they don’t want to refer out and they want to always have the right answer instead of using resources in the medical circles.”

Facebook groups were also thought to provide an immediate response and platform to quickly reach out to others who may have experienced similar situations and validate actions that were taken before the post. Elizabeth, who also engages in professional knowledge-seeking outside of the mothers’ AT group, described how she uses social media to gather feedback quickly:

It’s super easy for me to be on the side-lines and be like, this is just weighing on my mind. This happened in the first quarter. I’ve got a second during halftime, I’m gonna post this question.

Twenty percent of participants also shared how they often reach out to other ATs who have commented on their posted questions in the group or have been contacted if they had offered advice through Facebook Messenger. The one-on-one connection allowed the ATs to continue the conversation privately.

Professional Ego

Four participants noted how they felt some ATs sought out advice for the wrong reasons. Having an ego surrounding one’s expertise in front of patients or parents was seen to be an issue, as many ATs are often the only healthcare provider a patient might see. Because of this, there is pressure to always be right when providing a diagnosis and treatment plan. Nine participants, who were all aged 30 or older, believed younger ATs were constantly pressured to be right and avoid using other methods to gain additional insight besides asking peers in the Facebook groups, while younger participants expressed concern about how older ATs may exhibit an

egotistical attitude regarding their knowledge and experience. Brynn had a strong opinion regarding more senior ATs sharing advice within the Facebook groups:

I tend to notice that a lot of those comments tend to come from the older professionals who have been in the field for 20-25 years or more, or who have had research articles posted. I don't know if it's just an egotistical thing, or if it's just that they think their way is the right way. Being so young in the field – not that they would know that unless you post it, but they feel as if what they know is more...It's like we all have something to bring to the table. I have college students that I get at my clinical site. I'm a preceptor for them, and they teach me more than my program ever taught me. I feel everybody has value.

Alternatively, six participants argued that younger ATs were only seeking validation to support their egos. “I just think some people feel like they can post, and they want the validation that they’re doing good things. They would want the response to be supportive even if they’re in the wrong. They want the validation that they should feel the way they feel – which is fine – but like sometimes, no you’re not correct,” said Alyssa, a head AT at an all-male Division III college, who often must grapple with gender differences and male dominance at her workplace. The informal networks built by professionals are often influenced by social mechanisms such as level of expertise and trust, which could be construed as personal ego when tied to social learning (Schreurs et al., 2019). Other participants felt getting validation was a positive thing. Claire noted, “You get a little bit of validation. You know it’s not just happening here. Everybody’s going through this and it’s being able to get that sense of a little bit of relief in a way.” This subject showed an apparent split between younger and older participants and translated to professional discussion and e-professionalism differences.

Domain 3: Professional Discussion & Criticisms

When participating on social media, individuals tend to exhibit a heightened level of bluntness and judgment, leading them to express themselves more openly (Kordyaka et al., 2020). This phenomenon often gives rise to negative behaviors, known as online disinhibition, encompassing actions that involve the use of inappropriate language, criticisms, threatening ultimatums, and verbal attacks, which can be damaging to the self-image of others and oneself (Suler, 2004). It is worth noting all 20 participants had a mix of both positive and negative sentiments regarding the closed Facebook groups for ATs. Domain 3 encompasses the attitudes the participants had about the groups, which was a common topic of discussion during the interviews. While the 20 participants cited positive outcomes from their group participation, all described elements of toxicity and negativity that can be present, as well as the dominance of specific individuals in group discussions. There was some concern the groups could become a place where complaining about the AT profession is common.

Negativity & Toxicity

All participants acknowledged that negativity and toxic behavior were pervasive in many Facebook groups. The participants questioned the motivations behind publicly shaming other athletic trainers on social media and suggested it may have negative consequences for the person doing the shaming. Eighty percent of participants detailed how they felt some ATs use social media to vent or rant about their frustrations or experiences, and many athletic trainers fail to act professionally on social media. While professional collaboration and discussion are primary motivators for participating in Facebook groups, as Paul, a 49-year-old secondary school AT employed by a hospital system noted, “there’s normal constructive criticism, and then there’s backlash”.

Seven of the participants brought up an interesting story during the interviews. While the exact facts of the story vary slightly, the story was about an AT who had posted in a Facebook group about being frustrated with her athletic director and the lack of communication she was experiencing. The story told of how another AT, who knew the original poster and their athletic director (it is unknown if the two ATs had the same employer, although this appeared to be the case), took a screenshot of the post. The AT who took the screenshot either sent it to the athletic director or another manager who had decision-making authority over the original poster's employment. The AT who posted about their athletic director was subsequently let go from their position. The participants who retold this story cited the ethical dilemma of the post, noting that Facebook groups should theoretically be a safe space to ask for advice in difficult situations, but no space online is truly ever private. The AT who took the screenshot was also viewed negatively by participants as having violated the confidential nature of the group and for not reaching out to the other AT privately instead of taking what was considered a malicious action.

Dominance

Twenty-five percent of participants described ATs who continued to dominate the conversations or behave egotistically within the groups. "I think sometimes people want to be the loudest voice," said Britney, a doctoral student working as a graduate assistant and per diem AT during her spare time. Joy described ATs who had become influencers on social media, and several ATs were repeatedly mentioned by name in this context by other participants. Elaborating on the growth of AT influencers, Joy said, "I think ever since COVID started you've definitely seen the emergence of a few ATs who are very popular on social media and TikTok, or who have gone on the news about [athletic training]." The rise of healthcare professionals as social media influencers during the COVID-19 pandemic was a result of the need for quick and

widespread dissemination of health-related opinions and information, particularly when the information was viewed as coming from a credible source (Leibowitz et al., 2021).

The ATs cited as dominating the conversations within the Facebook groups were viewed as both experts who provided value in the groups and as toxic individuals who acted egotistically. “I think there are some people that try and dominate the conversation. They’ll post on everything. Some of them, frankly, think they’re God’s gift to athletic training. Sometimes the advice they give is good and other times I think it’s terrible,” exclaimed Ned, a secondary school AT. Dominant behaviors and negativity were believed to frequently extend to conversations about the AT profession and the professional organizations within the field. These organizations include the National Athletic Trainers’ Association (NATA), the Board of Certification (BOC), and the Commission on Accreditation of Athletic Training Education (CAATE). “Unfortunately, we’re just part of the culture that wants to tear down rather than build up, so that’s the negative part of it,” said Shannon, an AT working in the industrial setting.

As a relatively young profession, AT is often viewed as still finding its footing within the greater healthcare community. “One of the negatives about it is how much some of us complain about the profession. I know we have a lot of problems that we have to rise above and overcome,” stated Ashley. Eight participants asserted complaints about AT’s professional organizations were strong, and there was often confusion about which organization had power over different aspects of AT. “I see distrust in the NATA, and that they don’t feel the memberships are worth it,” said Bob, a 44-year-old AT primarily engaged in work conditioning at a rehabilitation clinic, continuing, “A lot of it seems like 80 percent getting help with problems and 20 percent is bashing the NATA.” Bailey, who had held several leadership roles within the professional organizations previously, stated regarding this topic:

That's a huge topic of conversation in all of these social media channels. What's the value of NATA? You see so many students coming in and asking, "Tell me why I need to be a member, because right now I don't see the value." That's really one of the places where you can see the huge differences in generations. The older population is like, you just do it because it's the right thing to do, and then the younger population is saying, "No, I need to think about this. What's [the NATA] actually doing for me?"

A disconnect between the NATA and the BOC was often cited, particularly over which organization manages the continuing education requirements for ATs. Additionally, the eight participants who discussed this topic felt the NATA was frequently blamed for the AT profession's issues, such as stagnant salaries, poor work-life balance, and inability to bill insurance companies for reimbursement.

Domain 4: Patient Privacy

Previous research has indicated that privacy behaviors on social media platforms can be influenced by social gratifications, and when people choose to share private information on social media, it is typically because they perceive a social benefit that is greater than the concern about privacy violations (Joinson, 2008). Patient privacy was the fourth domain found during the interview data analysis. Study participants made many statements revolving around the issue of anonymity and privacy when sharing medical information or discussing medical cases on social media. Statements emphasized the importance of anonymity, particularly when discussing sensitive information, and the potential liability issues that could arise if privacy is breached. All 20 participants expressed concern that information posted on social media could be used to identify a patient and highlighted the need to keep information vague when posting and to avoid giving out unnecessary details that may reveal the patient's identity. Social media users may

believe it to be necessary to disclose private information to gain social capital benefits and achieve social objectives, with the convenience of sharing outweighing the perceived risks of disclosure (Ellison et al., 2011).

HIPAA

Under HIPAA regulations, information can only be shared after explaining why information is being shared with the patient, and obtaining written consent, or the consent of a parent or guardian if the patient is a minor (HHS, 2022). After consent is obtained, the healthcare provider can only share the minimum necessary information needed to share the information. When study participants explored this topic, 11 participants specifically called out how ATs were using the phrase *permission to post* in their Facebook group posts. These 11 participants questioned what this meant and if it genuinely was occurring. Generally, these participants felt the *permission to post* phrase was hollow and proper written consent was likely not happening. Britney said:

I do think a lot of people will tag posts that say *posted with permission*. I think sometimes at the secondary school level that's a little questionable. Because can the minor consent to the permission, or is it the parent who is giving that permission?

Claire elaborated on the legality of using *permission to post*, questioning if the phrase would even hold up in a courtroom:

I don't think it has any standing because unless you have it in writing from that person or their parent if they're under 18. It's like, if a parent finds out you posted and is not happy with you, and they take you to a court of law..., you saying, "Oh, it was posted with permission" isn't going to do anything.

Participants also described the use of minimum necessary information, meaning they felt too much information was being shared and could help another person infer the patient's identity from the post, and the information was not needed to achieve the goal of sharing the patient information. Brynn, who became very passionate about the issue of patient privacy in the Facebook groups explained:

I think the age and the sport they're playing is important, but I'm not necessarily sure. Some people get really specific about the gender or the race of the patient. I'm not sure that's necessarily important information because that's not really going to affect how you're treating the patient. But the age and the sport they're playing is going to depend on how you give advice.

The Public Patient

The public nature of AT was a common sub-theme when discussing inferring patient identity. Participants described how the AT profession could sometimes make protecting patient privacy challenging due to patient care occurring under the public eye. Paul brought up a recent, extremely public sporting incident when sharing his views about patient care in the public eye:

There's a very limited amount of privacy during a game. I mean, probably the best example of that is the Damar Hamlin thing. You can't find anything after the initial down and everybody crowded around. You know, the TV for once backed out. They could've flown the sky camera over the whole thing if they wanted to, but obviously, they respected that privacy. I talked to our AD about it because, you know, what's the patient privacy expectation? As an open forum, you know, every one of those people in the stands has a phone, right? Everybody else is either filming it or taking pictures or whatever.

The Damar Hamlin incident was provided as an example of being viewed by the public during patient care by two other participants. Bailey felt it would be easy to discover a patient's identity if another group member wanted to look for the information online.

You see it all the time...People always leave out the name, but still say, "I have this kid with this and this" and you see pictures, or you see shared with permission or a bubble over the face. But there is information shared all the time that if somebody wanted to, could probably go through and identify the athletic trainer.

In a profession where patient privacy lines are blurred, four ATs in the study described feeling that keeping patient information anonymous was not always the norm. After sharing a story about a local news station's sports reporter following her around the side-lines of a football game, Britney said:

If [an injury] is ever like, an event, that is a publicly attended event, I don't know that you have the same level of privacy expectation. Because there could've been a newspaper photographer taking a picture.

False Sense of Security

Given the public nature of the patients ATs treat, seven participants described a false sense of security when sharing patient information in closed Facebook groups. The false sense of security was particularly emphasized by the older participants, many of whom felt younger generations of ATs are too comfortable posting on social media. Brynn explained:

I do think a lot of people tend to feel a false sense of security. On social media in general, especially the younger generation of people, like that grew up with social media their entire lives...So I think that if they've had it their whole lives, they feel like it's a secure place to be....They claim it goes away, but nothing on social media ever goes away.

Older participants in the study expressed the ease they felt younger ATs had about private matters and how growing up with social media blurred the line between public and private life, in general.

Balancing Patient Privacy and Collaboration

Concerns about privacy and confidentiality, the potential risks and liabilities associated with sharing patient information on social media, and the need for caution when discussing sensitive information online were pervasive in all 20 participant interviews. Despite this, all participants agreed there was value in sharing patient stories and gathering feedback from other ATs regarding specific patient cases. Although there were patient privacy concerns, many statements reflected a delicate balance between seeking advice from peers and protecting patient confidentiality. Eleven participants described and believed patient privacy could be protected by using Facebook's anonymous posting feature Facebook provides, which allows users to post without their name being attached to the post (Facebook, 2023). The use of Facebook's anonymous posting feature is supported in the literature when seeking out peer-to-peer advice or information (Hayman, Smith, & Storrs, 2019). Alyssa said, "I think you can post things and leave out enough detail and just give generalizations of the situation." Elizabeth provided a unique solution to this problem, saying, "It's very easy to change it from a patient to my little brother. No one knows that I don't have a little brother." Summing up how many of the participants felt regarding patient privacy and knowledge sharing in the Facebook groups, Bailey sensed there were areas for improvement:

I think we have to do a better job of talking about what the repercussions are, what this actually means, and what could come as a result of it. Also remembering that you're

getting information from somebody who has not yet seen your patient, talked to your patient, met your patient, seeing exactly what you're looking at.

This statement is a concern felt by healthcare providers even beyond the AT profession. All participants over the age of 30 felt education was lacking regarding using the Internet and other electronic forms of communication, such as email or text messages, to transmit patient information or seek advice from other professionals.

Education was believed to be improved regarding properly sharing patient information and understanding the implications of social media use in healthcare settings. Britney, who felt sharing information online was used as a scare tactic to dissuade people from posting on social media during her high school and college years recounted her experience in the early days of social media:

I think it's important to have those conversations with athletic training students about professional conduct online, especially not that most of our professional graduates are younger and in that Gen Z era or generation of just social media being a lot different for them.

All 20 participants stated they had training in school, or annual training through their employer about HIPAA. Still, 18 of the participants did not have any formal training regarding the professional use of social media or sharing patient information digitally. The two participants who had received education were the two youngest participants in the study.

Domain 5: E-Professionalism

E-professionalism is defined as the behaviors and attitudes that reflect traditional professionalism paradigms on digital media (Cain & Romanelli, 2009). An important component of e-professionalism is the ability to distinguish between appropriate and inappropriate conduct

when participating online (Duke et al., 2017). E-professionalism was the fifth domain that emerged from the data analysis. While this domain was not specifically part of the study's research questions, several themes under this domain emerged that are relevant to how ATs use closed Facebook groups as a community of practice and respect patient privacy on social media, and therefore is worth discussion. Participants regularly cited concerns about how ATs use social media to vent or publicly shame others, and how these behaviors and actions can lead to negative consequences.

Personal & Professional Reputation

Blurring the lines between personal and professional boundaries on social media is increasingly common for healthcare professionals (Vukušić et al., 2021). The study participants largely agreed there is a common understanding of how anything posted on social media platforms can be captured via a screenshot, saved, and potentially shared without consent. Therefore, people feel more comfortable being anonymous while discussing personal or patient information, especially in a group setting. Eleven participants mentioned the use of the anonymous posting feature on Facebook. "I think in situations where it's dealing with something that is an ethical or legal issue, the ability to be anonymous is important because it can have consequences in the real world," said Britney. Adverse effects on an AT's reputation when participating in Facebook groups were acknowledged to extend beyond the individual's reputation within the groups. Joy explained:

I definitely know in a few of the groups you can post anonymously... because you have to worry about your job. And what if an athletic trainer had her name associated with it [a post]? You have to worry about your job safety because anyone in those groups can

screenshot it. Just because there's rules in the group, it doesn't mean in the long run because it is social media. Anything posted can always be found.

Posting with caution and maintaining privacy is highly valued, especially in sensitive situations such as posting about personal issues, work-related problems, or criticisms. The study participants believed people feel more confident expressing themselves on the internet, but most are also aware of the potential negative impacts posting could have on their personal and professional life, and the organization they represent. "My dad always told me to act on social media the way that you would in person, and don't ever post anything that you wouldn't say to somebody's face," said Brynn, continuing, "Because that's out there for everybody, whether the group is private or not... There might be a co-worker within that district that you don't know about who's in the group." Although the utility of Facebook groups was valued since people are more willing to share personal opinions and struggles online than face-to-face, this may not always be a wise decision. "I keep everything private," said Susie, a full-time assistant athletic trainer at a college. "I don't want an employer or future employer to see what I was doing in college."

Generational Differences in e-Professionalism

E-professionalism was frequently explored by participants in the context of generational differences. The difference is unsurprising given that social media as we know it today is still a relatively new form of online communication. The belief that older ATs were more aggressive on social media, and in turn, younger athletic trainers felt a false sense of security was common between younger and older participants. "You've got some that are like, you know, "you kids get off my lawn", but then you definitely have a younger generation that doesn't want to hear it. Kids think they know better than anything that's happened before them," said Nora, a 54-year-

old AT at a secondary school. When speaking about why ATs might use Facebook groups, Bob said, “I think it’s more the younger generation that grew up online and basically broadcasts their entire lives.” Bailey extended this idea from her experience working with college students and now in a leadership role, saying, “I think the younger professionals – I truly think they’re looking for mentors and they’re looking for people to learn from.”

Fifteen participants cited the negativity and lack of professional respect within the groups amongst different generations as a reason they would urge newly certified and younger athletic trainers not to join. “I wouldn’t want a younger athletic trainer to be in [the Facebook groups] because some of the stuff that scares people away, which I don’t know – may or may not be a good thing,” said Ned. In the context of the full interview, Ned referred to joining toxic groups as a way to urge others to seek out an alternative profession due to low salaries, poor work-life balance, and burnout. Brynn stated:

I’ve noticed the older generation of people who are into social media and use it, they tend to be the ones that I noticed are a little bit more aggressive, and the ones that tend to tear people down more...I think a lot of the younger generation is those behind the scenes, like, ‘behind my phone, I can say what I want, it’s not going to hurt people’s feelings, and they tend to be a little bit more opinionated.

Despite the differences in how participants of varying age ranges felt about what way other generations of ATs utilize and participate in the Facebook groups, all 20 participants had the same belief that collaboration with other athletic ATs and having an extended network was essential for professional development.

Research Questions

Three research questions guided this study. This section will provide a summary of the findings derived from addressing these questions. The answers will be presented based on the domains and themes that have surfaced from the data analysis. Participants from diverse settings, with varied years of experience as ATs and across all age groups in the sample, provided comprehensive responses to the three research questions. All 20 participants acknowledged the value of AT Facebook groups. They also offered insights into how the Facebook groups could function better and meet the desired outcomes of those who choose to participate. The subsequent section delves into the intricate details of how each research question was answered through the study's interview process.

Research Question One: Communities of Practice and the Athletic Training Community

Determining if ATs are using closed Facebook groups for athletic trainers as a CoP was a primary objective of this research study. RQ1 asked:

Are athletic trainers utilizing social media-based athletic training groups as communities of practice?

Based on Wegner's definition of a community of practice (CoP), ATs use closed Facebook groups for athletic trainers in this capacity (2015). Wenger requires a CoP to include 1) a domain, which is the shared interest, competence, and commitment which distinguishes the community from others, 2) the community, where members pursue their interests through discussion, knowledge sharing, and relationship building through collective learning, and 3) the practice, which means community members are actual practitioners of the domain of interest and work to build a repertoire of resources and ideas they take back to their practice (para 4). Based

on the research data, many AT-related closed Facebook groups meet all three criteria defining a CoP.

Community of Practice Domain

In a CoP, the domain creates a common ground that inspires members to participate and guide their learning (Wenger, 2015). Whether intentional or organic, closed Facebook groups for ATs thrive as a CoP, despite the issues ATs see within the groups, such as toxicity or toeing the line regarding patient privacy. Within the Facebook groups, ATs have found community, a sense of belonging, professional mentorship, and a place to participate in social learning within AT. The shared interest, competence, and commitment to the field of AT fulfill the CoP criteria of a domain.

Community and Belonging

A sense of community and belonging were the most common motivations and outcomes participants found from their membership in an online Facebook group for ATs. There is a sense of understanding one another and the challenges ATs face in their professional and personal lives. Knowledge sharing and learning from others was a primary motivation for group participation, and relationships were found by making connections through shared interests within the profession, such as the unique issues female ATs have or young professionals searching for mentorship. Despite negative behaviors from other ATs on social media, the 20 participants found the community supportive and conducive to collaboration and learning.

Community of Practice for Professional Development

Sharing ideas and getting feedback or seeking advice and guidance from a large network of experienced professionals was a primary driver for ATs to participate in closed Facebook groups for ATs. The ability to ask questions quickly and receive rapid feedback from a national

network of other ATs can only happen via online communication. Additionally, the Facebook groups serve as a living curriculum ATs can tap into to solve problems or seek advice. No CoP is perfect and rational, constructive conversation should be the gold standard for knowledge sharing and learning for ATs using Facebook groups for professional development.

Social Learning

Formal continuing education is a requirement for ATs, but participants found value in the informal social learning occurring in the Facebook groups. Eight of the respondents noted that the groups allowed them to seek advice from others when it would not be possible for them to do otherwise due to being isolated at their worksite. Participants also found sharing their own experiences and advice with others to be incredibly rewarding. Meaning, practice, community, and identity form the framework for social learning, and each of these criteria is exhibited in Facebook groups (Wenger, 1998). AT is a small professional community, and elements of trust are displayed among the ATs who participate because of the regular, meaningful informal socialization and collaboration happening online.

In summary, because the ATs who participated in the Facebook groups demonstrated all three components that define a CoP exist, it is evident that ATs are finding CoPs within Facebook groups, thus answering the research question without any doubt. While not every AT-related Facebook is a CoP, such as an AT alumni group, many fit well within the CoP definition.

Research Question Two: Uses and Gratifications of Closed Facebook Groups for Athletic Trainers

To determine the motivations of ATs using closed Facebook groups for ATs, RQ2 asked: What uses and gratifications are athletic trainers communicating as reasons for engaging with social media-based athletic training groups?

The purpose of R.Q.2 is to determine which assumption ATs best align with as reasoning for engaging with other ATs in AT-specific social media groups. It can be hypothesized that the primary assumptions of why ATs use social media groups could improve their understanding of the usefulness of social media for professional collaboration. This question also explores how professional collaboration might close knowledge-to-practice gaps. The participant interview data found several motivations for participating in closed Facebook groups for ATs. While these motivations varied depending on what the AT hoped to achieve, commonalities were found amongst all twenty participants.

Gratifications Sought

The ATs who participated in this study provided various reasons for joining a closed Facebook group for ATs. All 20 ATs who participated in the study were members of multiple groups and identified different purposes for each group. For example, a group called *Women in Athletic Training* was cited frequently by the female participants. It provided a safe environment for female ATs to collaborate in a friendly, well-moderated space. Another Facebook group called *Secondary School Athletic Trainers Blowing Off Steam* was discussed and thought to provide a place for ATs to discuss stressful professional issues, with ATs providing practical advice and emotional support.

Community Building, Connection, and Networking

The most common reason for initially joining a closed Facebook group for ATs was community building and networking. Although criticized by several participants, validation from the larger community was also a driver for some. Seeking validation could extend beyond patient care, to knowing a critical conversation was handled appropriately to the emotions stemming from parenting as an AT or being a female in a male-dominated profession. Others enjoyed

providing validation for others to connect and support other ATs, which they felt was important as an extension of continued professional socialization.

Professional Development & Learning

Learning from others' experiences or seeking advice about a problem was another motivator for participating in Facebook groups. Every participant said they participate in the groups as passive observers or *lurkers* and only participate when they feel they can effectively contribute meaningfully, or the topic interests them. Professional development and learning on the Facebook groups ranged from actively sharing experiences and advice, sharing resources or contacts, to intentionally reaching out to someone one-on-one to provide personalized advice or support. Seven participants mentioned they found a mentor, or group of mentors, or became a mentor to another AT as a direct result of being in the Facebook groups.

Gratifications Obtained

For some participants, the original motivations for joining the Facebook groups led to outcomes they had not anticipated. Outcomes were positive and negative, and participants provided ideas for how negative outcomes could be circumvented. This study found several results from Facebook group participation including community and support, professional development, and expanding one's network when working in isolation.

Community, Support, & Validation

Finding a community where participants felt they belonged and could meaningfully engage with the group was a significant outcome of this study. Many participants were members of smaller closed Facebook groups specific to a smaller sub-set of ATs, such as those working in a particular job setting, individuals living in a certain region of the country, alumni groups, or social groups like mothers or the LGBTQ+ community. Validation and support from others can

be found in the groups, lending to the community feel of the groups. Although viewed negatively by some, about half of the ATs in the study appear to feel that Facebook groups are a safe place to vent and share their frustrations with group members.

The Isolation Problem

Many ATs work in isolation and cannot easily get feedback or ask for advice in the same manner that other healthcare professionals can. Participants who stated they work in isolation communicated the Facebook groups made them feel less alone and provided a space to find the professional collaboration and networking they were missing. Empowerment and solidarity were reasons those in isolation continued to utilize the groups, as they felt an extensive network of other ATs were there for the same reasons. Instead of going months between seeing another AT at a convention or away football game, isolated ATs now benefit from a way to connect with other ATs regularly.

Professional Development & Learning

Learning from the large network of ATs on social media or benefiting from informal professional development activities is another outcome ATs communicate from their participation in closed Facebook groups. While knowledge-seeking and sharing behavior was expected when initially joining the groups, athletic trainers are finding other topics for professional development in the groups such as finding a new job or per diem work, comparing salaries and benefits, discussing different job settings, getting plugged into a volunteer position in a professional organization, discovering how other organizations function, or finding new best-practices or technologies in the field. Others find mentors or even make friends whom they connect with in person at professional functions. The breadth and reach of crowdsourcing in the groups also allow for professional collaboration that would not otherwise be possible.

Uses and gratifications illustrate how ATs use Facebook groups to fulfill a specific need, both personally and professionally. Based on the five assumptions of uses and gratifications theory, ATs are actively selecting closed Facebook groups for ATs to collaborate with their peers, and the AT audience is both active and goal-directed because they are using the groups for professional collaboration. Additionally, social and contextual elements such as generational differences and personal experiences are shaping the ATs' activities within the groups, and the effects of the Facebook groups and how ATs use the Facebook groups are interrelated. The uses and effects of Facebook groups are interrelated because of how ATs can find answers to their questions or discuss important professional topics with one another.

McQuail (1987) purported that there are four types of gratifications people receive from media, and ATs are meeting all four of these gratifications. The first gratification, entertainment, is being met through the passive use of the groups as a *lurker*. Information as a gratification was common because ATs are using Facebook groups for knowledge-seeking purposes. Third, personal identity is being found within the groups because ATs report using the groups to find understanding and validation. Personal identity was especially relevant for female ATs who used Facebook groups to discuss their struggles in a male-dominated profession or their unique challenges of parenting as an AT. Finally, ATs are using Facebook groups for social interaction because networking and professional collaboration are the most frequently stated motivations for joining Facebook groups. While several motivations for participating in AT Facebook groups easily emerged from the data analysis, further research about why ATs use social media for professional purposes could be examined through a different lens.

Research Question Three: Patient Privacy & E-Professionalism on Social Media for Athletic Trainers

ATs frequently discuss patient-related issues on social media. R.Q.3 asked the following question:

What privacy concerns do athletic trainers participating in social media-based athletic training groups perceive when disclosing information regarding a patient in the group?

Several concerns were found from the research data, and many of these concerns extended to how participants felt ATs behaved professionally online. ATs acknowledge the need to respect patient privacy but also desire the ability to collaborate with other ATs on complicated patient cases. However, collaboration is limited when working in isolation or with a small group of other ATs. This leads many ATs to social media to discuss their patients. Participants felt they could discern a patient's identity due to the information posted by another AT, even though no personally identifiable information such as name, date of birth, location, or image is provided. The public nature of an AT's patient population is thought to cause this. For example, if an AT posted about an injured football player and the AT's school was listed as their place of employment, another AT could potentially discern the identity of the athlete by searching for an article detailing the game that could mention the injury or use details from the post to find the athlete on the school's public-facing website. Participants questioned if some patient cases could truly ever be private if the injury occurred and was managed in a public space, such as a football field.

The ATs in the study communicated the need for patient privacy when discussing patient cases online. They felt there was a way to accomplish this without divulging information that could help another person discern a patient's identity. Using Facebook's anonymous feature or

using only the minimum necessary information were both ways the participants could safely discuss patient information in the Facebook groups.

The Permission to Post Dilemma

All 20 participants mentioned the phrase *permission to post* when detailing how ATs discuss patient cases on social media. The use of *permission to post* is a unique phenomenon found during the interviews, and there were varying opinions about using the phrase. Half of the participants felt the phrase could be trusted, and believed the AT who posted had explained why they were posting on social media the patient, received verbal or written permission, and had received parental consent if the patient was a minor. The other half of participants believed the phrase was hollow and ATs were merely using the phrase to get their post approved by group administrators or to prevent it from being deleted if the group posts were not moderated before appearing in the group. Participants who did not trust the phrase also felt the phrase had no legal standing if a patient were to seek legal action because of their information being shared on social media.

E-Professionalism

E-professionalism was not an intended focus of this research study but was brought up by all 20 participants in the context of patient privacy and is therefore relevant to discuss. Participants emphasized that ATs should be mindful of what information they post online and how their posts could affect their reputation, others, and the profession. A false sense of security when participating or posting patient information in the Facebook groups was considered an issue, and some participants felt other ATs do not use discernment before the post or posts are unprofessional. Participants shared how they felt some ATs dominated the conversation and

acted egotistically in the groups, making the groups feel like unsafe places to collaborate or meet their original goals for joining the group.

Summary

Chapter Four detailed the findings of the research study's qualitative interviews. In total, 20 ATs were interviewed by the researcher. Each participant was asked a series of questions about their personal experience with closed Facebook groups for ATs, motivations for participating in the Facebook groups, and how patient privacy is perceived within the Facebook groups. Through the interviews, it was determined that ATs are using closed Facebook groups as a CoP, but that professional communication and development could be improved in the groups, particularly when discussing specific patient cases. Most participants described positive and negative outcomes from their participation in the Facebook groups and provided examples of ways the Facebook groups could be improved. Areas of improvement included refraining from toxic or negative behavior, improving e-professionalism when posting or engaging with others on social media, and either using Facebook's anonymous posting feature or learning more and applying tactics for respecting patient privacy on social media when choosing to collaborate with other ATs about a specific patient.

The motivations of ATs using the Facebook groups varied among the participants, but several commonalities were found. All participants cited networking and belonging to a professional community as a reason for joining a closed Facebook group. Additionally, all participants believed knowledge-seeking behavior and giving advice to others to be a motivation and direct outcome from participation. Other motivations found included learning from others' experiences, finding support when working in isolation, and finding or becoming a mentor. Opinions about motivations varied, with some participants believing other ATs were looking for

validation or an intrinsic reward by participating in Facebook groups. Other participants cited the many ATs who use the platform to vent about personal issues or the AT profession. Participants frequently brought up generational differences, with many feeling that certain generations or age groups of ATs exhibited different behaviors when participating in Facebook groups. These generational differences extended to the way participants described how ATs disclosed private patient information on social media. Participants 15 or more years into their careers felt younger ATs disclosed too much patient information online and described this as a direct result of their exposure to social media.

The findings from this study responded to the three research questions that were asked. In Chapter Five, why these findings are important to the AT and allied health professional community will be analyzed. A summary of the findings and a discussion of the interpretation of the results will be given, as well as an overview of the study's limitations and delimitations. The results will be linked to previous research and practices, as well as extrapolated into future research needs. Finally, recommendations for future research and a conclusion to this research study will be provided.

CHAPTER FIVE: CONCLUSIONS

Overview

The purpose of this qualitative study was to understand the use of Facebook groups for athletic trainers (AT) as a CoP, and the motivations of ATs for joining and participating in these groups. Participants, who will use pseudonyms in this chapter, varied in years spent in the AT profession and job setting. All 20 participants were members of several closed Facebook groups for ATs. Chapter Five will begin with a summary of the research findings and a discussion of the interpretation of these findings. The implications for practice and policy will be explored, in addition to the theoretical implications of the research study. Finally, this chapter provides the study's limitations and delimitations, and recommendations for future research.

Summary of the Study

ATs are allied health professionals who use social media to communicate with other ATs, including through closed AT-specific Facebook groups. While communication with other ATs has historically occurred through the workplace or in-person professional development events throughout the year, these groups are a popular communication method for ATs to network and collaborate. More research needs to be conducted to understand the effects of Facebook groups on ATs in terms of how ATs communicate and learn together. This study was designed to research how ATs are actively using Facebook groups as a Community of Practice (CoP), their goals for using and participating in Facebook groups, and how patient privacy is viewed as an important aspect of healthcare communication online. This research effectively answered the three research questions: (a) are athletic trainers using Facebook groups as a CoP; (b) what are the motivations of ATs using Facebook groups for ATs; and (c) what privacy concerns do ATs

have when they do participate in the Facebook groups? Furthermore, this research identified that ATs are actively using Facebook groups as CoPs for many reasons, including participation in a professional community, professional development, professional discussion, and finding professional and personal support. The study also found that ATs are concerned about patient privacy and how information is shared and discussed within the groups, such as sharing an image of a minor with a skin condition in the Facebook group, but also have concerns about how ATs behave professionally online as well.

Research Question Analysis

Research Question One asks how ATs are using closed Facebook groups as a CoP. The question was discussed in-depth by all participants, all of whom felt that finding connection and community with other ATs was a primary reason for participating in closed Facebook groups for ATs. A CoP is comprised of a domain, a community, and a practice, and most closed Facebook groups for ATs meet these criteria (Wenger, 2015). Exceptions of Facebook groups that do not meet the criteria of a CoP are those used for specifically defined purposes, such as AT alumni groups or Buy/Sell/Trade groups. Participants described the Facebook groups as places for ATs to connect around their shared experiences in the profession, network and find connections with other ATs, and work together to ask profession-specific questions and share advice and experiences.

Research Question Two questioned what the motivations of ATs using Facebook groups for ATs were and prompted a wide range of responses from the participants, ranging from connecting with others to finding solidarity with other female ATs, and looking for new employment opportunities. The most common response was wanting to network and collaborate with a larger group of ATs. All 20 participants described the connections with other ATs as the

primary motivator, and this was especially true for the female participants. Out of the 17 female participants, 16 were members of a women-only group and 7 participated in a motherhood-focused Facebook for ATs. The unique circumstances of being a female in a male-dominated profession, and working in a profession that requires long hours, many of which are on nights or weekends led many of the female participants to commiserate and find support from other female ATs. Finding support was also a common thread of discussion for the younger ATs who participated, citing the need for mentorship and guidance as they become established in their careers.

Research Question Three asked what privacy concerns ATs have when they participate in Facebook groups and elicited very passionate responses from the participants and led to many additional discussions about e-professionalism on social media. Responses from participants varied regarding their perspectives on patient privacy. Britney, a 32-year-old AT who works per diem while completing her doctorate in AT and participates in 8 Facebook groups, summed up the thoughts of many participants saying, “I think that people try to keep it anonymous....if you do have your employment site listed, then it's not too hard to figure out who the patient might be...if it's not and it's not easily accessible public information...it's a little bit more anonymous in terms of patient information.” Britney's statement speaks volumes about the idea of the public patient; a patient who is in the public eye and may have injuries discussed on local to global media channels (Johnson, 2022). Tanya, a Division III university AT with academic duties in the college's AT program emphasizes this with her students. “We are [one of] the only healthcare arenas where your overall clinical exam is observed by the public,” said Tanya.

ATs also described the value of discussing and sharing patient cases as a way to provide better care, learn new best practices, or share unique diagnoses. Participants, such as Susie a 29-

year-old working in the university setting, described discussing patient cases to continue professional development and continue to learn commenting, “Young professionals are trying to build confidence, and I think they do get some like benefit from posting.” While all participants agreed protecting patient information on the Facebook groups was not only necessary but legally required, the balancing act of sharing information and professional collaboration was repeatedly acknowledged.

Discussion

The following section will discuss the findings of this research study concerning the empirical and theoretical literature reviewed in Chapter Two. Much of the previous research on experiences of ATs participating in CoP or using social media focused on individual reasons for using social media in a more generic sense, and the ways ATs access professional development or become professionally integrated upon entering the workforce. The use of social media as a CoP for ATs and the motivations for participating in social media communities had not been researched before this study. The results of this research study revealed multiple findings about the use of closed Facebook groups by ATs. The use of closed Facebook groups, the motivations of ATs who participate, and how ATs perceive patient privacy concerns are all interconnected through the ATs’ experiences on social media. The challenge with previous literature is that it examined the problem from the perspective of other healthcare professions who do not have the same role or experiences of ATs (Deane & Clunie, 2021; Luc, Stamp, & Antonoff, 2018; Thompson et al., 2008). Additionally, research on AT’s use of social media is extremely limited (Hamilton, Neil, & Eberman, 2021; Winkelmann, Neil, & Eberman, 2018).

To bridge the current research gap, this research study sought to understand the phenomenon of closed Facebook groups for ATs. All ATs who participated in the research study

expressed that their participation in the Facebook groups helped them connect with other ATs across the country for both professional and personal reasons. Furthermore, all participants felt the Facebook groups allowed ATs to find and participate in a professional community when they are traditionally isolated from other ATs at their location. Part of the communication that occurs in the Facebook groups is about patient cases that individual ATs are managing. Participants articulated concerns about how patient information was disclosed in the Facebook groups but simultaneously felt there is value in discussing and collaborating on difficult or interesting patient cases. Therefore, it is crucial to understand how ATs are using closed Facebook groups as a CoP and how patient privacy is respected between ATs in their clinical practice (Meskimen et al., 2022; Pike Lacy, Lam, & Welch Bacon, 2022; Wenger Hamilton, Neil, & Eberman, 2021; Wenger & Wenger-Trayner, 2020).

Communications Research Tradition

The sociopsychological tradition guides this communications study because the insights derived from ATs' firsthand experiences can be viewed through the sociopsychological lens, especially given the significance of their values concerning ethical professional behavior. Rooted in social psychology, the sociopsychological tradition places significant emphasis on the individual as a socialized being, integrated within a web of interpersonal connections, yet retaining autonomy in their choices and behaviors (Littlejohn, Foss, & Oetzel, 2017). The interconnected relationship between communication and psychology becomes apparent when considering how an individual's personality or psychological makeup shapes their responses to various messages. This can manifest as either acceptance or bias, influencing how they convey their values, often through the lens of recognizable stereotypical behaviors (p. 42). From the sociopsychological perspective, how ATs view social media in a professional sense, including

how they act on social media with other ATs can be investigated. CoPs contribute to communications research as evidenced by the social learning that occurs within the communities (Li et al., 2009). If it were not for this type of communication, we would not be able to translate its application to the sociopsychological research tradition.

The sociopsychological tradition was appropriate for this study because of the focus on individual and interpersonal interaction, influences, and social behavior (Craig, 1999). This may include how people interpret information and formulate messages, which is what ATs are observed doing within closed Facebook groups. The socio-psychological tradition finds its foundation in psychological theories and underscores the individual as a socialized being who is intricately woven into a network, all while maintaining a degree of independent agency (Littlejohn & Foss, 2008). The interplay between communication and psychology is apparent when considering how an individual's personality and psychological makeup shape their responses to messages and influence how they express their values through their behaviors. Utilizing the sociopsychological tradition also supports future health communications studies because of the concentration on how individuals behave in communication situations, such as the conversations and messages being shared on healthcare providers' social media channels. Future studies can use the sociopsychological tradition to better predict how healthcare professionals will communicate and behave on social media, or how they integrate messages into their clinical practice.

Health Communications

All theories undergo assessment based on their practicality. According to Foss and Griffin's (2006) theory definition, the effectiveness of a communication theory hinges on its capacity to enhance our comprehension of a phenomenon compared to our previous knowledge.

If a theory fails to challenge a phenomenon, it loses its significance in the realm of communication research. As communication methods and the way humans send and receive messages continuously evolve, so do communication theories. Certain theories may become obsolete because they no longer contribute to our understanding of how communication pertains to our experiences, can be enhanced, or addresses new communication contexts relevant to our lives. New communication theories will emerge as the dynamics of message transmission and reception evolve in novel ways. Utilizing Craig's (1999) metamodel communication theories and research, health communication theory can be applied practically to engage with everyday practices.

Health communication has played a pivotal role throughout history, not only in enhancing human and public health outcomes but also in elucidating the ways communication can bolster these outcomes (Wright, 2019). When applying Craig's (1999) metamodel, health communication researchers can develop new theories that may emerge from practical efforts, such as efforts to foster patient autonomy, including patient-informed consent (Olufowote, 2009). The relevance of health communications could hardly be more pertinent than it is today, as the world grapples with the aftermath of the 2020 COVID-19 pandemic and contends with the emergence and resurgence of diseases like monkeypox and recent instances of polio in New York state (Anthes, 2022). The scope of health communications encompasses a myriad of relationships, including the dynamics with healthcare providers, institutions, media, societal and cultural influences, individual communicators, interpersonal relationships, message delivery, and much more (Littlejohn, Foss, & Oetzel, 2017).

The discipline of health communications is often described as an all-embracing concept, which considers a huge and diverse range of communicative activities touching on health and

healthcare, ranging from personal accounts of health and illness and encounters with medical professionals to health policy documentation and side effects information presented on drug packaging” (Harvey & Adolphs, 2011, p. 470). In parallel with the ever-evolving health industry, health communications constitute a multidisciplinary field with various sub-disciplines and intersections with domains such as media studies, sociology, psychology, and beyond (Brookes & Hunt, 2021). Given the global significance of healthcare-related communications, numerous communication theories have proliferated in response. Examples of health communication research that has emerged in the sociopsychological tradition include the Risk Perception Attitude (RPA) framework, and the Theory of Normative Social Behavior, which are important when considering health, risk, and behaviors of others (Babrow & Mattson, 2011). Rimal’s (2006) research in health communications specifically focuses on motivations to think about health-related issues, how the information is used, and how the information is acquired. Health communication studies such as these provide a baseline for the future development of health communication research.

The focus of this research brought together several communication theories supported by the sociopsychological tradition and attempted to apply these theories to better understand how ATs as a specific healthcare provider population interact on social media. For healthcare professionals such as ATs, communication skills are typically not taught during formal education but are necessary to collaborate with patients and other healthcare providers. Often there is a gap between the classroom and the workplace, and communication theories can be applied to help solve the problems ATs and other health professions are seeing (Heaven, Clegg, & Maguire, 2006). Health communication scholars have called for the advancement of research to address issues that limit the effectiveness of healthcare, health promotion, and health education, and

researchers must be proactive in formulating vital research inquiries, conducting thorough and enlightening data collection, sharing pertinent discoveries, and establishing impactful community research and intervention collaborations (Kreps, 2011). As new communication methods are developed, how these mediums are utilized by healthcare professionals, such as CoPs, will continue to be further researched and developed.

Empirical Literature

Hamilton, Neil, and Eberman (2021) first examined the relationship between ATs and social media, finding ATs utilizing a variety of social media platforms for a range of purposes, including networking and collaboration. The need for professional collaboration is apparent, as most participants agreed ATs are commonly isolated in their workplace and face other barriers to collaboration, such as communication roadblocks (Meskimen et al., 2022; Manspeaker & Hankemeir, 2019). One frequent roadblock is the athletic model of care ATs may fall under, instead of the medical model of care which allows for better access to interprofessional collaboration with other providers (Hankemeier & Manspeaker, 2017). ATs in the study who were practicing in isolation cited their seclusion as a reason they chose closed Facebook groups to collaborate with other ATs. Communication, learning, and infrastructure are challenges ATs working in isolation may face when trying to collaborate interprofessionally (Meskimen et al., 2022). Communicating freely and receiving timely feedback in the Facebook groups helped isolated ATs overcome barriers to interprofessional collaboration, which has been shown to limit knowledge-sharing and learning experiences for ATs (Driban & Laursen, 2019).

Even beyond AT, healthcare professionals frequently use social media for professional collaboration and mentorship, and other professions are not immune to the legal, ethical, and professional issues that can arise from social media use (Petrescu-Prahova et al., 2015; Gagnon

& Sabus, 2015). Collaboration and seeking out advice from others can facilitate ATs to find other educational resources and opportunities when they perceive they are deficient in a certain topic, and the participants described learning information and new practices or techniques from the conversations within the group they otherwise were not aware of previously (Eberman & Tripp, 2011). However, questions and concerns about patient privacy have also been shown to be a communication barrier when attempting to collaborate with other healthcare providers and ATs and may prevent ATs from reaching out to their provider network about a patient case (Meskimen et al., 2022).

Patient privacy as a legal, ethical, and professional issue for ATs using closed Facebook groups provoked an extensive range of responses from the participants. Quinn (2016) found social media use is affected when privacy is a concern and when the motivation for participating in social media is for professional purposes. ATs seemingly understand patient privacy is not always completely within their control, which is due to the public nature of the patient and the many stakeholders involved in patient-athlete care (Greim, Hobbs, & Swink, 2016). Half of the participants questioned if HIPAA and/or FERPA laws even applied to their clinical practice, and this is a long-standing issue for ATs depending on their job setting (Berkowitz, 2015). Instead of concrete guidelines and policies, the NATA provides best practices for ATs to follow (NATA, 2017a). Based on participant responses, perceptions about patient privacy varied depending on the job setting and the model under which the AT was employed. ATs who were employed by healthcare organizations rather than a secondary school or university communicated receiving more continued training on patient privacy and e-professionalism through annual compliance training or team meetings.

Theoretical Literature

This study can be understood through the lens of the Communities of Practice model, uses and gratifications theory, and the wisdom of the crowd effect (Wenger, 2015; Blumler & Katz, 1974), Surowiecki, 2005). The CoP model uses and gratifications and the wisdom of the crowd effect are investigated further in the following section in relation to the research questions.

Communities of Practice

Wenger's (2015) CoP model provides a framework for individuals to collaborate around a shared practice through knowledge-sharing and professional collaboration around a shared practice, such as AT. Wenger and Wenger-Trayner (2015) purport CoPs function as a format for collective learning when all members are passionate about the topic, describing knowledge as free-flowing because of the informality and practitioner-focused collaboration a CoP offers. Isolation and the athletic model of patient care can prevent ATs from participating in a CoP and closed Facebook groups can open doors for these ATs to join and actively participate with their peers. ATs have long been encouraged to create professional communities (Keeley et al., 2016). Closed Facebook groups, which are Facebook groups that can only be viewed and participated in by users who have been admitted to the group as a member, have created a sensible solution on a platform ATs are already familiar with and use regularly. Even as passive members, ATs can utilize the groups to learn from the posts and knowledge shared daily in the Facebook groups.

CoPs have evolved to emphasize learning through relationships when there is a shared objective, even if the mission of the CoP and the objective are somewhat uncoordinated (Omidvar & Kislov, 2014; Bright et al., 2017). The closed Facebook groups for ATs display this characteristic because the group members collaborate on a range of topics and members may use the groups for different purposes. Ajegbomogun and Oduwole (2017) described CoPs on social

media as a more spontaneous form of collaboration between members. “I’d like to get an answer as quick as possible, get it resolved, and move on,” said Sasha when describing why the groups were her preferred method for collaboration on patient cases. However, all study participants believed the primary objective was the same despite the uncoordinated posts and comments of the group; to improve and advance the field of AT.

Social Learning Theory

Bandura’s (1971) Social Learning Theory (SLT) is often tied to the CoP model because of how learning within a CoP occurs in a social context. Wenger & Wenger-Trayner (2020) use SLT as an extension of continued research on CoPs and distinguish the use of SLT in CoPs in several key ways. Three of these methods are the shared domain, commitment to learning and improving one’s practice, and the community itself, which are the definition of a CoP. The longevity of the CoP and its social structures, management of skills over time, and the recognition of membership and how members base their identity on their management of skills are added to the definition of a CoP when combined with SLT. Some Facebook groups for ATs as described by participants are displaying these characteristics as well. Participants described ATs who were frequently posting or commenting in the groups, or groups that were managed by a group of administrators, indicating that some Facebook groups are using a social structure. Additionally, the recurring theme of generational differences shows there is a social hierarchy based on years spent in the profession.

The management and recognition of skills, as well as the professional identity of members based on skills, are also displayed in the Facebook groups. Twenty percent of participants described personally reaching out to others when they had personal experience with a particular issue. Claire, an AT with 16 years of professional experience who currently works in

the university setting, explained how she will often see a post about an issue she is familiar with and take the conversation off the group to a direct message to the original poster so she can explain and give more context to her responses, saying, “It’s easy to go on social media and send someone a message, or hey, you know - I’ve done this, or this [individual] would be a great contact for you... I think makes it a lot easier.” Probst and Borzillo (2008) support this model in a CoP through their support of feeding knowledge into the group or promoting access to one’s greater network of professionals, which Claire is actively doing within the Facebook groups.

Uses and Gratifications

Defining the motivations of ATs for joining Facebook groups for ATs functioning as a CoP is best understood through the uses and gratifications theory (Klumler & Katz, 1974). Denis McQuail (1987) extended the theory by identifying entertainment, information, personal identity, and integration and social interaction as the four types of gratifications people get from media. The participants communicated all four types of gratifications during the study. Passive participation by scrolling through the Facebook groups and reading posts and responses was described as entertaining by 15 of the 20 participants, particularly posts with comments that became divisive between group members. Knowledge and information seeking and sharing was a motivation and participation for all 20 participants. Personal identity was found within recognized sub-sets of ATs, such as young professionals, women, and mothers who sought out support both personally and professionally via their participation. Finally, all 20 participants described networking and social interaction as a primary reason for joining and continuing to participate in the Facebook groups.

What motivates ATs to participate in closed Facebook groups and discuss patient cases can be viewed through the lens of Patronio’s communication privacy management (CPM) theory

(Patronio, 2002). CPM considers the internal process and dilemma individuals have when determining whether to disclose information, such as patient information on social media. The motivations and opinions of others' motivations about discussing patient cases ranged from wanting to learn and collaboration to wanting to draw attention to oneself or behaving egotistically. Perceived risks, such as harming one's reputation or divulging private patient details, can be affected by cultural expectations, intergroup dynamics, and social standing (Mansour & Franke, 2021). For example, 17 participants observed some Facebook groups required approval from a group administrator before a post was made available while other groups did not. The dynamics of the groups that required post-approval were described as friendlier and more collaborative than other groups by those 17 participants, which participants believed could become toxic without moderation.

Papacharissi and Rubin (2000) described information-seeking and self-education as a motivation to use social media. Case studies are a common method of learning in the healthcare field, and the participants described how the Facebook groups gave them access to case studies in an informal way. Ashley, a 27-year-old AT who would soon be transitioning from a secondary school to a clinical setting after the end of the 2022-2023 school year, particularly enjoyed learning from the patient cases discussed in the Facebook groups, stating, "[The groups] just give different ways to look at different cases that come in or even other unique cases. I like seeing other people post and learning different things and seeing the injuries." ATs appear to be actively using Facebook groups to share and collaborate on these case studies in a meaningful way.

Wisdom of the Crowd

Surowiecki's (2005) wisdom of the crowd effect is used to understand the motivations of ATs using Facebook groups to collaborate with other ATs on patient cases discussed in the

Facebook groups. When occurring online, the wisdom of the crowd effect is often referred to as crowdsourcing (Gordon, 2021). Knowledge-to-practice gaps in healthcare are often filled by turning to the experiences and expertise of other practitioners through curbside consultations (Sims et al., 2019). Because barriers, such as isolation, can prevent ATs from collaborating with other health professionals directly, Facebook groups for ATs are actively being utilized to overcome barriers to in-person consultation. Health professionals benefit from professional collaborations that cross geographical boundaries, and those collaborations can facilitate mentorships that otherwise would not occur (McKimm et al., 2019). All 20 ATs in the study communicated how they appreciate the ability to hear from many voices when knowledge-seeking in the Facebook groups, demonstrating the aggregation of knowledge from the group is valued.

In healthcare, curbside consultations are valued because this form of communication allows providers to interact with the goal of improving patient care (Lin et al., 2016). Bauer and Gegenhuber (2015) identified several motivations for crowdsourcing, including entertainment, self-actualization, meaning, belonging and recognition, skill development, and financial reward. ATs seem to be using closed Facebook groups for crowdsourcing for several of these reasons. Seventy-five percent of the participants described finding passive participation to be a form of entertainment because they enjoyed reading and learning from the posts and comments in the groups. Meaning and belonging by connecting with other professionals who are experiencing the same challenges and understand the nature of the profession was also described as a popular reason for group participation.

Learning from others to improve one's skills was also cited as a reason for ATs to participate actively and passively. Crowdsourcing has been found to be an effective way to fill

knowledge-to-practice gaps in the healthcare field and is valued for being inexpensive and less time-consuming (Kpokiri et al., 2021). The study participants showed that learning from others on Facebook is appreciated for the same reasons. One-quarter of the participants described in-person professional meetings to be cost-prohibitive, or they did not get enough time off from work to attend these events. The Facebook groups are filling a gap for these ATs to still connect and collaborate with their peers or participate in crowdsourcing behavior when the expertise of other ATs is needed.

Communication Network Centralization & Shared Task Experience

Communication Network Centralization (CNC) and shared task experience are two communication effects that may occur because of crowdsourcing. Four ATs in the study described other ATs who dominated the conversations in the Facebook groups or behaved egotistically. CNC describes these individuals as influencers who can have either a positive or negative effect on group dynamics (Yan et al., 2021). Influencers can reduce the diversity and accuracy of crowdsourcing results, or influencers can also facilitate improved knowledge sharing because they are truly experts (Noriega-Campero et al., 2018). These positive and negative results from influencers appear to be occurring in Facebook groups for ATs. Half of the participants identified influential ATs by name in the groups who they felt were truly trying to improve their profession and help others. However, 25 percent of participants also described ATs who dominated the posts and comments with continuous negativity.

Shared task experience is considered a form of crowdsourcing because participants are coming together and continuing towards a shared goal (Yan et al. 2018). The results of shared task experiences can be altered due to peer pressure in the group (Roberts, 2006). This can lead to hierarchies and decreased levels of trust among group members (p. 627). ATs in the study

discussed hierarchies in Facebook groups based on generational differences or levels of group participation. Older ATs or group influencers were described as those who would dominate the group conversation or behave egotistically, which can lead to peer pressure. These group behaviors can alter the collective learning in the groups due to social influence (Yan et al., 2021). This is important to consider since ATs appear to be motivated to participate in groups for learning purposes. ATs should be cognizant of influencers in Facebook groups of ATs and make an effort to decide if those individuals are simply the loudest voice, or if they are respected as an expert or mentors for the group as a whole.

Implications for Practice and Policy

The findings of this research study have implications for ATs, AT professional development, and professional AT education programs. Qualitative studies offer an avenue for researchers to interpret the findings of the study and provide ways to enact improvements and adjustments for the future (Creswell & Creswell, 2018). This section will discuss the implications of this study for practice and policy. The following are recommendations for ATs and stakeholders involved in the professional development or professional education process, in addition to recommendations for the greater allied health professional community.

Implications for Practice

This research study has several practice implications for ATs and professional AT programs. Davis, Ho, and Last (2015) recommended that healthcare professionals receive additional education and training on professional social media use. Currently, ATs are not required to receive training on social media use and professional AT programs are not required by CAATE to include education on professional behavior on social media (NATA, 2011; CAATE, 2020). Tanya is a faculty member for an AT program. She spoke passionately about her

motivation to include e-professionalism and social media use as a healthcare provider as part of her students' curriculum. Five participants who had graduated from an accredited athletic training program all reported they had not received specific education on social media use or e-professionalism but were aware of the topic and some best practices.

E-professionalism and social media use should be considered for inclusion in CAATE standards as the use of social media by the next generation of ATs continues to grow. Currently, state medical boards have the authority to discipline physicians who use social media inappropriately (Ventola, 2014). Nurses are also subject to the same disciplinary actions as a result of posting unprofessional content on social media (p. 407). Increased involvement of clinicians as active participants is expected to promote lively conversations and the sharing of opinions or content. This, in turn, will nurture a strong sense of connection among peers, supervisors, and the broader professional community, but potentially at the expense of the clinician's reputation or a patient's privacy (Riddell et al., 2019).

The NATA should consider developing updated best practices for ATs who choose to collaborate and discuss patient-related issues on social media. While toolkits exist for district and state-level organizations for social media use, there should be recommendations for individual ATs. The national, district, and state-level AT professional organizations should also consider offering continuing education courses or continuing professional development learning opportunities at their events to increase knowledge and understanding of e-professionalism and social media use by practicing ATs. Given the vast expanse and immediate availability of social media outlets, both certified ATs and AT students must acquire new proficiencies. These include efficiently sifting through the sheer magnitude of available information, thoughtfully evaluating the credibility of social media content, and thoughtfully participating as a user (Roland & Brazil,

2015). When using social media, ATs, AT educators, and AT students should exemplify conduct that they would proudly emulate in offline situations, recognizing that online behaviors have the potential to be magnified quickly (Brazil, Stokes-Parish, & Spurr, 2020).

Implications for Policy

Discussing patient cases and learning from patient case studies was a common motivation for participating in the AT-focused Facebook groups. Participants enjoyed learning and collaborating from the case studies, which also provided an outlet for isolated ATs to collaborate with others. However, patient privacy in these case studies is a concern for ATs. While there are policies and best practices for discussing patient information, for ATs the line between patient collaboration and privacy can be blurry because of the public nature of the patient. Participants mentioned it would not be challenging in some cases to discover the identity of a patient if they chose to look hard enough, even if the patient wasn't named and few identifiers were given. For example, if an AT shared a case study on a female basketball player suffering from an injury, another person could find the school where the AT worked and potentially find a news article mentioning the athlete in question and their injury. ATs seem to understand this is a hazard of their profession and acknowledge it is sometimes unavoidable to keep a patient's identity private when injuries are discussed in the media.

ATs in the study also communicated that there is not always a clear definition of where they fall under HIPAA and/or FERPA guidelines. Susie, an Assistant AT in the university setting who is in her eighth year as an AT mentioned, “[My undergraduate AT program] touched on FERPA at some point, but I don't have a ton of understanding being in the collegiate settings. It's a very blurred line between like, ‘is this HIPAA, is it FERPA, is it both?’ I know who it works though.” HIPAA regulates the privacy of health information while FERPA prohibits

educational institutions from disclosing personally identifiable information in education records without consent (CDC, 2022). Generally, secondary schools are not HIPAA-covered entities unless the school employs a healthcare provider who conducts covered transactions electronically (HHS, 2008). However, in secondary schools, health records fall under and are protected by FERPA unless the healthcare provider is not employed by the school, in which case the AT would instead fall under HIPAA (para. 3). The same rules apply to university students (para. 3).

HIPAA plays a crucial role in guaranteeing that robust security measures are applied to any information revealed to healthcare providers and health plans, as well as information generated, transmitted, or stored by them (Alder, 2023). It empowers patients by granting them authority over the disclosure and sharing of their personal information. FERPA bestows specific privileges upon parents concerning their children's educational records (U.S. Department of Education, 2021). As students reach the age of 18 or enroll in post-secondary education, these rights are transferred to them. These individuals, known as eligible students, inherit the privileges previously held by their parents. Depending on their practice location, some ATs may not have access to a private place to treat every patient. It is normal for patient evaluations to occur in the AT facility in full view of other athletes or on-field during an event. These situations make patient privacy an unreasonable expectation in some instances. ATs should be encouraged to develop policies for reasonably protecting patient privacy, such as installing privacy curtains, instituting no cell phone rules in the AT facility, and collaborating with other healthcare professionals when using digital communications, such as social media, email, or text messaging (Quandt, Mitten, & Black, 2009).

Limitations and Delimitations

Every research study possesses imperfections, as limitations and delimitations are inherent in the research process (Peoples, 2021). Limitations refer to uncontrollable factors that exert an influence on the study, and this particular investigation is not exempt from various limitations. Research plays a crucial role in enhancing our understanding of communication, guiding communication practices, and fostering collaboration among researchers (Keyton, 2019). An essential component of this scholarly process is acknowledging study limitations. These limitations enable research consumers to recognize potential biases or exclusion areas that may impact the results and conclusions (Ross & Zaidi, 2019). By highlighting these limitations, researchers encourage further investigation, identify gaps in existing research, and inspire the curiosity of other scholars (p. 261). Ethically, presenting study limitations promotes transparency and reproducibility, while facilitating proper interpretation and validity of findings (p. 261). There are two identified limitations to this research study.

The first limitation is the use of convenience sampling to recruit research participants, which limited the potential participant pool. Several job settings were missing from the participant pool and the demographics of the participants did not align with the current demographics of ATs in the United States. The age and gender of the participants were not in alignment with the average age and gender demographics of the AT profession as a whole in the U.S. This limitation could have led to some of the conversations and themes that were found in the data regarding differences between generations. The second limitation is the use of interviews to gather participant data. Using interviews limited the ability to gather specific data points, such as the frequency of passive or active participation in the Facebook groups by

participants. All participants gave estimates when asked how often they participated in the Facebook groups, and the estimates given were typically ranges, such as 1-3 times per week.

Delimitations encompass decisive and exclusionary choices that define the parameters and boundaries of a study (Simon & Goes, 2013). Clearly defining the delimitations of a study is crucial for interpreting the results, as these factors directly impact the outcomes (Theofanidis & Fountouki, 2018). By specifying the scope and delimitations, the study becomes more reproducible, outlining what was excluded (p. 157). For example, in the medical field, the growing awareness of gender bias necessitates disclosing the gender distribution within a randomly selected sample to emphasize the importance of transparency, even in random subject selection (p. 157). Several delimitations were employed to restrict the scope and establish clear boundaries for the study. There were two delimitations in this research study.

The first delimitation was to only include ATs who were members of a Facebook group for ATs. This excluded ATs who may use other social media channels, such as Twitter or Reddit for the same purposes. The rationale for this delimitation was because of the private group setting Facebook provides, which is not found or as popular on other social media platforms. The second delimitation was to only include ATs who had been certified for over a year. AT students or ATs in their first year of practice were excluded from the study because of this delimitation, many of whom are active participants in the Facebook groups for ATs. The decision for this delimitation was made because students and certified ATs are nearly always researched separately in AT-specific research, and newly certified ATs may still be integrating themselves into the AT professional community and have less experience in Facebook groups. The goal of the research was to understand the lived experiences and motivations of the AT community

rather than to attempt to answer how AT students participate or how newly certified ATs become professionally socialized.

Recommendations for Future Research

This qualitative research study sought to gain a deep understanding of ATs' experiences in closed Facebook groups for ATs. The participants in this study consisted of 20 ATs who actively participated in those Facebook groups. Future research should consider other social media platforms, such as Twitter, Reddit, or the National Athletic Trainers' Association's Gather social media platform for its members. Expanding research into other social media platforms will give further insight into how ATs are communicating and collaborating on different social media channels that function differently than closed Facebook groups. Closed Facebook groups were chosen for this study because they are not available to be viewed by the general public. Because of the private nature of closed Facebook groups, ATs may have different perceptions of patient privacy and e-professionalism on other social media platforms.

Another area for future research is how different generations of ATs participate and perceive other behaviors on social media. Generational differences were not part of the study, but the topic came up frequently during the participant interviews. Britney, a 32-year-old doctoral student working per diem, believes millennials are engaging much more than other generations in Facebook groups. "I think it's more millennial ATs that are engaging versus newer professionals. I think it's important to have conversations with AT students about professional conduct online, especially now that most of our professional AT graduates are younger and in that Gen Z era. Social media is a lot different for them," said Britney. Differing perspectives and experiences for different age groups of ATs should be explored further, especially considering the next group of ATs is part of Generation Z, those born between the mid-to-late 90s to the

early 2010s and are now beginning to enter the AT workforce. Gen Z is the first generation that has always known a world that included social media as a digital communication channel (Sayed & Gupta, 2020). “The older generation wants to kind of sweep the fact that [social media] exists under the rug and not talk about it,” complained Elizabeth, who serves as a clinical preceptor for a local university and teaches a sports medicine class at the secondary school where she works. Younger participants had very different viewpoints about patient privacy and e-professionalism on social media than the oldest participants, who are members of Generation X.

Future Health Communications Research

In this study that explicitly did qualitative interviews with ATs who were members of closed Facebook groups and how they use them through the narrative qualitative collection, main concepts emerged that could extend to future communications studies, particularly in the area of health communications. The use of patient photos, the concept of patient privacy, and the use of *permission to post* could be extended to future visual ethnographic studies focused on ethical behavior on social media by healthcare professionals. Use of patient photos and assuming patient privacy has not been breached, in addition to healthcare professionals’ perceptions regarding the context and appropriateness should be explored further (Pink, 2007)

As social media continues to evolve, CoPs will continue to be an area of interest for health communication researchers. ATs are not the only healthcare professionals actively utilizing social media for professional purposes. Communication is ubiquitous, and the concept of CoPs can be applied to organizations, governments, associations, education, and more. Studying CoPs in the context of health communications is a practical way to evaluate the communicative processes of organizational knowledge (Iverson & Mcphee, 2008). Future research could be extended to larger social platforms for healthcare providers such as Doximity,

or delve into the use of social media by other healthcare professions. Generational gaps and the online discourse between generations amongst healthcare professionals should also be explored in future research. Media theorist Don Tapscott (2016) speaks to the differences in how generations not only behave online but also how these differences affect how younger generations learn and collaborate through digital platforms. Social learning for healthcare professionals and the generation's differences in how this type of learning occurs on social media should be extended into future health communications research because of the immense growth of online learning and continuing education for healthcare professionals.

Conclusion

This study examined the motivations of ATs using closed Facebook groups to communicate with other ATs in the sociopsychological tradition, which views communication through the lens of interpersonal interaction and human behavior (Craig, 1999). The CoP model, uses and gratifications theory, and the wisdom of the crowd effect supplemented this framework and provided guidance for a communication-focused research study. The purpose of this study was to understand if ATs were meeting the criteria of a CoP through their participation in the Facebook groups, why they chose to participate in the Facebook groups, and how ATs perceived patient privacy during their Facebook group participation.

The study employed a comprehensive framework, incorporating the Communities of Practice (CoP) model, uses and gratifications theory, and the wisdom of the crowd effect. These theoretical underpinnings guided the investigation, which aimed to understand whether ATs were meeting the CoP criteria through their engagement in Facebook groups, why they chose to participate in these groups, and how they perceived patient privacy within this context. To ensure the rigor and ethical integrity of the research, the study was proposed to and approved by the

researcher's dissertation committee and the Institutional Review Board at Liberty University. Interviews with participants were conducted, transcribed electronically, and reviewed for accuracy by the researcher. Delve software was employed to code the interview data, yielding insightful domains and related themes that effectively addressed the research questions.

The findings of this study highlight the profound significance of ATs utilizing closed Facebook groups as CoPs. Notably, large Facebook groups catering to ATs, such as Women in Athletic Training and Secondary School Athletic Trainers, were identified as meeting the criteria of a CoP. These vibrant online communities effectively bridge the knowledge-to-practice gap for numerous ATs, particularly those who may experience professional isolation. However, amidst the tremendous benefits offered by these social-media-based CoPs, there exist legitimate concerns surrounding patient privacy within Facebook groups. Participants expressed apprehension based on their observations of how other ATs engage and share patient information in these online forums. Although ATs often post patient-related content without personal identifying information, readily available data, such as team rosters and news reports, can potentially enable patients' identification by interested individuals. Consequently, ensuring robust patient privacy protection in the context of Facebook groups emerged as a critical consideration.

The participants offered invaluable insights and recommendations to enhance collaboration within Facebook groups and better safeguard patient privacy. Suggestions included leveraging the anonymous posting feature and adhering to HIPAA guidelines, which emphasize sharing only the minimum necessary patient information. Furthermore, the study revealed generational disparities in social media behaviors among ATs, prompting a pressing need for improved education on e-professionalism and responsible social media use. These issues sparked

passionate responses during the participant interviews, underscoring the strong opinions held by ATs regarding social media conduct and the motivations of their peers. Notably, these opinions appeared to vary based on age and years of professional experience.

As a relatively new allied health profession, ATs are urged to collaborate closely with their professional bodies, fostering continuous improvement in communication and collaboration. By collectively striving to optimize these essential aspects, ATs can ensure the delivery of the highest standard of patient care. In summary, this study has made significant contributions to the understanding of ATs' motivations for utilizing closed Facebook groups as CoPs. It has shed light on the profound impact of these online communities on knowledge sharing and collaboration, while also emphasizing the imperative of safeguarding patient privacy. The study's findings underscore the importance of addressing generational differences in social media behaviors and enhancing education on e-professionalism within the AT community. By embracing a spirit of collaboration and working alongside professional organizations, ATs can leverage the power of communication and collaboration to continuously elevate patient care standards in their rapidly evolving field.

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APPENDIX A –PRE-SCREENING QUESTIONNAIRE

The prescreening questionnaire will be digitally completed via Google Forms, an online survey instrument. The following images show the screening process.

Allison Strickland | Athletic Trainer Study Prescreening Questionnaire

Allison Strickland is a doctoral candidate at Liberty University and is conducting a study on how athletic trainers use social media and participate in closed Facebook Groups for athletic trainers.

Qualifying individuals will be asked to participate in an individual, virtual, recorded interview. This interview is for research and educational purposes. The interview may take up to but no more than 1 hour. You may qualify if you answer "Yes" to questions #3, #4, and #5. If you answer "No" to any of the questions, you will be disqualified from participation.

If you meet all of the prescreening requirements, you may be contacted to schedule an interview. Please contact Allison Strickland at amstrickland4@liberty.edu with any questions. Thank you for your time.

** Indicates required question*

1. Full Name *

2. Email Address *

3. Are you at least 18 years of age? *

Mark only one oval.

Yes

No

4. Have you been a certified athletic trainer who has been certified by the Board of Certification for Athletic Trainers in the U.S. and have been practicing for at least 12 months? *

Mark only one oval.

Yes

No

5. Are you a member of at least one closed (private) Facebook Group that is specifically for athletic trainers? *

Mark only one oval.

Yes

No

Skip to section 2 (Thank you!)

Thank you!

If you meet all the pre-screening requirements, you may be contacted to schedule an interview. Please contact Allison Strickland at amstrickland4@liberty.edu with any questions. Thank you for your time.

APPENDIX B – CONSENT FORM

Title of the Project: IMPACT OF CLOSED FACEBOOK GROUP PARTICIPATION ON ATHLETIC TRAINERS

Principal Investigator: Allison Strickland, MEd, LAT, ATC, Doctoral Candidate, School of Communication, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be an athletic trainer who has been certified by the Board of Certification for Athletic Trainers in the U.S., have practiced for at least 12 months, and be a member of a Facebook Group specifically for athletic trainers. Taking part in this research project is voluntary.

Please take time to read this entire form and ask questions before deciding whether to take part in this research.

What is the study about and why is it being done?

The purpose of the study is to determine the motivations of athletic trainers using Facebook Groups to professionally collaborate with other athletic trainers.

What will happen if you take part in this study?

If you agree to be in this study, I will ask you to do the following:

1. Participate in a virtual audio and video-recorded interview that will take no more than 1 hour.

How could you or others benefit from this study?

Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include an increased understanding of how athletic trainers use social media to communicate and collaborate professionally. This knowledge will then benefit the athletic training profession and how they view and operate on social media in the future.

What risks might you experience from being in this study?

The expected risks from participating in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

How will personal information be protected?

The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records.

- Participant responses will be kept confidential by replacing names with pseudonyms.
- Interviews will be conducted in a location where others will not easily overhear the conversation.

- Data collected from you may be used in future research studies and/or shared with other researchers. If data collected from you is reused or shared, any information that could identify you, if applicable, will be removed beforehand.
- Data will be stored on a password-locked computer. After three years, all electronic records will be deleted.
- Recordings will be stored on a password-locked computer. The researcher and her doctoral committee will have access to these recordings. After three years, all recordings will be deleted.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting that relationship.

What should you do if you decide to withdraw from the study?

If you choose to withdraw from the study, please contact the researcher at the email address or phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Whom do you contact if you have questions or concerns about the study?

The researcher conducting this study is Allison Strickland. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at [REDACTED]

██████████ You may also contact the researcher's faculty sponsor, Dr. Shannon Leinen, at ██████████.

Whom do you contact if you have questions about your rights as a research participant?

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the IRB. Our physical address is Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA, 24515; our phone number is 434-592-5530, and our email address is irb@liberty.edu.

Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.

Your Consent

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record and video-record me as part of my participation in this study.

Printed Subject Name

Signature & Date

APPENDIX C – SURVEY GUIDE**Section 1 – Demographics:**

1. Age & Gender:
2. Employment status, setting, & job title:
3. Years certified as an athletic trainer:

Section 2 – Social Media Audit:

1. Which social media platforms do you regularly use?
2. How many closed Facebook Groups for athletic trainers are you currently a member of?
3. How often do you participate in the closed Facebook Group(s) for athletic trainers?

Section 3 – Athletic Training Communities of Practice

R.Q. 1. Are Facebook groups for athletic trainers meeting the criteria of a community of practice?

1. From your perspective, what is the main purpose of closed Facebook Groups for athletic trainers?
2. What did you hope to achieve by joining the closed Facebook Group for athletic trainers?
3. In your opinion, what are the most important outcomes that have resulted from your participation in closed Facebook Groups for athletic trainers?

Section 4 – Participant Uses & Gratifications of Social Media Questions:

R.Q. 2. How do athletic trainers communicate motivations for using Facebook Groups as a community of practice?

1. What motivates you to engage with closed Facebook groups for athletic trainers?
2. When you participate in the group, how do you participate?
3. What do you notice most about how other athletic trainers participate within the group?

Section 5 – Understanding of Patient-Protected Information Disclosure on Social Media

RQ3: How do athletic trainers perceive privacy concern issues when participating in Facebook

Groups for athletic trainers?

1. Can you share your experience with continuing education or training on HIPAA and FERPA on social media?
2. What are your experiences with patient information being shared in closed Facebook Groups for athletic trainers?
3. What would you do if you had a concern about another athletic trainer incorrectly disclosing confidential patient information on social media?

