

THE IMPACT OF STUDENT-TEACHER INTERACTIONS ON ACADEMIC
ACHIEVEMENT: A PHENOMENOLOGICAL STUDY EXAMINING THE PERCEPTIONS
OF FIRST-YEAR UNIVERSITY STUDENT-ATHLETES WITH ONLINE EDUCATION

by

Shinelle Wallace

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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Abstract

The purpose of this transcendental phenomenological study was to describe the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. At this stage in the research, quality of student-faculty interaction in online education is defined as online interaction between teachers and students that leads to better self-directedness, motivation, engagement, student satisfaction, and academic achievement. The theory guiding this study was self-determination theory as it helps to identify and understand the student-athlete's inherent drive towards action and doing tasks towards growth and proficiency in online education. The central question leading this research study asked, "What are student-athletes' lived experiences of faculty interactions and academic engagement when learning in an online environment?" The participants selected for this study are male and female, aged 18 to 22, first-year student-athletes enrolled in one or more online courses attending a NCAA Division I University in the state of Missouri. Data was collected and triangulated through surveys, individual interviews, and journal prompts. All collected data was analyzed using the transcendental framework. To present the essence of the phenomenon, data analysis followed Moustakas' (1994) transcendental methods of epoché, phenomenological reduction, and horizontalization of textural and structural descriptions. The study produced three themes and eight sub-themes. The themes were course dynamic, student-instructor involvement, and quality of student-instructor interactions. This study found that quality student-faculty relationships impacted their perceptions of self-directedness, motivation, engagement, student satisfaction, and academic achievement.

Keywords: academic achievement, division I student-athletes, engagement, first-year student-athletes, interaction, online learning, self-determination theory, student-athletes

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Dedication

First, this dissertation is dedicated to God, the source of all good things.

I would also like to dedicate this dissertation to my husband, Craig, a super captain who continued to help me navigate through rough waters. During my pursuit of a Doctorate in Education, he has been a constant source of support and encouragement.

It is my immense gratitude to my parents, Orris and Wilma, educators who have loved me unconditionally and instilled discipline in me from an early age. As a result of their parenting, guidance, and tutelage, I worked hard to achieve the things I love.

A special thank you to my sister Shara, an Olympian, who taught me how to dream big, follow my dreams, and appreciate obstacles during the race. She taught me that those hurdles will help shape my experiences and make me a stronger person.

Jay, my mentor, who was always a believer in my ability to earn a doctorate.

Thanks to the rest of my family and friends for supporting me through this goal of achieving a Doctorate in Education. I feel grateful to have you in my life.

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List of Abbreviations

Self-Determination Theory (SDT)

National Collegiate Athletic Association (NCAA)

CHAPTER ONE: INTRODUCTION

Overview

Online education continues to gain popularity. Over 60% of academic leaders deem online programs (distance learning) essential to their institution's short- and long-term strategy; they do not see any decrease in the demand for online learning in the future (Haywood & Murty, 2018). However, given limited research examining student-athletes perceived difficulties or experiences in online courses, there are no statistics regarding the incline or decline of online enrollment for student-athletes (Coffey & Davis, 2019). Therefore, this research surrounding the perspectives and outcomes of online learning may provide valuable information to instructors, students, student-athletes, coaches, and especially those faculty developing, delivering, and maintaining online academic programs. Online learning offers student-athletes who compete in collegiate sports a flexible learning environment that allows them to balance their athletics and academics (English et al., 2022). Chapter one includes an introduction to information affecting the academic achievement of first-year student-athletes attending a Division I university enrolled in one or more online courses. Also, the problem and purpose statements were presented, and the significance of the study is introduced. Additional subsections discuss background information, which was organized according to historical, social, and theoretical contexts. Next, I discussed motivation and philosophical assumptions. Last, the research questions, term definitions, and chapter summary were cited.

Background

With the rapid technological advances, many colleges and universities have moved from the conventional brick-and-mortar classroom setting to online/distance learning (Fitzpatrick et al., 2020). While the traditional setting was the foundation of tertiary education for centuries, educational institutions have started to deliver class material beyond the physical classroom

using digital mediums to educate students (Dumford & Miller, 2018). This change was developing for some time, building momentum. By 2003, 81% of colleges offered one or more courses, and by 2008, over 25% of higher education students were enrolled in one or more online classes (Perry & Pilati, 2011). Universities promoted the ease of working in the online environment through educational software tools such as Blackboard in 2010 and Canvas in 2013 (Chen et al., 2020; Marachi & Quill, 2020). Thus, the emergence of online courses became a practicable alternative and enhancement to the traditional face-to-face classroom setting.

Then Covid-19 struck and flourished, causing a global pandemic that triggered an explosion in online learning. Educational institutions of all levels suddenly adapted to a unique environment, one where students would not attend traditional in-person classes. The exponential growth of online opportunities accommodated movement restrictions in a society rocked by the spread of Covid-19. Universities had no choice but to initiate online learning platforms for all students. This change has spawned an accelerated movement to distance learning for students who choose to continue learning online after the pandemic restrictions have been lifted. Universities are now evaluating the best learning delivery approaches and the best use of resources in the new realm of hybrid courses and online-only courses.

Consequently, in the United States, higher education faces new challenges in maintaining quality education while welcoming increasing numbers of students in online instruction (Marachi, & Quill, 2020; Stone & Springer, 2019). Quality learning includes factors that enhance the educational experience in a classroom, such as, but are not limited to, clear expectations, timely feedback, one-on-one communications, and engagement, all equally important to classroom learning (Stone, 2019; Vlachopoulos & Makri, 2019). Students' academic success will be negatively affected if these essential factors are disregarded when an online course is delivered. For student-athletes, academic stumbles or failure may result in an ineligible athletic

status (Beron & Piquero, 2016; Gayles, 2015; Hall et al., 2017; Higbee & Schultz, 2013).

Historical Context

Online education was established in the late 1900s but evolved throughout the years and was first introduced as distance learning. The conception of distance learning began in the early to the mid-19th century when the United States Postal Service was established (Caruth & Caruth, 2013). In 1873, Ana Eliot Ticknor created America's first official correspondence education program called the Society to Encourage Home Studies to offer learning opportunities facilitated through the mail (Caruth & Caruth, 2013; Miller, 2000). This enhancement now involved course delivery distribution and instruction between students and professors through the postal service (Caruth & Caruth, 2013; Miller 200). As time progressed and technologies advanced, radio and television adapted the changes to meet the needs of various learners in remote locations (Erthal & Harting, 2005). Eventually, distance education became more hi-tech and accessible due to the expansion of web technology. As web and digital technologies advanced, online learning emerged and was adopted by traditional brick-and-mortar educational institutions (Dumford & Miller, 2018).

In the 1980s, CompuServe emerged, producing online content, which the University of Phoenix quickly adopted and leveraged (Aleman & Porter, 2016). In the 1990s, the World Wide Web was introduced and allowed other Universities to deliver online education. The University of Phoenix became one of the first to provide online educational programs (Harting, 2005). Universities and academic institutions worldwide have become more assured in the advancement of technology and tailored curriculum, teaching, and learning to suit online learning (Carlson & Carnevale, 2001; Erthal & Harting, 2005). Today, universities offer online degrees and online classes (Broffman et al., 2022; Lumpkin, 2021). A historical study suggested that universities did not plan adequately for the introduction of online learning to higher education (Anderson &

Garrison, 2003). Among the pedagogical challenges students and teachers encountered were the difficulty of adapting to online learning environments, and the lack of technical assistance they may have received from institutions to enable them to meet their objectives (Kee et al., 2012).

As online learning continues to expand, students and faculty can interact with each other in real-time (synchronous learning), as well as at various times and places in elapsed time (asynchronous learning) (Lumpkin, 2021). Today's fully online programs use asynchronous learning because it provides maximum flexibility for students and faculty (Broffman et al., 2022). As a result, online courses transformed into a popular tool that allowed universities to increase enrollment by offering flexibility to students with demanding schedules (Ortagus, 2018). According to Ortagus (2018), the percentage of students enrolled in one or more online classes has increased from 5.9% in 2000 to 32.1% in 2012. According to the National Center for Education Statistics (NCES), in 2020, students enrolled in online courses increased to 72.8%. Online education continues to gain popularity, and researchers do not foresee a decline in enrollments soon. According to Haywood and Murty, 2018, 65.5% of academic leaders consider online programs essential to their institution's online strategy. Unfortunately, there are no statistics that isolate the growth of student-athletes in online courses (Coffey & Davis, 2019); research is limited or non-existent.

The recent surge in popularity of online learning has changed the dynamic of traditional models in higher education. The change has forced educators and students to adapt quickly to a new learning culture. In addition, to this date, these changes present a challenge to those teachers who entered the profession at a time when technological expertise was not required (Gairín & Mercader, 2020; Kee et al., 2012). As the increase in migration continues, the needs and expectations of online learning styles should be investigated and developed to improve the quality of engagement and meaningful interaction with professors.

Online education provides a host of benefits for student-athletes. The most valued being those of convenience and flexibility for those who have obligations that limit their attendance in face-to-face classes (McNiff & Aicher, 2017). Hence, online learning is desirable for advisors who enroll student-athletes. Class attendance often conflicts with travel for away games, media appearances, and medical treatments, all required for student-athletes to retain their scholarships (Hyatt & Kavazis, 2019). The diverse needs of student-athletes have forced academic advisors and administrators to register students for courses that use the online learning format.

Social Context

Online learning began as a resource that provided flexibility and convenience for a minority of students, often older and nontraditional students (Kentnor, 2015). In addition, it attracted learners who could not attend university in a traditional setting because of social, medical, financial, or geographical reasons (Palvia et al., 2018). Now, however, all populations of students can be served by distance learning, especially student-athletes. This research is intended to identify the factors and dynamics that affect or hinder effective student-faculty interaction, academic success, active learning, collaborative learning, and positive educational experiences. The results from the study are intended to improve course delivery and design to enhance the level of engagement between students and instructors in online education.

Senior academic leaders – vice presidents of academic affairs, provosts, academic deans, and department chairs will also benefit from understanding the student perspectives on the quality and effectiveness of online educational programs. The information will improve continuously and ensure that courses and programs remain sustainable. As universities, student-athletes, faculty, and other stakeholders continue to adapt to online learning, administrators will need to observe its progression and ensure its effectiveness moving forward.

Theoretical Context

The experiences and academic expectations facing intercollegiate student-athletes are concrete and unique (Hyatt & Kavazis, 2019). However, little research has been made available examining the perceived difficulties that student-athletes experience in online learning and whether they are receiving the support and engagement to succeed in online education (Coffey & Davis, 2019). Also, fewer studies have sought to identify specific actions and practices that support student-athlete-faculty engagement in online learning environments (Coffey & Davis, 2019). Garratt-Reed (2016) argues that many of the studies surrounding the academic outcomes of online students are compromised by methodological flaws. The deficiencies include tiny sample sizes, failure to account for selection bias, and a lack of generalizability (Ortagus, 2018). Among the research examined, few researchers have examined the quality of online education from the student-athlete's perspective (O'Neil et al., 2021). Nonetheless, the social constructivist framework and self-determination theories were common theories discussed in the literature regarding online learning (Luo et al., 2021). The social constructivism framework/worldview was used to examine student-athletes' perceptions of collaborative learning and how cognitive functions derive from social interactions (Bozkurt, 2017).

Researchers have identified that sports participation and student-athlete educational experiences may be affected by this growth in e-learning. Additionally, changes in the educational landscape create new challenges and opportunities for those supporting student-athlete's education. Higher education leaders are challenged to prepare their institutions to meet the connectivity needs of prospective students. Moreover, they must provide higher-quality learning experiences and outcomes to meet growing expectations (Rasi & Vuojärvi, 2018). Hence, some researchers have used the self-determination theory (SDT) to examine the contextual factors influencing teachers' motivation and study student-athlete persistence and dropout (McNiff & Aicher, 2017). Concurrently, researchers are exploring how teachers'

motivation affects and limits how they interact with their students (Claver et al., 2020; Luo et al., 2021). Furthermore, the theory has been widely used in assessing motivational outcomes in educational and work contexts.

The theoretical foundation of this current study is the self-determination theory, which is a theory grounded in motivation and has often been applied to sports and education domains (Orazbayeva et al., 2020; Orazbayeva et al., 2021; Robinson et al., 2017; Yu & Levesque-Bristol, 2020). The basic tenants of this theory are found in three key psychological needs; autonomy, competence, and relatedness. These three components are factors of motivation. Through human motivation, people can become self-determined when their needs for competence, relatedness, and autonomy are addressed (Deci & Ryan, 1985; Deci & Ryan, 2017).

Problem Statement

The problem is that student-athletes may not receive the faculty support and engagement they need to succeed in online learning (McNiff & Aicher, 2017). The current study focused on first-year student-athletes because the research surrounding online learning and student-athletes is new and scarce (Cleofas, 2020; Coffey & Davis, 2019; Condello et al., 2019). Little research has been published examining the perceived experiences or challenges of student-athletes in online courses and the efficacy of the institutional support programs designed to assist them (Coffey & Davis, 2019). Also, there is limited and fragmented information regarding the dual career of student-athletes, which minimizes understanding of the development and success of student-athletes (Condello et al., 2019). The study focused on first-year students. I examined their online experiences at the beginning of their collegiate experience expecting to identify problems that can be mitigated or improved as they continue their transition to a full-time student-athlete with its attendant responsibilities.

As online courses expand, educational methodology capitalize on different techniques (audio-visual resources, real-time dynamics) like traditional classroom courses. They require a distinctive skill set and level of discipline for effective delivery. In the current research, some scholars noted that the educational outcomes for student-athletes enrolled in online classes may vary according to depth of engagement provided by instructors, student-faculty interactions, collaborative learning, technological expertise, enriching educational experiences, the class type and, level of academic challenge (Alamri et al., 2020; Kim & Lundberg, 2016; Weldon et al., 2021). The academic and athletic expectations facing intercollegiate student-athletes are concrete and unique. Studies indicated that participation in one or more intercollegiate sports was significantly associated with academic achievement and discipline (Cleofas, 2020; Dyer et al., 2017; Muñoz-Bullón et al., 2017; Pellegrini & Hesla, 2018). Other researchers argued that the interactions between students and faculty positively affect academic achievement among college students. A major challenge for student-athletes involves creating a consistent level of interaction that fosters genuine learning and growth (Beckowski & Gebauer, 2018; Hamlin et al., 2017; McNiff & Aicher, 2017). Unsurprisingly, some student-athletes benefit from online learning while others struggle (Kreb, 2009; Levy & Nichols, 2009; McNiff & Aicher, 2017).

Purpose Statement

The purpose of this transcendental phenomenological study was to describe the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. At this stage in the research, the quality of student-faculty interaction in online education was defined as online interaction between teachers and students that leads to better self-directedness, motivation, engagement, student satisfaction, and academic achievement. The theory of self-determination guided this study and assisted in connecting learning environments, engagement, and positive social

interactions with faculty to the knowledge construction of the student-athletes (Deci & Ryan, 1985; Deci & Ryan, 2017).

Significance of the Study

Practical Perspective

The study was critical because it may help identify specific engagement constructs, activities, and practices that support student engagement in online learning environments—full-time student-athletes dealing with dual responsibilities (athletic and academic). The problem is that student-athletes may not receive the faculty support and engagement they need to succeed in online learning (McNiff & Aicher, 2017). The knowledge generated from this study can be significant to student-athletes, online instructors, athletic coaches, and athletic advisors. The findings of this research could help online faculty understand the unique needs of student-athletes and give a voice to the benefits and barriers that these athletes may encounter in their academic endeavors. Online faculty, coaches, and advisors could also better understand the reported challenges that student athletes may face when juggling competitions, practices, and the numerous hours necessary to maintain scholarships. Student-athletes understand that they have the same academic expectations as their non-athlete classmates. However, they are driven by the extra demands of partaking in intercollegiate athletics (Hyatt & Kavazis, 2019). These additional demands may create significant challenges for students, especially first-year student-athletes (Hyatt & Kavazis, 2019). Therefore, the instructors need to perceive the benefits of providing support and engagement and see how that positively affects the student-athletes academic performances, improves engagement, and maintains athletic eligibility.

Empirical Perspective

Empirically, fewer studies have sought to investigate student-athlete-faculty engagement in online learning environments (McNiff & Aicher, 2017). While the research surrounding

student-athletes is limited, there is research that investigates faculty perspectives (O'Neil et al., 2021). Accordingly, this research did not wish to primarily understand the faculty's perspective but to focus more on the students' perspective.

The participants included first-year student-athletes enrolled in online courses and were educated by higher education professionals. Therefore, the current study examined the students' perceptions in a higher education setting and how university faculty could become more supportive and engage with their students. Also, the study identified methods that could help instructors provide support that positively affects student-athletes' academic performances and maintains athletic eligibility. Especially, since online courses have become a popular tool for colleges and universities to boost enrollment by offering flexibility to student-athletes with busy schedules (Guzzardo et al., 2021).

Theoretical Perspective

I used a social constructivist worldview since all knowledge is derived from their human experiences (Creswell, 2018). This worldview approach allowed me to collaborate with student-athletes as I tried to understand the complexities and dynamics of effective engagement in online learning. Additionally, Vygotsky's (1978) idea of social constructivism and how it described knowledge development when people interact in their culture and society intrigued me.

Social constructivism is strongly associated with cognitive constructivism and societal and peer influence (Vygotsky, 1978). One's level of development is the level at which learning occurs. Knowledge evolves through social discussion and evaluation of another individual's understanding. After following the approach of a transcendental phenomenological study, I obtained the perceptions of student-athletes' lived experiences. I facilitated semi-structured interviews and utilized a constructivist worldview approach with student-athletes to learn personal accounts of their experiences to create rich descriptions of their lives (Creswell, 2018;

Moustakas, 1994). My role was strictly to observe and describe the phenomena (Creswell, 2018; Moustakas, 1994). The study was grounded in self-determination theory and confirmed the theory in the lives of the student-athletes and faculty by studying online learning environments and engagement. One factor of self-determination theory examines positive social interaction to facilitate students' knowledge construction (Orazbayeva et al., 2020; Orazbayeva et al., 2021; Robinson et al., 2017; Yu & Levesque-Bristol, 2020). The current study corroborated with the self-determination theory as the researcher investigate student-teacher interactions in online learning to understand the student-athletes' inherent drive to engage in their learning to increase academic growth.

Research Questions

In this study, I examined the perspectives of first-year student-athletes enrolled in one or more online courses attending Division I universities in Missouri. This transcendental phenomenological study consisted of one central research question and three research sub-questions. The research questions were intended to describe the student-athletes shared experiences related to factors that affected academic achievement as I examined the quality of student-faculty interaction in online education.

Central Research Question

What are student-athletes' lived experiences of faculty interactions and academic engagement when learning in an online environment?

Current literature highlights that as technology advances, more opportunities are created for all students to learn (Lumpkin, 2021; Ortagus, 2018). Specifically, these advances in technology also impact student-athletes attending university (English et al., 2022). Research reveals that as teaching and learning progresses outside the traditional classroom, students have either expressed clear satisfaction or dissatisfaction with the dynamics of online learning.

Previous and similar studies have yielded contradictory results. Some researchers observed positive academic outcomes that show students may prefer the online learning, while others reported negative outcomes from student-athletes (McNiff & Aicher, 2017).

Hence, the central research question examined the description of the participants' shared firsthand experiences and their perceptions regarding the quality of learning in the online environment. The sub-questions further addressed the specifics of the participants' social (engagement and interaction), athletic, academic, and individual experiences. Also, the central question provided the student-athlete's individual experiences and depth to the existing literature. The central question helped identify specific engagement constructs, activities, and practices that can improve the quality of online learning environments for student-athletes.

Sub-Question One

How do student-athletes perceive engagement in their online learning courses? Sub-question one elicited feedback from student-athletes regarding personal experiences with engagement in online learning at the post-secondary level. The question captured the participants' perception of engagement in online learning to discern a complete picture of their composite perception (Moustakas, 1994). The development of this question addressed the dynamics of the student-athletes social and academic experiences while enrolled in online learning.

The self-determination theory posits that students' autonomy, competence, and relatedness support are key promoters of students' interest and engagement in learning (Cents-Boonstra, 2021; Jang et al., 2016). For example, Núñez and León (2019) revealed that autonomy, an aspect of self-determination theory, supports motivation and engagement and could improve teaching and learning in education. I used sub-question one to obtain information about the

participants' perspective of engagement in online learning, build on existing research, and apply the self-determination theory to improve the quality of online education.

Sub-Question Two

How do online student-athletes describe their interactions with faculty and the quality of faculty support in their online learning courses?

Literature supports that instructors' role in online learning interactions is one of the most critical aspects of student academic success. However, there are concerns that online learning does not offer the same level of engagement, interaction, and rigor provided by instructors in a traditional face-to-face learning environment (Dumford & Miller, 2018; Georgiou, 2018; Nachmias & Soffer, 2018). According to Szeto and Cheng (2016), teachers in the traditional face-to-face classroom offer more interaction, engagement, direction, and motivation.

Researchers state that instructors can adjust their teaching style or class structure to improve student focus, attendance, success, and retention in face-to-face courses because they are able to identify verbal and non-verbal cues from their students (Quesada-Pallarès et al., 2019).

Sub-question two helped me understand how student-athletes perceive their relationship with faculty and how their perceptions affect learning behaviors. Additionally, it helped participants reflect on their feedback and communication experiences and discuss the phenomena of engagement with their instructors in-depth. This question identified opportunities and areas for improvement for online student-teacher interactions that mirrored traditional face-to-face classroom student-teacher interactions.

The research sub-question also helped me understand how student-athletes perceive their relationship with faculty and how their perceptions affect learning behaviors from the quality of the content. The social constructivist framework, which guided the study, contributed to online learning literature based on the perception that student-teacher interactions and

relationships lead to better learning experiences in the online learning environment, focused on collaborative learning and social interactions (Bozkurt, 2017; Vygotsky, 1978).

Interactive communication technologies (Teams, Skype, Zoom) play a role in increasing student-instructor relationships in online learning and collaborative experiences. Research shows that effective interactive technologies can create or enhance instructor presence, which is identified as a powerful approach to improving student outcomes in online learning (Ouyang et al., 2020; Park et al., 2020). Student-teacher presence, interactions, and relationships strengthen student engagement and satisfaction in online classes and positively impact academic outcomes (Higbee and Schultz, 2013). According to Higbee and Schultz (2013), as students build relationships and interact with their instructors, they acquire knowledge and competence from the interaction.

Sub-Question Three

What factors do student-athletes perceive as contributing to overall quality of online education?

Sub-question three represented the student-athletes perception of the factors contributing to the students' overall quality of online education and how this quality affects academic achievement. A significant challenge for student-athletes involves creating a consistent level of interaction with instructors that fosters genuine learning and growth (Beckowski & Gebauer, 2018; Hamlin et al., 2017). The answers garnered from this question described the events that shape the participant's feelings and attitude about the overall quality of online learning (student-faculty relationships, engagement, interaction, academic success, challenges of online learning, collaborative learning, positive/negative educational experiences). These expository questions were imperative because, contingent on the student-athletes experience, positive or negative, they may determine their attitude toward how they perceive online learning.

Definitions

The definition section below includes key terms related to the phenomenon of interest used throughout this study.

1. *Engagement* – Engagement is a level of enthusiasm and commitment one displays. Engagement can be compressed into three main categories: behavioral, emotional, and cognitive. Behavioral engagement involves following the rules and completing the task; emotional engagement encompasses interests, values, and emotions; cognitive engagement incorporates motivation and exertion of effort (Fredericks et al., 2004).
2. *Motivation* - Motivation is based on an individual seeking fulfillment and change through personal growth (Maslow, 1943).
3. *Online learning* - Online learning is a delivery of education/teaching that occurs via Internet technology. Students and instructors connect through telecommunication systems including, but not limited to, web-based learning, computer-based learning, virtual classrooms, and digital collaboration (Panigrahi et al., 2018).
4. *Phenomenology* - Phenomenology is a qualitative research approach that involves understanding the universal experiences through interviews with participants. Researchers attempt to gain insight into universal feelings or experiences by defining the phenomena and identifying commonalities with the phenomenal boundaries (Creswell, 2013).
5. *Qualitative Research* - Qualitative research involves gathering and analyzing non-numerical data to understand concepts, perceptions, and experiences (Creswell, 2013).
6. *Self-determination theory* - The self-determination theory is a psychological theory about motivation (Deci & Ryan, 1985).

7. *Division I Student-athlete* - Division I student-athletes consist of highly ranked men's and women's intercollegiate athletes and teams who attend the largest schools with large budgets to support their athletic programs (NCAA, 2018).
8. *Social Constructivism* - Social Constructivism evolves through social discussion and emphasizes that people construct meanings through life experiences and interactions they have with others in their social environment (Bozkurt, 2017; Vygotsky, 1978).
9. *Transcendental Phenomenology* - Transcendental phenomenology is a scientific study that obtains the perceptions of participants' lived experiences (Moustakas, 1994).
10. *National Collegiate Athletic Association (NCAA)* – An organization in the United States that governs and mandates intercollegiate athletics. The NCAA operates as a general legislative and administrative authority for men's and women's intercollegiate athletics for four-year institutions of higher learning (NCAA, 2018).

Summary

As higher educational institutions continue online learning, a large segment of the population will benefit and have the convenience of learning without stepping into a traditional face-to-face classroom (Sansom et al., 2020). As demand grows, higher educational institutions are continuously looking for ways to engage students, improve the quality of online learning and student-faculty interactions, and increase students learning potential (Coffey & Davis, 2019). Unfortunately, limited research has been presented investigative the perceived difficulties of NCAA Division I student-athletes in online learning and the effectiveness of the institutional supports intended to help them understand the development and success of student-athletes (Condello et al., 2019). Therefore, the purpose of this transcendental phenomenological study was to describe the impact of student-faculty interaction and its perceived effects on academic

achievement in online education for student-athletes attending a Division I university in Missouri.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter provides an overview of the theoretical framework and a systematic review of literature on the lived experiences of Division I student-athletes with online learning and student-faculty interactions. The general problem the current study addresses is whether Division I student-athletes were receiving the faculty support and engagement necessary to succeed in online learning. The first section presents a discussion of Deci and Ryan's (1985) Self-determination theory, the theory's relevant to online learning, followed by a synthesis of recent literature regarding online learning, first-year student-athletes' perceptions of online learning, and the experiences of student-faculty interactions. Next, the literature surrounding barriers faced in online learning and factors that lead to online success is addressed. Also, there is a focus on the literature surrounding perspectives on challenges and barriers faced in online learning and factors that led to enhanced online learning experiences that play a role in academic success. Finally, this chapter concluded with a gap in the literature which presented a need for the current study and closed with a summary.

Theoretical Framework

The self-determination theory was used throughout literature to discuss learning environments, engagement, and research that examines positive social interaction to facilitate students' knowledge construction (Orazbayeva et al., 2020; Yu & Levesque-Bristol, 2020; Robinson et al., 2017). Self-determination theory was constructed by Edward Deci and co-founder Richard Ryan in 1985. The theorists are well-known American professors in the Department of Social Sciences in Psychology (University of Connecticut 1971-1976, Carnegie Mellon University 1967-1970, and University of Rochester 1977-1981) and are known in psychology for their contributions to intrinsic and extrinsic motivational theories. Therefore, the

self-determination theory was essential to the study. The theory helped to identify and understand the student-athletes inherent drive towards engagement and completing academic tasks that ensure growth and mastery (Keshtidar & Behzadnia, 2017).

Self Determination Theory

The self-determination theory is a psychological theory about motivation (Deci & Ryan, 1985; Deci & Ryan, 2017). It proposes that individuals can become self-determined when their needs for controlled motivation or autonomy are fulfilled (Keshtidar & Behzadnia, 2017).

Through human motivation, people can become self-determined when their needs for competence, relatedness, and autonomy are addressed (Deci & Ryan, 1985; Deci & Ryan, 2017). The theory focuses on intrinsic/internal, extrinsic/external motivation, and amotivation. Intrinsic motivation arises from one's drive for fulfillment and growth; extrinsic motivation arises from one's desire for external rewards (Deci & Ryan, 1985; Deci & Ryan, 2017). However, amotivation is the state where an individual finds little value in the task and therefore chooses to act without purpose or direction (Ryan and Deci, 2000).

The theory suggests three common psychological needs: autonomy (support), relatedness (involvement), and competence (structure) (Jeno et al., 2018). Autonomy refers to a feeling or acting in a way that reflects a sense of self (Deci & Ryan, 2000). Deci and Ryan (1985) emphasize a person's need to feel a sense of control over their behaviors and goals by prompting change—a component of self-determination. The second need is the perception of relatedness, which refers to feeling accepted, feeling a sense of belongingness, and feeling socially supported, respected, and included (Deci & Ryan, 2000). Last, competence refers to the need to gain mastery of assignments and acquire different proficiencies. Once individuals recognize the skills required for success, they are more likely to take action to achieve their goals (Deci & Ryan, 1985).

Research has shown that the self-determination theory has significantly affected student learning in education and has positively influenced the learning process, especially in higher education (Cheng et al., 2020). For example, the theory has steered the development of intervention programs intended to bolster autonomous academic motivation to improve students' determination and academic outcomes (Nonaillada, 2019). According to higher education research, a student's behavioral and academic achievement are contingent on the quality of teaching, course designs, student-faculty interaction and engagement, and resources (Chiu, 2021; Kim & Lundberg, 2016). Recent research has used self-determination theory to understand the psychological factors that influence students' academic outcomes in higher education.

Scholars believe that the application of the theory in higher education helps educators and researchers learn to cultivate academic motivation, interest, and drive for persistent learning in students (Cheng et al., 2020). Self-determination theory integrates social environmental factors and individual psychological variables that influence individuals' learning, involvement, and well-being (Alamri, 2020; Guay, 2021). The self-determination theory emphasizes that individuals require an environment that will support them for individuals to thrive. Hence, the self-determination theory guided education, sports, health, and medical field empirical studies and academic contributions (Alamri, 2020; Cheng et al., 2020; Chiu, 2021; Guay, 2021; Nonaillada, 2019).

When considering the perceptions of first-year student-athletes' online experiences, the self-determination theory helps to examine whether sustained participation and engagement are influenced by the fulfillment of these three basic psychological needs of autonomy (support), competence (structure), and relatedness (involvement). The theory also provides a framework for understanding the complexity of student-athletes perceptions that lead to motivation, their individual needs in online learning, and the diverse challenges of today's education (Deci &

Ryan, 1985; Maulana et al., 2016). Motivation is the construct that appears throughout the theory. Motivation energizes one to engage in an intriguing or relevant activity (Calvo et al., 2010; Ulstad et al., 2019). Generally, student-athletes have higher external reward motivation because they are driven to succeed by factors such as prizes, status, money, and fame.

Conversely, lower intrinsic motivation comes from performance pressures, unengaging student-faculty relationships, and stalled career aspirations, all leading to frustration and burnout that can cause academic failure (Moller & Sheldon, 2020).

According to the self-determination theory, the interaction between individuals (student-athletes and instructors) and their social contexts describes how their development will progress (Guay, 2021). Autonomy reaffirms the idea that learning empowers both students and teachers, with responsibility not solely on the instructor (Maulana, 2016; Sheehan et al., 2018). Based on the self-determination theory, student-athletes have three essential needs: to be satisfied socially, to be successful to have academic success, and to be successful as an athlete. The first need is to feel autonomous in completing school assignments. The concept of autonomy means that an instructor considers the student-athlete's perspective, considers feelings, and provides opportunities for choice while limiting stressors or demands (Keshtidar & Behzadnia, 2017). Autonomy provided by teachers encourages choice, independence, problem-solving, independent decision-making, and participation (Maulana, 2016; Sheehan et al., 2018). Research conducted by Chen et al., (2020) revealed that students with high motivation and high autonomy displayed greater learning achievement than those with low motivation and low autonomy with learning motivation. The research shows how motivation corresponds with the students' academic identity while maintaining learning interests and promoting critical thinking (Afshar et al., 2014; Chen et al., 2020; Haslerig, 2018; Okada, 2021).

The second need is the need to perceive relatedness. Perceived relatedness in the classroom for a first-year student-athlete significantly affects their institutional persistence, academic achievements, and motivation (Sheehan et al., 2018). A student-athlete's relatedness is supported when an educator shows interest and engagement (Orazbayeva et al., 2021). Also, relatedness involves the instructor developing an understanding of the student's social or cultural position (i.e., their athletic endeavors and the pressures that student-athletes have balancing dual roles) (Orazbayeva et al., 2021). For example, researchers Rettig and Hu (2016) observed that a student-athlete's low grades reflected the commitment of considerable time invested in sport-related activities, consistent pressure from coaches, scrutiny of any missteps on or off the field, and the influence of media.

A student needs to have a feeling of acceptance to fulfill relatedness needs, which goes beyond an instructor's caring (Butz & Stupnisky, 2017; Marshik et al., 2017). Relatedness exemplifies going beyond the normal faculty behavior and relationship with students; it focuses on relationships that improve mutual understanding and the student-athlete's academic and social integration (Marshik et al., 2017; Sheehan et al., 2018). The identified practices can be adopted and encouraged in online environments to help ensure that online students are socially and academically engaged in their online courses. According to Orazbayeva et al. (2021), relatedness is explained as a positive connection and commitment where students feel optimistic about academics. Research findings suggest that one's attitude is linked to relatedness through the feeling of connectedness (Hilts et al., 2018). Another scholar found that the participants reported their ability to connect and contribute was conducive to the satisfaction of their need for relatedness; relationships formed were believed to be developed and enhanced through contributions (Caleon & Wui, 2018).

A third fundamental need is the need to feel competent. Competence is regarded as essential to expressing motivation in sports and academic settings (Keshtidar & Behzadnia, 2017). According to Van Yperen et al. (2021), competence inspires confidence in student-athletes, which energizes motivation and a healthy feedback loop. In achievement domains such as school and sport, effort and ability are the predominant perceived causes of success and failure (p. 441).

The self-determination theory was used to examine the student-athletes' perceptions in their social contexts in online learning and then how the quality of online instruction affected their academic achievement. Specifically, examined the student-athlete's level of intellectual challenge, active or collaborative learning, student-faculty interaction, educational experiences, and student-teacher engagement in online education by applying the three basic psychological needs; autonomy, relatedness, and competence (Chiu, 2021). The basic needs helped me examine the motivational determinants of student-athletes' perceived efforts within their academic domains; competence in classes, perceived autonomy with assignments, relatedness to content, intrinsic educational interest, and perceived academic value (Chen et al., 2020). Learning motivation is a key predictor of learning efficacy and increased learning outcomes (Hamm et al., 2017). Therefore, the research explored the psychological traits of learning motivations of first-year students-athletes. These aspects affect the online learning experience and include an evaluation of the relationship between the quality of online learning and learning outcomes from a perspective of SDT (Chen et al., 2020; Guay, 2021). This study will hopefully contribute to existing literature that deals with student-instructor interaction at all levels (first-year, sophomore, junior, and senior) of student-athletes enrolled in online courses.

Related Literature

As the number of student-athletes enrolled in online courses increases, concerns continue to rise about the quality of these courses and student-faculty relationships (Gómez-Rey et al., 2016; Orme, 2021). There is limited and fragmented information regarding the dual responsibilities of student-athletes, which minimizes understanding the development and success of student-athletes (Condello et al., 2019). The self-determination theory is explored by looking at literature related to students' perspectives of online learning. The group applicable to this study is Division I first-year university students who compete in a collegiate sport. The literature sought to understand how student-athletes perceived their relationship with faculty and how their perceptions affected learning behaviors regarding the quality of the content, intrinsic and extrinsic motivation, and perceived satisfaction. Throughout the related literature, topics discussed included first-year university student-athletes, first-year student-athletes experiences, and adversity, online learning in the United States, online learning and self-determination theory, student-athletes perception of online learning, student-athletes' perception of student-faculty interactions, intercollegiate athletics, and academics, and closing the gap.

National Collegiate Athletic Association (NCAA) Division I Student-Athlete

The National Collegiate Athletic Association (NCAA) (2021) was established in 1973 “to create a fair playing field for teams from similar schools and provide college athletes more opportunities to participate in national championships” (p.2). The NCAA is a member-led organization comprised of appointed members devoted to facilitating quality events for student-athletes, coaches, fans, broadcast viewers, and other stakeholders involved (Smith, 2000). Moreover, the NCAA aspires to provide college athletes with opportunities (Eckard, 2020; NCAA, 2021; Swindell et al., 2019). The national organization governs and mandates intercollegiate athletics and operates as a general legislative and administrative authority for

men's and women's intercollegiate athletics for four-year institutions of higher learning (NCAA, 2021).

Nationally, the current three-division structure showcases approximately 90 championships in twenty-four (24) different sports across Divisions I, II, and III (NCAA, 2021). However, it is pertinent to note that this research will focus on Division I student-athletes. The Division I category consists of highly ranked men's and women's intercollegiate athletes and teams who attend the most prominent schools, have larger budgets to support their athletic programs, and offer athletics scholarships (NCAA, 2021). There are about 8,960 student-athlete undergraduate enrollments in sporting disciplines across the fall, winter, and spring seasons (NCAA, 2021). The sporting events include but are not limited to track & field, cross country, soccer, volleyball, basketball, baseball, softball, gymnastics, golf, tennis, wrestling, and swimming (Swindell et al., 2019).

To become a student-athlete, practice, and compete at a Division I institution, certification through the NCAA Eligibility Center must be granted. Another eligibility precursor for the student-athlete is to meet and maintain academic standards for NCAA-approved core courses (English, math, science, five additional core courses), core-course GPA (3.0 minimum), test scores (a minimum SAT combined score in math and critical reading is 980 or ACT sum score of 75), and the student athlete must graduate from high school (NCAA, 2021). According to Hosick and Sproull (2012), the initial eligibility standards help ensure one is prepared to succeed in college. Another scholar argued that the initial eligibility process ensures impartiality and honesty across college sports.

Once the athlete receives certification from the NCAA Eligibility Center and an offer letter from their desired university, they will sign their National Letter of Intent. By signing the

letter of intent, the student-athlete agrees to join a Division I university and prepare for their new journey as a first-year student-athlete.

The First-Year Student-Athlete

A first-year student-athlete's transition from high school to university can be rewarding and overwhelming when they first arrive for the first year (McElveen & Ibele, 2019). Student-athletes sign a letter of intent that requires them to participate in academic activity and complete coursework; failing to comply with Athletic Academic Services policies results in profound consequences (Higbee & Schultz, 2013). They are responsible for maintaining a specific Grade Point Average (GPA) to maintain eligibility while balancing their athletic discipline schedule. (Gayles, 2015; Higbee & Schultz, 2013; Parker et al., 2016).

First-year student-athletes must demonstrate competence and overcome sport-related difficulties that can undermine academic motivation and class attendance: travel, competitions, fatigue, injuries, identity issues, and novel training environments (Insler & Karam, 2019; McElveen & Ibele, 2019). While some student-athletes have a supportive environment, some do not and feel burdened by the pressures of social adjustment, loneliness, and stress (Gayles, 2015). A supportive environment can boost competence. According to Deci and Ryan's (1985) theory of self-determination, competence is an innate psychological need, and feeling effectiveness in one's environment is important for optimal well-being. Research shows that a competence-supportive environment can be formed by creating stimulating and challenging activities, and engagement that suits the level of learning ability and encourages confidence in their capacity to engage (Yurinova et al., 2022).

As the dual name implies, the identity of a first-year student-athlete can be complicated by assumptions and contradictions (Kalman-Lamb et al., 2022). Presuming prestige, for example, is common among student-athletes, especially if they compete at a high level and in a high-

profile sport (Clayton et al., 2015; Steele et al., 2020). Nonetheless, the identity of student-athletes can be riddled with stigma in academic settings. Counter voices insist that educators and faculty assume athletes have limited academic skills, and they believe that first-year student-athletes prioritize sports discipline over scholarly pursuits (Cross & Fouke, 2019).

However, Higbee and Schultz (2013) argue that first-year student-athletes are concerned about performing well academically. Student-athletes develop their academic identities in early university years. They choose a major and decide on a career because most student-athletes believe or know that their future career will not involve sport (Higbee & Schultz, 2013; Steele, 2020). In Yukhymenko-Lescroart's (2021) study, the researcher examined the dualistic model (athletic and academic domains) of student-athletes and self-determination theory to examine the motivational determinants of their perceived efforts. The researcher observed that “their perceived value of classes was predicted by perceived competence and choice of major” (Yukhymenko-Lescroart, 2021, p. 8). The researcher’s findings correlated with prior studies suggesting that “student-athletes enter university with a strong athletic identity that is likely to diminish in favor of academic identity as they become engaged in studies” (Yukhymenko-Lescroart, 2021, p. 8).

First-Year Student-Athlete Experiences and Adversity

Scholars reveal that first-year student-athletes showed positive correlations with satisfaction in their first year at a university (Hamm et al., 2017). The study found that being immersed in a new environment and competing in a collegiate sport are positively rewarding (Hamm et al., 2017; Parker et al., 2016). The experience provides structure, discipline, and motivation for students. Rather than focusing on the pressures associated with the dual responsibilities, students persist in obtaining decent grades, staying eligible, meeting graduation requirements, and earning degrees while excelling in their sport (Parker et al., 2016). Deci and

Ryan's (1985) theory of self-determination recognizes that a student who has adapted in college will likely persist in the effort to succeed as a scholar-athlete.

According to Keshtidar and Behzadnia (2017), some student-athletes are motivated by an autonomous motivation which involves their interpersonal values and commitment, while other student-athletes are motivated by a controlled motivation. In controlled motivations, the individual engages in an activity to avoid punishment, stress, feeling of guilt or self-enhancement (Keshtidar & Behzadnia, 2017). Strowd et al., (2019) argue that rationalization for this discovery is that participation in competitive athletic training and competition results in developing characteristics that are beneficial to the academic setting (Cleofas, 2020; Pellegrini & Hesla, 2018). These qualities may include a strong work ethic, task orientation, self-mastering skills, problem-solving, time management, and performing under pressure (Cross & Fouke, 2019; Keshtidar & Behzadnia, 2017).

The results from different studies revealed both the positive and negative first-year experiences for student-athletics (Gayles & Baker, 2015). Student-athletes, especially first-year student-athletes, experience many challenges to academic performance, adjusting to life away from family, and financial difficulties associated with the burdens of university life (Egan, 2019). Along with personal stressors, collegiate athletes are obligated to spend extensive time participating in activities related to their respective sport, including but not limited to practice, training sessions, team meetings, game preparations, and travel for competitions (Hyatt & Kavazis, 2019). Regardless of their obligations, strict schedules, and stress associated with college life, collegiate athletes must balance being college students and athletes. Also, academic performance becomes stressful for most student-athletes because of their need to be successful in the course while concurrently remaining a top performer in their respective sport (De Brandt et al., 2018).

Time management is one of the most significant stressors/challenges related to academic performance and the ability to engage with faculty (Davis et al., 2019; O'Neil et al., 2021; Pierce et al., 2021). Athletes perceive that their stress level is at its highest during their athletic season combined with the academic year. Students have difficulty balancing their dual lifestyles—handling sports obligations and academic responsibilities and scheduling time outside of class to meet social needs (Hamlin et al., 2019; O'Neil et al., 2021; Roberts et al., 2019). Their energy levels may decrease because of limited unscheduled time, and their sleep may suffer interruptions (Roberts et al., 2019). These factors may significantly affect a student athlete's ability to focus and may render them susceptible to illness or injury (Hamlin et al., 2019; Roberts et al., 2019). Coaches, instructors, and faculty must be aware of accommodating the stressors that affect student-athletes and help athletes find ways to balance athletic and academic demands (Davis et al., 2019). The need of relatedness must be met for healthy performance.

Online Learning in the United States

Online learning is a form of education that occurs via the Internet (Panigrahi et al., 2018). Online learning, derived from distance learning, can also be identified as e-learning, virtual learning, and remote learning among other terms (Panigrahi et al., 2018). Online courses and programs are designed to be delivered asynchronously (they do not take place in real-time and synchronously and are administered through a learning management system) (Lumpkin, 2021). As a result, online courses have become a popular tool for universities to boost enrollment by offering flexibility to students with busy schedules (Dyment et al., 2019; Ortagus, 2018). According to Ortagus (2018), the percentage of students enrolled in at least one online class has increased from 5.9% in 2000 to 32.1% in 2012. According to the National Center for Education Statistics (NCES), in 2020, students enrolled in online courses increased to 72.8%. Online education continues to gain popularity and does not appear to be going away soon. According to

Haywood and Murty (2018), 65.5% of academic leaders consider online programs essential to their institution's online strategy. Unfortunately, there are no statistics that isolate the growth of student-athletes in online courses (Coffey & Davis, 2019); research is limited or non-existent.

The recent surge in popularity of online learning has changed the dynamic of traditional models in higher education. The change has forced educators and students to adapt quickly to a new learning culture. As the increase in migration continues, the needs and expectations of online learning styles should be investigated and developed to improve the quality of engagement and meaningful interaction with professors.

Online Learning and Self-Determination Theory

Scholars maintain that online programs, compared to traditional learning settings, are more accessible to students—especially for those students who work full-time, have family commitments, or have other obligations (Weldon et al., 2021). Students cited flexibility in completing course work at their own pace as the most significant reason for enrolling in the online university (Dyment et al., 2019; Sorensen & Donovan, 2017). Online courses can provide convenience and flexibility for students, as found in previous research (Dyment et al., 2019; Sorensen & Donovan, 2017; Sugden et al., 2021). Alamri et al., (2020) also argues that online learning provides accommodation and accessibility and provides more autonomy over learning by allowing them to work at a viable pace. For first-year students or student-athletes, adapting to online learning may be a challenging adjustment at first. Still, once students acclimate to the model, they may benefit from several advantages. According to research, students benefit from added flexibility and self-paced learning, improved time management, demonstration of self-motivation, improved virtual collaboration, and critical thinking skills (Bradley et al., 2017; Donovan & Sorensen, 2017; Wang et al., 2019; Zhou et al., 2021).

Contrary to Weldon et al., (2021), Stone (2019) mentions that online learning is not tailored to every student. The negative aspects of online learning may be linked to students grappling with financial worries, illness, no secure internet connection, no device, or no private space for learning. Other factors that may affect a student's ability to connect or engage with an online course include the quality of the course, instructor-student interaction and engagement, and the structure of the learning environment (Beckowski & Gebauer, 2018; Stone, 2019).

According to Jacobi (2018), the self-determination theory helps contemporary researchers understand the unique needs of online learners, the learning process (in terms of self-regulated learning), learning outcomes (in terms of perceived learning gains and satisfaction), and the distinct challenges educators' experiences (Song & Kim, 2021). The self-determination theory encompasses three basic psychological needs that affect motivation: autonomy (support), competence (structure), and relatedness (involvement) (Deci & Ryan, 1985, Deci & Ryan, 2000; Deci & 2019). As previously stated, students benefit from added flexibility and self-paced learning. Students do not have the luxury to take time off from work for a full-time online program or course, especially those who often travel for work. Hence, for those students who must organize their complex schedules, online programs allow them to learn flexibility (Donovan & Sorensen, 2017). Rather than rushing from work or their homes to commute to class, students can follow their schedule by accessing an online learning platform at their convenience—at a time that does not coincide with other commitments. That flexibility can afford students to balance work, life, and academic lifestyle in school (Dyment et al., 2019).

Additionally, online learning permits students to revisit and access material as many times or stop reviewing content at any time to organize notes. Students have the option to work through lessons and assignments at their own pace to ensure that they are mastering the material before moving on to the next section. Also, online learning may benefit those students who may

feel uncomfortable or feel like they are interrupting their instructors by asking them to repeat or expand on a specific topic. Again, this added flexibility helps students in online learning move through their course(s) at their pace to achieve academic success.

According to the self-determination theory, autonomy refers to independence, the desire to have control over one's life, and make choices based on personal preferences (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan 2017). In the context of autonomy, online learning provides students with opportunities to have control over their learning experience (Jacobi, 2018; Okada, 2021; Wang et al., 2019). According to Jacobi (2018), creating a sense of autonomy motivates students to make choices that highlight what they value in learning and emphasizes that the learning is relevant to achieving academic success. If students feel a sense of autonomy, they identify and relate with that personal meaning of engaging in the behavior. For example, the student's assignments are appointed due dates. If the student completed their homework at their pace and, before the due date, they would experience identification due to the instrumental value of the coursework being tied to career or educational goals (Jacobi, 2018).

Identification is the act of one internalizing the motives behind actions and associating them with a sense of self. At this point, the student has internalized the value associated with completing homework and engages by choice (Okada, 2021). The individual becomes self-determined and has arrived at integration (Chen & Jang, 2010; Jacobi, 2018). From a social cognitive view, researchers have identified that self-regulated learning strategies were identified in online learning (Bradley et al., 2017; Cho & Shen, 2013; Song & Kim, 2021). Others argue that online learning requires learners to exhibit greater self-regulation, self-motivation, and time dedication than traditional face-to-face classrooms as they improve learning performance (Wang et al., 2019; Zhou et al., 2021). Because online education requires learners to operate independently, it may challenge academically weak students or those who do not attend

university in a traditional setting (Dabbagh et al., 2019). As a result, students struggle in online learning for several reasons. Hence, students may feel isolated and disconnected in online courses due to the absence of in-person interaction with instructors and may find it more challenging to engage and learn.

According to the self-determination theory, relatedness represents the social aspects of the learning experience (i.e., interactions and connections) (Ryan & Deci, 2017). A student's feeling of connection to others is vital for success in an online learning environment. However, the asynchronous delivery may limit relatedness (Broffman et al., 2022; Lumpkin, 2021). Butz and Stupinsky (2017), suggest that relatedness may be limited because the asynchronous delivery model removes the natural student-teacher interactions and limited interaction situations that universities provide.

In an educational setting, relatedness describes the sense of connection between the student and their instructor and involves student-teacher relationships and interactions (Caleon & Wui, 2018). An example of relatedness can be offered to students and instructors through video recordings. Throughout the course, the instructor can record videos for students to hear their voices, see their faces, and feel like someone is guiding them through the course and is actively present virtually (Butz & Stupnisky, 2017). This is especially true in an asynchronous class where there is a lack of real-time interaction with instructors (Broffman et.al., 2022; Lumpkin, 2021). Other ways that relatedness can be displayed in online learning includes instructors interacting in introduction discussion forums, instructors providing quality (in-depth) feedback to assignment and discussions, overall fostering an inclusive learning environment, creating an environment where activities and interactions allow sharing and collaboration of knowledge and experience (Butz & Stupnisky, 2017; Zhou et al., 2021).

There is limited and inconsistent research surrounding how relatedness affects the quality

of online learning in higher education (unique needs of online learners, self-regulated learning, and learning outcomes) and student-faculty interactions (Besser et al., 2022). Of the few studies that were identified, there were positive relatedness correlations with intrinsic motivation and academic success—relatedness was suggested to be equally as important for internalizing regulation (Butz & Stupnisky, 2017; Deci & Ryan, 2002; Jacobi, 2018).

Researchers Zhou et al., (2021) conducted a research study examining the relationship between perceived relatedness with students and their instructors, online self-regulated learning (OSRL), perceived learning gains, and students' satisfaction attending a higher educational institution. Based on self-determination theory, the researchers observed that relatedness was positively associated with OSRL. The study also reported that relatedness was also a central predictor of online learning engagement, which aligned with the findings from Chiu's (2021) study that explained student engagement in online learning. However, the researchers concluded that relatedness had no direct effect on either perceived learning gains or satisfaction (Zhou et al., 2021).

Like Zhou et al., (2021), research by Wong (2020) stated that relatedness is an essential predictor of online learning engagement since relatedness describes a student's desire to feel connected to teachers/instructors within a supportive relationship. The researchers suggested that in online learning, relatedness was identified as a definite need for autonomy and competence (Durksen et al., 2016; Wong, 2020). Therefore, building and maintaining student-instructor relationships could have a gratifying effect on student engagement and potentially positively affect student academic achievement. Like Wong, other scholars suggested that relatedness is an understudied component of SDT, and as a standalone entity in online learning, it requires more research (Butz & Stupnisky, 2017; Chiu, 2021).

Other empirical studies conducted during COVID-19 discovered and supported the idea

that there were strong correlations between relatedness and other learning variables (student satisfaction, academic achievement, motivation, self-directedness, engagement). It was suggested that, given the social distancing caused by the pandemic, students missed and craved the social connection that was lost because of physical isolation from instructors and classmates (Wong, 2020). The researchers stressed the importance of social relationships between students and teachers in online learning because it promotes knowledge-sharing behavior and improves learners' satisfaction and other academic outcomes (Besser et al., 2022; Park et al., 2020; Oyarzun et al., 2018).

However, outside of COVID-19 studies, findings determining whether relatedness truly impacts the perceived quality of online learning and student-faculty relationships is inconsistent. Some scholars believe that students benefit from more powerful feelings of relatedness, while other research suggests that this may not always be the case. In addition, some learners are solitary learners who prefer individual work and independent thinking (Butz & Stupnisky, 2017). Hence, educators and course designers should continue to examine the social objectives of online courses to address the unique needs of students as they require diverse interaction techniques to facilitate the authentic connection that characterizes actual relatedness (Butz & Stupnisky, 2017).

According to Deci and Ryan (2017), competence is associated with structure and the need to feel the satisfaction of understanding. Therefore, as it relates to students in online learning, competence refers to their need to feel competent, effective, and challenged (Chiu, 2021). Scholars believe that competent students display higher levels of self-efficacy and motivation if online learning environments balance the challenging assignments with student's level of ability, set clear objectives, provide examples for assignments, offer structure for activities, include a system to provide student-progress communication and provide positive and timely feedback (Chiu, 2021; Guerrero-Roldán & Noguera, 2018). Through user-friendly online functions,

professors can provide guidance during online lessons (i.e., synchronously, or asynchronously) to build confidence in students' abilities to achieve desired outcomes (Chiu, 2021). Chen et al., (2020) and Chiu (2021) agree that competence has a positive effect on student engagement since it enhances their interactions with instructors and influences their actions according to their intrinsic motivation.

Tsai (2018) investigated whether the effects of online competency-based learning affected or enhanced students' learning performances and experiences in an online course. He observed that competency is essential because it increases academic identity, learning motivation and is associated with academic achievement. Instructors can cultivate or increase competency by encouraging problem-solving and critical thinking activities that will develop their self-understanding and a sense of mastery of the topic studied. Once this need is met, students are likely encouraged to engage and participate in activities.

According to Guerrero-Roldán and Noguera, (2018), higher education instructors are encouraged to create learning environments where assignments support the development of competences in students to attain learning goals and achieve desired learning outcomes. Other scholars also believe that cultivating competencies in students requires a significant amount of time and resources since it is student-centered and output-oriented (Chen et al., 2020; Gil-Jaurena & Kucina Softic, 2016; Guerrero-Roldán & Noguera, 2018). For instruction, teachers need to examine their student's ability, needs, interests, knowledge, learning style, and learning pace, which requires a significant effort from teachers, especially in a large class (Guerrero-Roldán & Noguera, 2018).

Student-Athletes and Online Learning

According to McNiff and Aicher (2017), the number of online courses offered to student-athletes have increased dramatically. Online courses have become more attractive to academic

advisors and first-year students. Given the limited time student-athletes have with their busy schedules, some prefer online learning over in-person classes because it gives them the flexibility to balance their dual responsibilities. Also, with strict attendance requirements, online learning helps student-athletes maintain eligibility, compete, and avoid problems with attendance (Bozkus, 2014).

In addition, while some first-year student-athletes enter university with some online learning experience, others have been left behind with little-to-no online learning experiences (Parker et al., 2016). As a result, first-year student-athletes who graduate from a traditional high school with limited or no online learning experience may feel unprepared to use online platforms, may lack social skills in an online environment, and may not perform as well as students who have previous experience in self-paced courses (McNiff & Aicher, 2017). While online learning is a convenient educational approach for student-athletes, there are observable concerns about how student-athletes—of all levels—will be challenged, motivated, or require individual academic tutoring and support needs as they take online courses (McNiff & Aicher, 2017).

For student-athletes, online education provides benefits, with the most valued being those of convenience and flexibility for those who have obligations that limit their attendance in face-to-face classes (McNiff & Aicher, 2017). Online learning is an attractive and desirable alternative for advisors who enroll student-athletes. However, class attendance often conflicts with travel for away games, media appearances, and medical treatments, rigors that follow the dual career require student-athletes to retain their scholarships (Hyatt & Kavazis, 2019). A positive aspect of online learning classes is that they provide student-athletes a level of autonomy to continue their assignments while traveling for competition, enhancing their educational opportunities. The diverse needs of student-athletes have persuaded academic advisors and

administrators to register students for courses that use the online learning format to emphasize learner-centered activity.

While online learning seems best suited for student-athletes, the quality of instructors and the quality of the online course may affect the student's academic performance (Knollman-Porter et al., 2018). Student-athletes are unique because, in addition to different learning styles from diverse backgrounds, expectations, experiences, and abilities, they also have the added pressure of sport demands (Cox et al., 2005). Accordingly, one-size-fits-all courses often do not produce favorable results for student-athletes who must balance conflicting pressures (Davis et al., 2019; McNiff & Aicher, 2017; Sorkkila et al., 2019). Ryan and Deci (2000) emphasize that the role of instructor-student support (needs-support) and student-centered learning has important implications for students' satisfaction, which aids and prompts academic success.

Since student-athletes often have high external reward motivation and low intrinsic motivation, strategies for effective engagement in academic work must be considered for the first-year student-athlete community (Moller & Sheldon, 2020; Yukhymenko-Lescroart, 2021). Condello et al., (2019) believe that SDT will help to identify specific engagement constructs, activities, and practices that support student engagement in online learning environments. Understanding the needs of this specific learner group could help to promote quality and positive online learning experiences (Jacobi, 2018; Krebs, 2009). Depending on students' characteristics or discipline, the comfort or discomfort of an online course will vary (McNiff & Aicher, 2017). The self-determination theory proposes that persons become self-determined when their needs for controlled motivation or autonomy are fulfilled (Keshtidar & Behzadnia, 2017).

Considering that student-athletes spend much of their time preparing for and traveling to competitions, instructors must make material accessible and relatable to stimulate students' interest, possibly igniting intrinsic motivation (Comeaux et al., 2017; Jacobi, 2018). Chiu (2021),

recommends that structured teaching involves designing user-friendly forums and multifaceted functions for online learning, provides clear instruction for assignments, defines the guidelines of learning activities, enhances competence by providing relevant and constructive feedback, builds confidence in students, and offers relevant learning materials for students to achieve academic outcomes.

Rubin and Moses (2017) posit that division I student-athletes are privileged to have academic centers, tutors, and staff to assist them with online learning. This assistance from the athletic department's resources is advantageous to first-year students transitioning from high school to university demands, involving challenges like balancing academics and athletics while coping with social adjustment, loneliness, independence, and stress (Condello et al., 2019; Gayles, 2015).

While Rubin and Moses (2017) commend the systems to assist student-athletes, some of the academia communities have expressed concerns regarding the rumors plaguing big-time university student-athletics, allowing academic misconduct and unethical practices (McCarthy, 2015). Some academicians continue to dispute online learning courses' legitimacy, rigor, and quality (Allen & Seaman, 2011). While there are many positive outcomes associated with online learning, there are still several risk factors. Some of the risk factors identified by researchers include but are not limited to lack of internet literacy among students, lack of interactivity in course content, misalignment of course content with learners' needs and lack of relevance of course content, lack of effort and support offered by instructors or faculty, and online exam misconduct (cheating) (Almaiah et al., 2020; Hussain et al., 2018; Su & Guo, 2021). However, the National Association of Advisors has created a team to evaluate those risk factors to establish guidelines (McNiff & Aicher, 2017). Through this approach, the coalition can identify

challenges and opportunities caused by online learning and then establish best practices for guiding student-athletes through classes.

Perceptions of Student-Faculty Interactions

A teacher's primary responsibility is to establish and facilitate engaging interactions among learners to remain motivated (Cox & Williams, 2008). Student-athletes are encouraged to build relationships with instructors and professors to adapt to online learning (Coffey & Davis, 2019). While some students prefer online learning, student-athletes, because of their busy athletic schedules, are forced to take online classes, whether they prefer them or not (Knollman-Porter et al., 2018). Fortunately, they sign a letter of intent that requires them to participate in academic activity and complete coursework; failing to comply with Athletic Academic Services policies results in profound consequences (Higbee & Schultz, 2013). While the letter of intent lays out guidelines, it does not provide enough motivation for student-athletes to create relationships with instructors and proactively engage in academic activities (Gaston-Gayles, 2004; Higbee & Schultz, 2013).

Online learning simultaneously enables faculty to be more purposeful in their teaching by providing students with opportunities to interact with course materials on their schedule. While online learning eliminates traditional classroom boundaries, faculty's quality and expectations of student performances should not decrease in the online environment (English et al., 2022; Nachmias & Soffer, 2018). According to Higbee and Schultz (2013), building relationships with instructors, faculty, and student peers is essential for sustaining an elevated level of academic engagement and achievement, especially for first-year students. A major challenge for student-athletes involves creating a consistent level of interaction that fosters genuine learning and growth (Beckowski & Gebauer, 2018; Hamlin et al., 2017; McNiff & Aicher, 2017). A

significant theme is non-communication between instructors and professors (Guzzardo et al., 2021).

McNiff and Aicher (2017) examined student-athletes and support services staff to determine whether online learning was effective and identify strategies and best practices for online learning. However, there were some mixed perceptions surrounding student-faculty engagement in online learning (Webber et al., 2013). According to McNiff and Aicher (2017), students stated that faculty who teach online classes tend to be more responsive with students over email in some instances. While other research stated that the student-athletes reported that a lack of communication was a common reason for boredom, low engagement, lethargy, and alienation (Beckowski & Gebauer, 2018; McNiff & Aicher, 2017). Another student further explained that their online classes had fewer interactions with instructors than face-to-face courses because the course material was also available on the learning management system.

While the information was readily accessible to students on the learning management system, some viewed online learning negatively. For example, instructors inconsistently posted material, negative experiences caused by delayed feedback from instructors, or the inability to get technical support to navigate the online delivery software, increasing the lack of self-regulation and self-motivation (Hendricks & Turner Johnson, 2016; Jacobi, 2018; Snijders et al., 2020). Given limited student-faculty engagement, they felt isolated while the instructional methods seemed monotonous and the delivery poorly designed (Condello et al., 2019; Hussain et al., 2018).

Another example is the inability to communicate with the instructors face-to-face and ask questions in a group setting is a limitation. For example, in subjects like advanced math and science, instructors' interactions make a significant difference (Bozkurt, 2017; Horzum, 2015). Also, waiting on an email or an explanation on a discussion board can be frustrating and

alienating (Bozkurt, 2017; Horzum, 2015). According to Cung et al., 2018, enhancing student interaction led to better performance for students who took advantage of in-person office hours with instructors or had regular digital communication with instructors.

According to McNiff and Aicher (2017), student-athletes strive from provided instructor-student interaction. The SDT, social context plays an essential role in determining individual behavior (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan, 2017). Supporting the three universal needs described throughout the literature (autonomy, competence, and relatedness) enables students to progress from amotivation (a reduction in motivation) to extrinsic motivation to intrinsic motivation (Zhou et al., 2021). Researchers have argued that reciprocal relationships support the development of self-regulated learning because individuals can exert their agency for learning (Chiu, 2021). In this case, it makes sense to assume that students who receive constant feedback and actively receive communication from their instructors are more likely to self-regulate their learning (Zhou et al., 2021).

Developing student motivation through teachers' practices is vital for online learning. However, their content delivery is also an aspect of engagement and should closely mirror a traditional learning environment with audio, video, simulations, role-playing, group work, and animation (Comeaux et al., 2017). When professors strategically plan and execute an active learning environment, they promote critical and reflective thinking that provides an opportunity for reflection and dialogue—learning (Cottafava et al., 2019). Student-athletes, like all students, learn from being engaged, expressing, and defending their ideas when challenged.

Instructor's Challenge with Technology

Universities and academic institutions worldwide have become more reliant on the advancement of technology and tailored curriculum, teaching, and learning to suit online learning (Carlson & Carnevale, 2001; Erthal & Harting, 2005). To reach distance learners,

flexibility, and more so now, due to recent events (i.e., the pandemic), many universities offer online degrees and online classes (Broffman et al., 2022; Lumpkin, 2021). Studies also reveal that some universities did not plan adequately for the sudden integration of online learning to higher education (Farjon et al., 2019; Scherer et al., 2021). Among the pedagogical challenges students and teachers encountered were the difficulty of adapting to online learning environments and the lack of technical assistance they may have received from institutions to enable them to meet their objectives (Kee et al., 2012). It is imperative that teachers are skillful in online learning management systems so they can select and use the tools that accurately and efficiently accomplish their instructional objectives.

Technology may represent a significant challenge for teachers who entered their profession when the expertise wasn't necessary. For example, if an instructor has not had online teaching experience or has not received appropriate training to deliver effective online instruction, the student's ability to engage and connect to the course material may be affected (Beard et al., 2004). These untrained and inexperienced instructors may not create effective online materials, activities, or assignments in classes requiring extensive hands-on demonstrations, such as laboratory experiments, and/or dynamic instructor-student interaction. Accordingly, students may be disadvantaged in online courses (McNiff & Aicher, 2017; Monda et al., 2015).

Intercollegiate Athletics and Academics

During the athletic season, student-athletes often miss classes each week because of out-of-town travel. Additionally, regular practices and weight training require even more time away from the study (Buttall & Miller, 2018; Sorkkila et al., 2019). These necessary activities conflict with engagement with others in social or academic settings. Therefore, unfortunately,

student-athletes may be relegated to online interactions; indeed, online classes help with maintaining studies while traveling (Roberts et al., 2019).

Student-athletes may have unpleasant experiences from online learning because they feel disconnected from classroom dynamics (where they meet socialization needs), are confused by the material, or the instructor fails to add substance and clarity to the material (Condello et al., 2019; McNiff & Aicher, 2017). The negative experiences are associated with little or no feedback from their instructors, poorly designed online course content, and monotonous instructional methods (PowerPoint boredom), resulting in a lack of self-regulation, self-motivation, and a sense of isolation (Beard et al., 2004). Due to the nature of online courses, online students' shoulder much of the learning load. Online courses, for example, require students to review the online content (readings and video modules) on their own. In this scenario, the student-athlete becomes increasingly responsible for planning when to review the learning material. They must ensure attention to detail to complete assignments and assessments.

Additionally, student-athletes have limited time to take advantage of college services and opportunities for direct academic engagement (O'Neil et al., 2021; Roberts et al., 2019). With the student-athletes busy schedules, some prefer online learning over a traditional school setting because it gives them the flexibility to balance their dual responsibilities (McNiff & Aicher, 2017; O'Neil et al., 2021). These students prefer working at their own pace and scheduling their time to complete assignments while pursuing their athletic training and competition (Bozkus, 2014). Because attendance is a requirement for student-athletes, online learning helps them to maintain eligibility status and not be punished for absence and attendance issues (Bozkus, 2014).

The recurring construct identified throughout the literature is the power of relationships (Condello et al., 2019; Snijders et al., 2020; Woods, 2002). The power of relationships describes what influences a person's cultural development on social and individual levels (Bozkurt, 2017).

Student-faculty relationships, social interaction, and individual meaning play pivotal parts in learning (Snijders et al., 2020). Self-determination theory, Deci and Ryan (2000) emphasize the importance of affective experiences and meaningful relationships. The theory identifies that naturally occurring conditions such as choice, feedback, and continuous dialogue from instructors and faculty foster healthy autonomy (support), relatedness (structure), and competence (involvement) (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan, 2017; Jacobi, 2018).

Closing the Gap

Online learning is a growing educational methodology that includes different techniques than traditional face-to-face courses but also requires a distinctive skill set for academic success (Palvia et al., 2018). While research reports efficiency gains that can be achieved through online learning, it is unclear how student-athletes perceive these gains. The problem is that little research has been published examining the perceived difficulties of student-athletes in online courses and whether they are getting the faculty support and engagement necessary to be successful in online learning (Coffey & Davis, 2019). Few studies have identified specific actions and practices that support student-athlete/faculty engagement in online learning environments (Coffey & Davis, 2019). Few researchers have examined the quality of online education from the student-athlete's perspective (O'Neil et al., 2021). Also, there is scarce information examining student-athletes' perceptions of online, blended learning; accordingly, future research is necessary to provide instructional approaches that enrich student-athletes' learning, especially for first-year experiences (Condello et al., 2019; Griffiths et al., 2018). Since the field of online learning is continually progressing, professors, instructors, and school administrators at every level must understand the unique needs of first-year student-athletes and find ways to improve online delivery methodologies (Palvia et al., 2018).

The growth of online enrollment at the higher education levels in the United States exploded with the Covid-19 pandemic and continues to increase (Ortagus, 2018; Palvia et al., 2018). While researchers continue to compare the academic outcomes associated with face-to-face learning and online learning, results have been relatively inconsistent (Ortagus, 2018). Garratt-Reed (2016) argues that many of the studies surrounding the academic outcomes of online students yield concerning claims fraught with methodological flaws. The deficiencies include extremely small sample sizes, failure to account for selection bias, and a lack of generalizability (Ortagus, 2018). The lack of evidence, quantitative or qualitative, regarding the relationship between online learning and student-athletes academic success is problematic (Coffey & Davis, 2019). Given the increase in student-athlete online enrollment, my identifies and expands the evidence of successful strategies for effective online engagement for first-year student-athletes.

Student-athletes, as well as their peers, have a right to quality education in online learning. The question emerges, how to determine if they are receiving a quality education in online learning? Reports in the United States have positioned online education as an essential element in the long-term strategy of universities, especially for student-athletes (DeSantis, 2011). According to the NCAA rules, student-athletes are required to maintain a balance between athletic and academic obligations (Condello et al., 2019; NCCA, 2021; Pellegrini & Hesla, 2018). Hence juggling the two careers can be overwhelming, and due to intense travel, classes can be disrupted. Online learning (synchronous or asynchronous) can offer student-athletes a tailored, convenient, and an on-demand learning environment that can be accessed any time or location is not reliant on traveling to or from a campus, and is self-paced (Hergüner et al., 2021; McNiff & Aicher, 2017). While some research proves that online learning is not a one-size-fit-all, it has still become a key part of instruction (Hergüner et al., 2021). Therefore, understanding

student-athletes' needs and wants can be beneficial in producing quality online courses. Furthermore, this study hopes to garner information that will assist educators to customize strategies to excite student-athletes, increasing the likelihood that a student will encounter a positive online learning experience.

More research should examine how autonomy, competence, and relatedness affect the learning process (in terms of self-regulated learning), providing quality student-teacher interactions, and learning outcomes (in terms of perceived learning gains and satisfaction). Research has not fully investigated research surrounding student-athletes in online learning, and further research is needed to clarify these issues (McNiff & Aicher, 2017). Because of these challenges, educators and researchers have developed recommendations to increase the connection and interaction between students and instructors during online courses. However, some scholars have provided recommendations that could help educators and stakeholders fill the gaps in research (Cung et al., 2018).

Online education programs should be focused on quality learning (course design, course syllabus, course materials, evaluation strategies, assessment strategies, and faculty feedback) (Keelson et al., 2022). Also, the quality of online education should mirror the quality delivered via face-to-face classes or programs in any institution of higher education (Moorhouse & Wong, 2022). One of the foundations of quality online learning is identifying and understanding the relevant higher education community. Students-athletes and their peers benefit from the quality of the course design and the instructor's active involvement (McNiff & Aicher, 2017). Courses must be designed, delivered, and governed by the university's policies, the schools' policies, and the department's policies, and students are made aware of these policies through courses (Edge et al., 2022; Wiesenbergs & Stacey, 2005). For example, the design of the course should encourage academic freedom as well as employ online learning best practices that

create an outstanding learning experience that adheres to academic guidelines. Additionally, an aspect of course design should involve a community or space that promotes student-faculty interactions and should clearly articulate support (course-related resources and faculty response time for email) (Chiu, 2021).

According to Edge et al. (2022) quality online learning program organizes courses and programs within an effective and practical structure. Instructors are encouraged to use instructional models and methods that stimulate active, collaborative learning and provide multiple paths for students to master stated learning outcomes (Jowsey et al., 2021; Lee, 2022). Achmad and Syam (2022) recommend that instructors use media relevant to the content that extends and contributes to student mastery of learning outcomes. Chiu; (2021) argues that an effective structure provides numerous opportunities for student-instructor interaction and communication within the course content. The syllabus should clearly state and measure the learning objectives as part of the structural strategy (Keelson et al., 2022). As a part of quality online learning, students should be assessed for readiness, progress, and mastery of learning outcomes and receive summative feedback about their performances that references stated grading criteria.

Summary

In chapter two of this study, the self-determination theory is identified as a key component of the framework that will guide my study. Chapter two also discussed examining research related to first-year student-athlete experiences of adversity, online learning perceptions, student-faculty interactions, student-athlete dual identities, and closing existing gaps in effectiveness. Studies show that there are positive outcomes to online learning and hurdles that online learning must overcome. While online courses provide student-athletes accommodation, this delivery may fail those it is who thrive on instructor interactions and engagement (Hergüner

et al., 2021). Hergüner et al. (2021) argue that lack of student-instructor interaction and first-year students' lack of self-discipline result in poor academic outcomes. Online learning courses may seem more appealing to student-athletes than face-to-face courses, but preference for this type of learning environment does not always guarantee success (McNiff & Aicher, 2017).

The problem is that the Division I student-athletes may not receive the support and engagement necessary for success in online learning. Although online learning is widely examined and continues to develop, literature related to the quality of online education among student-athletes is scarce. Among the research examined, few researchers have examined the quality of online education from the student-athletes' perspective (O'Neil et al., 2021). Hence, the need to understand the impact of student-athlete's interactions with faculty in online courses.

CHAPTER THREE: METHODS

Overview

The purpose of this transcendental phenomenological study is to describe the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. Chapter Three of this study discusses the transcendental phenomenological methodology to describe how first-year university Division I student-athletes in the state of Missouri become more engaged with faculty and how faculty can become more supportive and connected to student-athletes in online learning. At this stage in the research, quality of student-faculty interaction in online education is defined as online interaction between teachers and students that leads to better self-directedness, motivation, engagement, student satisfaction, and academic achievement. In this chapter, a comprehensive description and explanation of the study design, participants, and setting are provided in this chapter. Also, this chapter includes the detailed descriptions of the data collected and the methods used for analysis. Finally, this chapter concludes by addressing the steps taken to ensure trustworthiness and ethical concerns.

Research Design

The qualitative method utilized for this study is the transcendental phenomenological design. Qualitative research is most appropriate for this study because research was conducted in a natural setting. After the data collection methods (i.e., surveys, interviews, journal prompts, etc.) are analyzed, patterns and themes are developed into an overall picture of the study's problems or concerns (Creswell, 2013). While numbers and measures are essential in research, the relied on qualitative research to better understand and describe the problem presented by the participants (Creswell & Poth, 2018). Qualitative research was vital because it offered a clear and dynamic picture of the research that can be attained only by engaging directly with student-

athletes (Creswell & Poth, 2018). A qualitative design was most appropriate for this study because it is personal in nature. What motivates a researcher to want to explore specific topics is that personal component that allows the researcher to serve as the primary instrument of research (Patton, 2015).

According to Moustakas (1994), different qualitative research methodologies have distinct strengths in meeting the requirements of design concepts. As it relates to this study, phenomenology was best suited because the method involves understanding the universal experience of a phenomenon through interviews with student-athletes—knowledge presumed to be the primary source, a source that cannot be disputed (Moustakas, 1994). The qualitative approach includes the development of a common meaning based on several participants' experiences (van Manen, 2014). This type of design is best suited when the understanding of similar experiences is the focus. This form of research diverges from the narrative of one individual and incorporates several individuals who share a common experience (Creswell & Poth, 2018).

Phenomenological research may appear like the narrative research approach because it provides the reader with an in-depth understanding of a phenomenon through participants' lived experiences (Moustakas, 1994). However, phenomenological research goes a step beyond narrative. The study used this design method to report on individual experiences of student-athletes and common meanings/themes from the individuals regarding their experiences of a concept or phenomenon (Moustakas, 1994). With this approach, data is collected through interviews and observations. In its procedures, researchers identify a small group of participants with a shared experience, identify a concept of interest, recognize the assumptions, collect the data, identify present influences, conduct data analysis, bracket biases, and then give a textual description with imagery (Moustakas, 1994; possibly). This method also includes capably

extracting viewpoints from multiple participants into one body of work. It is important that all participants in this qualitative method have had the same experienced phenomena (Creswell & Poth, 2018).

Phenomenological research is common in social and health science settings and is heavily influenced by philosophical ideas coined by German philosopher Edmund Husserl (1859–1938) (Creswell & Poth, 2018; van Manen, 2014). The research method is used to describe individuals' experiences and how they managed a situation form the basis for a phenomenological study (Moustakas, 1994). This research method emphasizes subjectivity as researchers examine the phenomena from different angles and perspectives. These perspectives are explained through participants' stories (Moustakas, 1994).

Qualitative phenomenological research includes two main approaches: transcendental and hermeneutical (Creswell, 2013; Moustakas, 1994). Hermeneutical phenomenology involves interpreting the meaning of the lived experiences to participants and researchers (Moustakas, 1994). However, the purpose of this research is not to interpret lived experiences shared. Instead, this is a descriptive “study of the appearance of phenomena” (Creswell, 2013; Moustakas, 1994). Since focused on describing and giving meaning to the participant's experiences, the transcendental phenomenological design aligned with the intended objective to gather first-hand knowledge from the student-athletes in the study.

This investigation used a transcendental phenomenological design to examine the perceptions of the quality of student-faculty interactions in online education, especially the interactions that impact first-year university student-athletes' academic achievement. Therefore, transcendental phenomenology helped me describe the student-athlete's perspective while bracketing my own experiences with a new perspective, setting aside predispositions, biases, and preconceived ideas that may have potentially affected the data collection and the research

interpretation of the phenomena under examination (Creswell, 2013; Moustakas, 1994).

Moustakas (1994) discussed the notion of epoché, which implies that novel solutions are created when prior knowledge about the phenomenon is put aside. To create an unbiased approach to study, the epoché process is the first step. Although epoché does not eliminate all prepositions and prejudgments, it frees people from the bonds of the primal mindset that they access as a basis for truth and reality. Next, I used the transcendental phenomenological reduction, which allowed me to combine experiences into a single experience. Hence, to achieve the closest possible description of the meaning and essence of the phenomenon, I reduced each experience to equal status while bracketing my presuppositions (Moustakas, 1994). The imaginative variation helped me hear the voices of each student-athlete (Moustakas, 1994).

My goal was to describe the participants' experiences and perceptions of quality online student-faculty relationships. I described the quality of student-faculty interactions in online education for Division I student-athletes while highlighting common meanings/themes from the multiple individuals regarding their experiences to shed light on the existing phenomenon (Moustakas, 1994).

Research Questions

The study of the shared experiences of first-year university Division I student-athletes across the state of Missouri who are enrolled in one or more online courses was guided by one central research question and four research sub-questions. First-year student-athletes enrolled in one or more online class have shared experiences that vary in characteristics and disciplines (program, class, national or international student). The central research question is used to form the description of the participants' shared experiences relating to factors affecting academic achievement and the quality of student-faculty interaction in online education (Creswell & Poth, 2018). The central research question is answered more specifically through four research sub-

questions.

Central Research Question

What are student-athletes' lived experiences of faculty interactions and academic engagement when learning in an online environment?

Sub-Question One

How do student-athletes perceive engagement in their online learning courses?

Sub-Question Two

How do online student-athletes describe their interactions with faculty and the quality of faculty support in their online learning course?

Sub-Question Three

What factors do student-athletes perceive as contributing to overall quality of online education?

Setting and Participants

The setting for this study included NCAA Division I universities in Missouri that included a variation of intercollegiate disciplines. All student-athletes from varying sports disciplines were encouraged to participate in the study. The settings are NCAA Division I universities in Missouri. To ensure confidentiality, each respective university was referred to with a pseudonym throughout the dissertation.

Settings

The universities in the study are public universities that use a semester-based academic calendar and offer online and traditional learning courses. The sites for this study were five Universities located in Missouri. Tiger University (pseudonym), Lion University (pseudonym), Bear University (pseudonym), Hawk University (pseudonym), and Wallace University (pseudonym). These universities have a diverse student-athlete population that fields the

following sports on a NCAA Division I level: football, women's basketball, men's basketball, women's soccer, softball, baseball, men's cross country, women's cross country, men's track & field, women's track & field, women's tennis, women's volleyball, men's gymnastics, women's gymnastics, baseball, men's golf, women's volleyball, men's swimming, and women's swimming. Currently, there are approximately 1981 student-athletes participating in at least one sport at Division I universities in Missouri. While some of the training and competition venues are located off campus, most are located on main campuses, where their training facility and classes are located. Division I universities were chosen as a setting because they draw a substantial number of out-of-state, in-state, and international student-athletes. These universities are also known for offering flexible online courses. Most of the institutions are recognized for their Student-Athlete Support Services Office (SASSO), an initiative in the Athletic Department that focuses on the student athlete's holistic development for all programs offered. While their online offerings continue to grow, the universities still offer several online courses that count towards earning Bachelor's, Master's, Doctoral degrees, and Certificate Programs. Additionally, numerous courses offered are NCAA-approved online courses for student-athletes to pursue their degrees.

These universities have an athletic director and a compliance director who work collaboratively to oversee the day-to-day operations, ensuring that student-athletes are aligned with NCAA rules and regulations and are eligible to compete in their respective sports. The athletic directors, compliance directors, and coaches maintain their roles without an on-campus presence other than at athletic contests and practices. The universities have staff within the different colleges who serve as academic advisors to student-athletes throughout their academic journeys, though students also rely on their professors for student-faculty interactions.

Participants

Participants in this study included first-year student-athletes who are both male and female, age 18 to 22, attending a NCAA Division I University in the state of Missouri and enrolled in one or more online course attending. The student-athletes maintained eligibility status and were in their active season or training for their upcoming season. The objective was to recruit participants who can dialectically construct their realities to enable the researcher to examine and describe the phenomena from different perspectives, illustrated by participants' stories (Creswell & Poth, 2018; Moustakas, 1994).

In this transcendental, phenomenological research, the sample size included 11 participants, which is the suggested number based on qualitative research and until saturation occurs (Creswell & Poth, 2018). The ideal volunteer population was 50% male and 50% female, of which 50% will represent minorities with at least one male and female representation from each university. Overall, I would prefer 40% in-state students, 40% out-of-state nationals, and 20% international students. The aim was also to receive information-rich dialectic exchanges from the 10-15 participants. The final number depended on saturation level from which no new data emerges, or data becomes redundant (Creswell, 2013; Creswell & Poth, 2018). I will gather information and analyze the data for recurring exchanges, themes, and experiences that may not be identified during the interview process.

Researcher Positionality

When I competed for a university as a Division I student-athlete, I struggled to maintain dual responsibilities (track & field and academics). At the same time, online courses were accommodating and allowed me to attend classes virtually and often at my pace (self-paced) to attend track practices and competitions. However, I found that there was a lack of engagement between online professors and their students. My professors infrequently communicated with me, and of the few student-faculty interactions, the conversations pertained exclusively to

instruction. Interactions and feedback with professors/faculty were inorganic, appeared to be forced, and vague. They were not engaged with me holistically.

As time progressed, classwork intensified, and I was not receiving the necessary support for academic success. Coupled with the poor instructional design, lack of engagement, and scarce student-faculty interactions, I fell behind in my studies. This too often reinforced inappropriate behaviors and led me to consider avoiding difficult classes or changing my major so that I would be learning from engaging and student-centered professors.

My educational philosophy is centered around building relationships: collaborating, engaging, and positively transforming stakeholders (teachers and students). Building relationships and maintaining morale among teachers and students involves engagement, which is far more than listening to an instructor, paying attention in class, and engaging in academic tasks. Student engagement is a multidimensional construct that embraces categories of presence, passion, and mental control (Burić, & Frenzel, 2021).

According to the social constructivism theory, knowledge evolves through social discussion (Bozkurt, 2017), and pertaining to the self-determination theory, engagement is influenced by the fulfillment of three basic psychological needs of autonomy, competence, and relatedness (Deci & Ryan, 1985; Ulstad et al., 2019). Therefore, my lack of motivation in online learning led to frustration and burnout, causing low academic achievement (Moller & Sheldon, 2020). Therefore, as a former Division I student-athlete who struggled with faculty interactions, I want to use the results of my study so that to gather a better understanding of this issue and use the findings to foster and support student-athletes better when the opportunity arises in my career.

Interpretive Framework

The interpretive framework guides this study by is social constructivism. People

construct meanings through life experiences and the interactions they have with others in their social environment (Bozkurt, 2017; Vygotsky, 1978). Therefore, I used this research paradigm for my qualitative research to describe student-athlete's perception of their relationships with faculty, the learning behaviors that are affected by the quality of the content, how the quality affects their academic achievement, and how those factors contribute to the student's overall perception of online education. Following the tenets of social constructivism, I gathered the responses from each research participant during semi-structured participant surveys, semi-structured participant interviews, and written journal prompts (Friedemann et al., 2011; Moustakas, 1994; Patton, 2014). I focused on the participant's perceptions by analyzing their experiences articulated in interviews, then prepare the perspectives to accurately describe those experiences (Maxwell, 2012; Moustakas, 1994; Patton, 2014).

Philosophical Assumptions

Over the years, the words “student engagement” and “student-faculty interaction” have become necessary in literature as researchers continue to examine instructional improvements and curriculum development, especially in online learning (Cassidy et al., 2021; Paulsen & McCormick, 2020). I believe that the increasing prevalence of online learning in higher educational settings has provided more accommodating opportunities than traditional classroom settings (Jiménez-Bucarey et al., 2021). However, I believe that the shift to online learning is challenging for student engagement and high-value faculty interactions. Infrequent or ineffective student-teacher and student-faculty interactions in online courses can lead to poor academic performances (Avcı & Ergün, 2022, Greven et al., 2020). I strongly believe that students' participation in the learning process and continuous student-faculty interaction are fundamental to academic success. Therefore, it is vital to create an educational setting that encourages students to thrive and receive a high-quality education through academic interpersonal

relationships (Altuwairqi et al., 2021). Accordingly, my research surrounding the quality of education involves addressing the student's social and psychological needs, as addressed below. Furthermore, my philosophical assumptions (ontological, epistemological, and axiological) were addressed as well.

Ontological Assumption

Ontologically, the assumption is based on the idea that the nature of reality is subjective, individual experiences are subjective, and multiple realities are constantly changing (Guba & Lincoln, 1994). Therefore, my research aims to describe the student-athlete's perspective by developing subjective meaning from their life experiences and their complexity of views established from varied and multiple life experiences (Moustakas, 1994; Patton, 2014). Furthermore, it is essential to present and compare the multiple perspectives provided by the participants as they view their lived experiences using multiple forms of evidence (Creswell, 2018; Guba & Lincoln, 1994). Ontological assumptions will help me collaborate with the student-athletes time as I sought to describe the complexities of their lived experiences and understand how they can become more engaged with faculty and how faculty can be more supportive and engaging student-athletes at Division I Universities in Missouri.

Epistemological Assumption

Following the tenets of social constructivism epistemologically, the participants and I engaged in dialogue through an objectivist view as we create unbiased knowledge (Guba & Lincoln 1994). I considered diverse participants' perspectives of a given situation to identify the meaning of the phenomenon (Creswell, 2013). Importantly, this approach aims to connect with the participants being studied and to acknowledge the subjective experiences of all participants to gain a deeper understanding (Creswell, 2013; Guba & Lincoln, 1994). It is essential that the participants feel comfortable to express their thoughts and feelings to develop detailed and

meaningful descriptions of the phenomenon (Moustakas, 1994; Patton, 2014). My epistemological assumptions were that relationship-building and a positive relationship with instructors has a dramatic effect on students' motivation and can therefore enhance learning. Stronger relationships lead to greater academic engagement, improved social skills, and more positive behavior in students.

Axiological Assumption

A challenge of research is finding multiple perspectives (positive and negative) reflective of the complex picture of engagement among student-athletes. It is imperative that I remain objective and impartial while sharing negative and positive results. Since I did not have a pleasant experience as a student-athlete, my axiological assumption is that other student-athletes' perceptions would be like mine. The student-athlete's academic performances are shaped uniquely by their experiences and interactions with faculty, as well as the lack or fulness of engagement and participation—not my experience. I remained mindful of this potential bias. I used a social constructivist worldview since all knowledge is derived from their human experiences to guide the study (Creswell, 2018). Axiological assumptions are the specific values that I brought to the study (Creswell & Poth, 2018). During my time as a student-athlete, I valued and understood the importance of communication and connection with faculty.

Researcher's Role

Considering that I followed a transcendental phenomenological study approach, I obtained the perceptions of participants' lived experiences. This transcendental phenomenological study helped me set aside prior judgments of my lived experience as student-athlete in an online learning environment. My role as a researcher in this study was strictly to observe and describe the phenomena (Creswell, 2013; Moustakas, 1994). As the researcher, I facilitated semi-structured interviews utilizing a constructivist approach with student-athletes to

learn subjective accounts of their experiences to create rich descriptions of their lives (Creswell, 2013; Moustakas, 1994).

According to Moustakas (1994), to conduct robust and thorough qualitative research, the researcher should clearly state their stance as a human instrument in the study. As the critical instrument for data collection and data analysis, I was aware of and acknowledged personal bias and eliminated personal involvement, pre-existing conceptions, and similar experiences with the subject material to clarify the phenomena (Moustakas, 1994; Patton 2015). According to Patton (2015), during this systematic process, I bracketed out presumptions, so data is represented in true and uncontaminated form. I do not have authority over the student-athlete research participants. Although the participants and I have shared lived experiences as student-athletes, it was essential that I had no direct communication or relationship and did not previously know the student-athletes participating in this research study. This also helped eliminate any potential bias.

I believe that student-faculty interactions in a supportive and engaging environment will help students achieve academic success. As a previous student-athlete, I have a strong experiential bias related to the effect of continuous communication, participation, and meaningful relationships with faculty. With Division I university experience as a first-year student, my perceptions may resonate with the research participants; however, I will bracket out my feelings about others identifying with my research. I worked attentively to ensure that I remained objective, listened closely and transcribed the exact words provided by the student-athletes to describe their lived experiences with the phenomena of study accurately. Lastly, as the researcher, it was my responsibility to ensure the validity of data analysis, which can help faculty become more supportive and engaging to student-athletes, while also helping student-athletes become more engaged with faculty.

Procedures

I followed the detailed rules and procedures guided by the dissertation process provided by Liberty University. The study was approved by the dissertation committee and Liberty University (Creswell & Creswell, 2018). Then, I received formal approval from the Institutional Review Board (IRB). Once I received approval from the IRB to conduct the study, I contacted the participants to obtain consent, forwarded imbedded Google forms links to access the survey, scheduled one-on-one interviews via Zoom application, and provided communication about journal prompts.

Permissions

It was required that an IRB review be completed before access to the site and the recruitment of human subjects for qualitative research (Creswell & Poth, 2018). This study was conducted after approval from the IRB (See Appendix A) at Liberty University. Convenience and snowball sampling were used in concert to gain sufficient participants for data saturation (Creswell & Poth, 2018; Patton, 2015). Once the participants were identified, I contacted the participants through social media direct messages using the recruitment messaging (Appendix C), outlining the purpose and process of this study. Selected participants were asked to sign and return a consent form (Appendix B) notifying them of the possible risks and expected benefits of the study. Additionally, the consent included the participants' right to voluntarily withdraw from the study at any time, the steps taken to protect their identity and privacy (Creswell & Poth, 2018). Participants were assured that their confidentiality was protected and saved as an encrypted file and they will remain anonymous throughout the research and publication process, unless they should request otherwise. The participants were also informed that their interviews were recorded and used solely for research purposes. Pseudonyms were used for names of participants and universities to maintain the confidentiality and privacy of participants (Creswell

2013). Therefore, ensured participants' anonymity by avoiding identifiable information in the analysis files by assigning fictitious names (Creswell & Poth, 2018). Last, data was stored and safeguarded using password protection for electronic files, all of which will be destroyed after three years.

Recruitment Plan

To qualify for the study, the researcher identified 11 participants who were male and female, first-year Division I student-athletes in the state of Missouri who were between the age of 18 to 22 and enrolled in one or more online courses (synchronous, asynchronous, or blended). Participants were selected based on whether they meet the criteria for the study. The objective is to recruit participants who can dialectically construct their realities to enable me to examine and describe the phenomena from different perspectives, illustrated by participants' stories (Creswell & Poth, 2018). I used a combination of convenience and snowball sampling. Convenience sample was used to identify the first participant. To identify participants, I used the university's athletic website, as it is public information and discloses the information that I needed to determine whether the student-athletes were eligible for the study. The athletic webpage of the university provided, among other things, the student-athlete's first and last name, athletic discipline, age, gender, and academic year. A convenience sample is a non-probability sampling technique in which samples are taken from places around a familiar location or through the internet that are conveniently situated (Creswell, 2012). As a result of convenience sampling, I was able to recruit my first student-athlete.

The second sampling method, snowball sampling is a convenient way to recruit individuals who are difficult to identify or who need to meet certain criteria (Creswell & Poth, 2018; Marcus et al., 2017). I opted for snowball sampling because participants were likely to recruit persons they knew with the same shared/lived experience and were likely to inform them

of the importance of the study (TenHouten, 2017). The snowball sampling also helped the study address standardized questionnaires, interview questions, and journal prompts which gathered rich data for the ongoing issue (Patton, 2015).

Due to the newness of the research, and the difficulty in locating a small sample, as well as considering the student-athlete's busy schedules, low participation was anticipated. The NCAA Division I universities were chosen for the study due to their proximity to one another and convenience of being in the same state. While the athletic teams are rivals competing against each other during regular competitions, most of the athletes are friends from high school or from the same country outside the United States. The student-athletes were familiar with each other which helped me find other student-athletes through referrals by selected participants. Current selected student-athletes referred other student-athletes: teammates, mutual friends, or competitors. Student-athletes were encouraged or recruited persons they knew who had similar shared/lived experience and informed other student-athletes of the importance of the study which, therefore, allowed me to include them in discovering the necessary characteristics of the population. Hence, through convenience and snowball sampling, I would be able to obtain more participants of hard-to-reach populations (Leighton et al., 2021).

Upon IRB approval, I relied on each university's athletic website to recruit first-year student-athletes. Upon identifying eligible candidates, they were contacted by direct message using social media direct message with the attached statement from the social media recruitment messaging (Appendix C). Once student-athletes responded agreeing to participate in the research study, I obtain their email address and I sent the consent form (Appendix B) to the student-athletes. The consent form included the purpose of the study, described the procedures that were used to protect their privacy, and mentioned their right to voluntary withdraw at any time (Creswell & Poth, 2018). Upon signing and returning the consent form, a link to a survey created

in Microsoft forms was sent to their email addresses. Microsoft forms was selected because of its ability to remind participants about completing surveys and its compatibility with the aggregation of data and transfer to Excel and Word for analysis (Cross et al., 2021). Confirmed participants were also asked to share the study information and my contact information with potential participants. In addition, I invited confirmed participants to share the first and last name of potential student-athletes that might be interested in the research. Participants were advised to obtain others' permission before disclosing their contact information. Consequently, this phenomenological study's sample size was based on thematic saturation (Patton, 2015).

Data Collection Plan

The basis of qualitative research is an inquiry that is driven by an empirical interest in a topic along with the researcher's enthusiasm for it (Moustakas, 1994). I identified a small group of participants who were male and female Division I first-year student-athletes in the state of Missouri who were between the age of 18 to 22 and enrolled in at least one or more online course. The objective was to recruit participants who can dialectically construct their realities to enable me to examine and describe the phenomena from different perspectives, illustrated by participants' stories (Creswell & Poth, 2018). Multiple data collection options were critical for this research because they helped gathering the most significant information from the participants (Heath et al., 2018). Surveys, individual interviews, and journal prompts were the data collection methods used throughout the study. This section provided a brief overview of data collection approaches, a concise rationale, and lastly, detailed descriptions of the way I collected data using each approach.

Survey Data Collection Approach

For this research, qualitative surveys (Appendix D) included baseline questions that sought to answer research questions, to understand, and categorize the diversity of the student-

athlete population. I formulated nine straightforward, non-threatening; open-ended questions built in Microsoft forms. Student-athletes received a link via email to access the surveys in Microsoft forms and were given one week to complete them. For those students-athletes that needed additional time, Microsoft forms allowed me to send them a friendly reminder. The questions were used to organize the student-athletes demographically (i.e., age, sex, etc.), academically (i.e., online classes enrolled in, their rationale, and experiences), and athletically in discipline and background questions (i.e., scholarship/non-scholarship, school, and sport).

The information collected from the survey helped to create a detailed description of the student-athletes. Without including the data from the surveys, I risked assuming the stance of absolutism and I may have assumed that the phenomena I am interested in are the same regardless of culture, race, ethnicity, or educational background (Hammer, 2011). The information generated from the surveys helped the readers and researcher in determining which participants are generalized by the findings and what comparisons can be established from the results (Rohrer et al., 2017). According to Rohrer et al. (2017), surveys are a precursor to interviews or focus groups since they help distinguish early themes to explore further in the research.

Survey Questions

1. Please tell me about yourself (Name, etc.).
2. What is your gender?
3. What is your age?
4. What is your ethnic/racial background?
 - a. White
 - b. Black or African American
 - c. American Indian or Alaska Native

- d. Asian
 - e. Hispanic or Latino
 - f. Native Hawaiian or Other Pacific Islander
5. Please share whether you had an online learning experience in high school.
 6. What university do you attend?
 7. Please specify whether you are categorized as an in-state student, out-of-state student, or international student.
 8. Please share if you receive an athletic scholarship. Please specify whether it is partial, half, or a full scholarship. If you do not receive any form of athletic scholarship, please state that you do not receive any athletic scholarship.
 9. What NCAA Division I collegiate sport(s) do you participate in at the university? Please list all sports of participation and specify whether they are the men or women's team.
 10. How many online courses do you take? Please list all online courses.
 11. Please describe the structure of the online course(s). Is it synchronous (real-time), asynchronous (various times and places in elapsed time), or a combination of the two?
 12. What factors led you to choose an online course or courses rather than traditional in-class instruction?
 13. What is your idea of quality online education?

Questions one through nine are designed to gather general demography, academic, and athletic information from the participants to help create a detailed and thick description of the student-athletes. Before moving to topic-related questions, the seven lead-in questions will allow me to build rapport with the student-athlete and learn more details about her/his background. Question five is considered a linear question it will they help me access information about

previous settings while allowing participants to orient themselves with phenomena of the research (Evans and Whitcombe, 2016).

Studies suggest that online courses have attracted students because they are more accessible and offer a greater chance to reach students (Palvia et al., 2018). Question twelve is designed to get a general understanding of why the student-athlete decided to choose an online course. Question thirteen is developed for the student-athlete to provide their understanding of quality online learning in university. Therefore, examining the participant's general knowledge of the term will help to discern a more complete picture of their composite perception (Moustakas, 1994).

Survey Data Analysis Plan

According to researchers, the data analysis aspect of qualitative research is laborious and time-consuming because the responses are thick, rich, and in-depth. Therefore, much effort went into sifting through, coding, and then categorizing the responses (Merriam, 2002; Moustakas, 1994; Oluwafemi, 2021; Patton, 2014). Hence, I used Moustakas' (1994) technique for data analysis for phenomenological reduction. Data was collected through Microsoft forms and then converted to Microsoft Excel for data analysis.

I employed a five-step process as I began to analyze and synthesize data. The steps will include organizing data, reviewing, and exploring data, creating codes, revising codes for themes, and present codes in a cohesive manner (Moustakas, 1994). First, all interviews were recorded and later transcribed for analysis (Creswell 2013). I prepared and organized data. This step included printing out and reading participant survey responses multiple times to develop an in-depth understanding of the participants experiences (Moustakas, 1994; Patton, 2014).

Then I reviewed and examined data. This is an opportunity for me to read and thoroughly examine data for an in-depth understanding. Throughout this step, I kept notes about the student-

athlete's thoughts, ideas, or any questions I had (Moustakas, 1994). This was a critical phase because I had to avoid subjective judgments and exercise judgement while consciously bracketing their own beliefs. (Creswell, 1998).

Then create codes. As recommended by Moustakas (1994), I extracted relevant information and eliminated participants' repetitive statements. Then, the interpreted data was divided into codes or meaning units (Moustakas, 1994). At this step, I used a combination of notes, thought maps, along with other techniques that helped the me connect with the data.

After that, I reviewed codes and organized into themes. At this step, I identified recurring themes, perspectives, and beliefs. I clustered horizons into themes. Clusters of themes were formed by combining units of meaning to identify significant themes (Creswell, & Poth, 2018; Moustakas, 1994). Then, the translated data was divided into meaning units so that each of the themes has one meaning only (Peoples, 2021). Finally, I presented the themes in a cohesive manner to describe the story of the data provided by student-athletes.

Individual Interviews Data Collection Approach

According to Moustakas (1994), the qualitative interview is a dynamic interaction in which words and discourse permit apprehension both within and beyond the interview setting. Lambert and Loiselle (2008) suggest that it is the expressed perspectives between the participants and researcher, in the form of opinions, attitudes, beliefs and feelings. Hence, individual interviews were a crucial methodological approach because of the engagement when seeking an in-depth understanding of a particular phenomenon.

I conducted semi-structured interviews in this study. It was my practice to epoche' before every interview to remove biases and presuppositions so that they wouldn't affect the interview and the research interpretation of the phenomena that I am examining (Moustakas, 1994). The interviews were influenced and guided by my philosophical ideology, which is constructivism.

Therefore, my interactions with student-athletes were structured. Furthermore, they allowed participants to provide deeper and more valuable responses to subsequent questions within an established focus. I prepared a line of questioning with major areas of interest and allowances to explore dialogue openings and other opportunities for obtaining unsolicited information (Hoffman, 2007).

During a phenomenological interview, participants are asked informal, open-ended questions and are encouraged to reflect deeply on their answers (Patton, 2015). I therefore asked participants open-ended questions, which allowed them to explain the phenomenon in their own words (Moustakas, 1994). Also, throughout the interview, a series of follow-up questions were asked periodically to provide deeper insight and detail (Creswell & Poth, 2018) to facilitate coding and theme identification.

While semi-formal interviews were conducted individually via Zoom video-conferencing application. To ensure a reliable recording of the interviews, Zoom application and an iPhone were used to record them. Each interview lasted approximately an hour and a half, with a fifteen-minute break in between. During this time, the student-athletes had the opportunity to share their thoughts, emotions, and experiences more freely than they would in a group (Guest et. al., 2017; Lambert, 2008). The Zoom video-conferencing interviews permitted observation, recording non-verbal forms of communication (gestures, body language, etc.), and transcription. Since student-athletes for this study were in Missouri, video-conferencing applications was necessary for interviewing because they allowed access to the participants from any suitable location (Heath et. al. 2018).

A note-taking process was used during the interviews to keep participants focused and to facilitate probing as the interview progressed (Patton, 2015). Using Zoom, I also transcribed the interviews after they were conducted. As I read the transcriptions, I made notes on the quality of

the information I received (Patton, 2015). Then I conducted member checks with participants to ensure reliability of the results (Moustakas, 1994). Listed below are the individual interview questions (Appendix E) that were asked during the interview.

Individual Interview Questions

1. Tell me about yourself and describe why you chose this university.
2. What do you perceive as engagement? SQ1
3. How do you perceive the level of engagement in online learning? SQ1
4. How do you perceive the effect (positive or negative) of student-faculty engagement as it relates to your academic achievement? SQ2
5. From a student-athletes perspective, how do you feel about the communication and interactions between yourself and your online instructor? SQ2
6. From a student-athlete's perspective, in your online course(s), how accessible is the instructor? SQ2
7. Describe the support offered by the online instructor. SQ2
8. Describe the interactions with the instructor when it comes to feedback in you online course. SQ2
9. Please describe how the engagement or lack thereof affects your academic achievement in online instruction. SQ2
10. Describe how student-teacher interaction influences academic achievement. SQ2
11. How does your athletic discipline affect your interaction with faculty? SQ2
12. What factors do you think determine the quality of student-instructor relationships or faculty support in the online instruction you receive? SQ2
13. How does student-faculty involvement and interaction affect your academic achievement as a student-athlete? SQ2

14. From a student perspective, describe the online educational environment? CRQ
15. Describe your competition season. SQ2
16. What are the requirements for taking classes to stay academically and athletically eligible? SQ2
17. How does your professor know that you are a student-athlete? SQ2
18. What accommodations does your professor offer to his/her student-athletes? SQ2
19. Describe your experiences of online learning during competition season? SQ3
20. How does the workload in your online program compare with traditional in-class instruction, especially as a student-athlete? SQ3
21. What do you think are the important factors determining the quality of online education? SQ3
22. From a student-athlete's perspective, what would you suggest to improve the quality of the student-faculty interaction experience? SQ3
23. In what ways could online education programs serve both your educational and athletic needs? SQ3
24. From a student-athletes perspective, how can student learning objectives and outcomes be achieved through online education? SQ3
25. From a student-athlete's perspective, how would you rate the overall quality of the online education you receive? SQ3

To build rapport, I began with one general question, question one. Before moving to topic-related questions, the first lead-in question will allow me to build rapport with the student-athlete and learn more details about her/his background.

Questions two and three are directed to participants to reflect on their perception of engagement. This question helped the student-athletes reflect on her/his knowledge and personal

meaning of the engagement concept. Therefore, examining the participant's general knowledge of the term helped to discern a more complete picture of their composite perception (Moustakas, 1994). Question four to eighteen was designed to get a general understanding of how engagement affects student-athlete's experience with online learning and their academic achievements. These questions allowed me to capture the participant perceptions of engagement. Additionally, they helped track and compare any inconsistencies or common ideas in their perception of the phenomenon (Patton, 2015).

The research sought to understand how student-athletes perceive their relationship with faculty and how their perceptions affect learning behaviors from the quality of the content. Questions twelve to thirteen encouraged the participant to consider all aspects of engagement and student-teacher interactions. These questions helped participants reflect on their experiences regarding feedback and communication and discuss more in depth about the phenomena of engagement with their instructors. The questions were created for the participants to express themselves openly (and vulnerably) about their student-instructor interactions and to expand on their ideas and thoughts in the interview.

According to Higbee and Schultz (2013), building relationships with instructors, faculty, and student peers is essential for sustaining an elevated level of academic engagement and achievement, especially for first-year students. Hence, questions four to eighteen were established to elicit unique outlooks on the student-athlete's perception of the quality of student-teacher relationships and faculty support in their online learning courses.

Finally, questions eight to four to eighteen led the participants into questions nineteen to twenty-five, as they represented the basis of the student-athlete's perception of the factors that contributed to the students' overall quality of online education and how this quality affected academic achievement. A major challenge for student-athletes involves creating a

consistent level of interaction with instructors that fosters genuine learning and growth (Beckowski & Gebauer, 2018; Hamlin et al., 2017). The interview questions, especially questions four and ten, exposed the events that shaped the participant's feelings and attitude about student-faculty engagement and their academic outcomes. These expository questions were imperative because, contingent on the student-athlete's experience, positive or negative, they may determine their attitude toward how they perceived online learning.

Individual Interview Data Analysis Plan

As analyzed and synthesized data, I employed phenomenological reduction, which encompasses bracketing, horizontalizing, organizing invariant qualities and themes, and constructing textural description (Moustakas, 1994). First, I bracketed my preconception of the study. Bracketing is the act of a researcher holding preconceptions/biases in abeyance to see all meanings and interpretations while describing a phenomenon (Moustakas, 1994; Peoples, 2018), therefore allowing the researcher to listen for full meaning behind the phenomena (Creswell, 2013). This is a critical phase because I am required to exercise judgement while consciously bracketing their own beliefs to avoid subjective judgements (Creswell, 1998). After extracting relevant information, I will scrutinize and eliminate redundant information. Then, the interpreted data was divided into meaning units so that each of the themes has one meaning only (Moustakas, 1994). The Moustakas' (1994) step-by-step guideline helped further analyze the data (p. 120).

Data was transcribed, and I used member checking to ensure accuracy. Transcribed data will then be manually transferred to Microsoft Excel for data analysis. First, I listed all relevant expressions grouping (Horizontalization). The use of horizontalization assigns equal value to each statement that represents a segment of meaning (Biedermann, 2019; Moustakas, 1994). I reviewed the data, determined irrelevant, repetitive, or overlapping information not related to

examining the phenomena. The remaining data represented the horizons, therefore described as the textural significances that are essential parts of the phenomenon (Moustakas, 1994).

After that, I clustered horizons into themes. Clusters of themes are formed by combining units of meaning to identify significant themes (Creswell, 2013; Moustakas, 1994). Then, the translated data was divided into meanings so that each of the themes has one meaning only (Peoples, 2021).

I identified and compared common themes and individual variations gathered from interviews and journals for validity. Next, I constructed individual textural description of the participants experiences assigning structural descriptions for each individual textural description. While the participants have their own experiences, each experience must be understood in relation to the others. Therefore, it is my responsibility to reconstruct lived experiences of the participants (Moustakas, 1994).

Lastly, I constructed a textual-structural description for each participant and synthesized the texture and structure into an expression and meaning. I created structures and included textual descriptions explaining the participant's experience. To understand and describe the experience of the phenomenon, this last step is important because it includes a synthesis of participant narratives collectively (Moustakas, 1994).

Journal Prompts Data Collection Approach

Journal prompts coupled with interviews are excellent options in data collection since student-athletes can elaborate and provide their enriching participant perspective (Friedemann et. al., 2011). Also, journal prompts offer the participant more time to articulate, draft, edit, and submit responses to the prompts. This process helped me examine in detail the answers to increase the reliability of the study. It also increased the study's validity when subjects respond accurately to the journal prompts. Student-athletes received a link via email to access journals

prompt in Microsoft forms. Participants were asked to complete eleven journal prompt questions and return within a week. The participants were also asked to write at least three complete sentences to each prompt. The journal prompt (Appendix F) questions are listed below:

Journal Prompts

1. Please tell me about yourself (Name, etc.).
2. Please describe your perception of the level of autonomy (feeling of choice and support) provided in the online class(es). For example, does the instructor encourage you to think independently, have a voice that carries weight, and constructively use any freedom like you would in a traditional setting? CQ & SQ3
3. In what ways does autonomy (feeling of choice and support) impact your academic performance? CQ & SQ3
4. What suggestions would you provide to improve the level of autonomy? CQ & SQ3
5. Please describe your perception of the level of relatedness (involvement and feeling of belonging) provided in the online class(es). For example, does the instructor create an environment where there is a sense of belonging, closeness, support from others, and understanding of the needs of student-athletes? CQ & SQ3
6. In what ways do you connect, both intellectually and emotionally to you instructors and course work? CQ & SQ3
7. How does relatedness (involvement and feelings of belonging) impact your academic performance? CQ & SQ3
8. What suggestions would you provide to improve the level of relatedness (involvement and feeling of belonging)? CQ & SQ3
9. Please describe your perception of the level of and competence (structure and feeling capable) provided in the online class(es). For example, does the instructor communicate

course goals and objectives and clearly explain assignments? Is the instructor responsive to student questions, and does he/she provide detailed feedback on assignments and exams? CQ & SQ3

10. How does competence or confidence impact your academic performance? CQ & SQ3

11. What suggestions would you provide to improve the level of competence? CQ & SQ3

Using the SDT, questions one to eleven represent exploratory questions that sought to understand student athletes' perception of the factors that influence the overall quality of online education and how student-teacher relationships affect academic achievement. The list of questions aimed to determine whether the online environment and instructors provide quality support to which student-athletes tend to be motivated, self-determined, and self-regulated. In addition, the questions assessed the degree to which the participants felt a sense of choice, belonging, and capability.

Journal Prompts Data Analysis Plan

Data was collected through Microsoft forms and then converted to Microsoft Excel for data analysis. I employed a five-step process to analyze and synthesize data. The steps included organizing data, reviewing, and exploring data, creating codes, revising codes for themes, and present codes in a cohesive manner (Moustakas, 1994). First, all interviews were recorded and later transcribed in Zoom for analysis (Creswell 2013). I prepared and organized data. This will include printing and reading participant journal prompts multiple times to develop an in-depth understanding of the participants experiences (Moustakas, 1994; Patton, 2014).

Then I reviewed and examined data. This was an opportunity for me to read and thoroughly examine data for an in-depth understanding. Throughout this step, I kept notes of their thoughts, ideas, or any questions you have (Moustakas, 1994). This was a critical phase

because I am required to exercise judgement while consciously bracketing their own beliefs to avoid subjective judgements (Creswell, 1998).

I then created codes. As recommended by Moustakas (1994), the researcher will extract relevant information and eliminate participants' repetitive statements. Then, the interpreted data was divided into codes or meaning units (Moustakas, 1994). After that, I reviewed codes and organized into themes. At this step, I identified recurring themes, perspectives, and beliefs. I clustered horizons into themes. Clusters of themes are formed by combining units of meaning to identify significant themes (Creswell, & Poth, 2018; Moustakas, 1994). Then, the translated data was divided into meanings so that each of the themes has one meaning only (Peoples, 2021). Finally, I presented themes in a cohesive manner to describe the story of your data provided by participants.

Data Synthesis

To validate the process of analysis, all interviews were recorded using an iPhone and subsequently transcribed for analysis using Zoom application. Data collected from the surveys and journal prompts were collected through Microsoft forms and then converted to Microsoft Excel for data analysis. The data collected from the interviews were transcribed and analyzed by first identifying codes and then identifying emergent overriding themes using qualitative data hand coding (manual via Excel) (Creswell & Poth, 2018; Saldana, 2021). I synthesized all data from surveys, individual interviews, and journal prompts using Microsoft excel, into coherent evidence that identified codes, subthemes/patterns, and overarching themes that provided answers to my research questions. After reading your data, I analyzed it line-by-line to code as much as possible and assigned the first set of codes. Despite being time-consuming and challenging, I preferred inductive coding to deductive coding because it reduced bias (Saldana, 2021). Each code was derived directly from the survey responses, individual interviews, and

journal prompts; there was no set codebook. While it was time-consuming and difficult, inductive coding was preferred over deductive coding because it reduced bias (Saldana, 2021).

In addition, I organized codes based on how they interrelate using the hierarchical coding framework (Saldana, 2021). I organized the codes according to the perceptions of student-athletes on various topics. Among the three levels of codes, the topic was described at the top, responses were specified at the middle, and the theme specific to that topic was detailed at the third (Saldana, 2021). While data analysis software may make data processes easier, all phenomenological studies do not fall in that domain (Peoples, 2021). Hence, I also opted for manual coding. Peoples (2021) argues that qualitative data analysis may limit a researcher's ability to focus on the text because it separates me from the data and hinders abductive reasoning. As a result of manual coding, I was able to streamline the analysis process and become familiar with the data more quickly.

Trustworthiness

While the legal and ethical issues discussed in this study will be negligible, this section discusses credibility, transferability, dependability, confirmability, and ethical considerations. These research qualitative characteristics, highlighted, ensured rigor, reliability, validity, and objectivity (Lincoln & Guba, 1985). This section was critical because it explained the actions taken to confirm a rigorous study. As it pertains to this study, trustworthiness supported the argument that the investigation's findings demanded attention (Lincoln & Guba, 1985). Trustworthiness helps people make rationalizations, accept research findings, guide individual choices, and can be used for future research (Stahl & King, 2020).

Credibility

According to Connelly (2016), credibility is a significant criterion used to establish trustworthiness: in laymen's terms, it means establishing the genuineness of the research study's

findings. Therefore, to encourage trustworthiness, snowball sampling and triangulation and informant feedback or member checking was utilized. Snowball sampling is the compilation of participants through recommendations from eligible participants who have contact to possible participants (Creswell & Poth, 2018). With snowball sampling, participants recruited persons they knew with the same shared/lived experience and informed them of the importance of the study. Additionally, I asked participants to encourage other possible participants.

The study included a combination of data collection methods: surveys, individual interviews, and journal prompts were used for data collection. Triangulation was employed to validate the emergent themes from coding interviews and surveys (Connelly, 2016; Stewart et al., 2017). Next, I compared interviews and surveys, observing, and identifying differences and similarities of themes. The use of triangulation helped confirm the participant's perspectives and experiences while comparing them, provided a context for their attitudes and behaviors.

Informant feedback (member feedback or respondent validation) is a method used by researchers to improve credibility (Stahl & King, 2020; Thomas, 2017). The technique established validity and reliability of a study in hopes that the subjects responded accurately to the questions on the survey and in the interviews (Stewart et al., 2017). During informant feedback, participants verified transcripts of interviews so I could examine the detail of the answers to prompts in interviews and surveys; the participants could verify transcripts to increase the reliability of the study (Thomas, 2017).

Transferability

Transferability provided the readers with evidence that shows how findings of qualitative research applies to other settings or perspectives with other participants (Lincoln & Guba, 1985). I facilitated the transferability achieved through detailed descriptions of the findings (Merriam & Grenier, 2019; Stahl & King, 2020). While researchers form the conditions for transferability,

they cannot guarantee transferability. However, it was my goal to provide readers with a thick and rich description of the lived experience of participants and the research site, allowing them to decide whether the findings are transferable (Creswell & Poth, 2018; Lincoln & Guba, 1985).

The reader of the research makes this judgment of transferability (Lincoln & Guba, 1985).

Dependability

Dependability refers to the stability of data and findings that can be replicated—thus permitting future researchers to repeat the work (Lincoln & Guba, 1985). Dependability is concerned with reliability in quantitative studies and can be attained descriptive procedures retrieved from the study to develop a comprehensive understanding of the methods and their effectiveness (Stewart et al., 2017). Dependability is an assessment of the quality of data collection, data analysis, and literature. My goal was to confirm that the findings were consistent with the raw data collected as I performed member checks. Again, this ensures that the findings are consistent and can be replicated by future researchers.

Confirmability

Confirmability ensures that data is not imagined or induced by the inquirer (Langtree et al., 2019). This criterion focuses on neutrality and warrants that research findings can be corroborated by readers, showing congruence among two or more individuals about data accuracy (Stewart et al., 2017). The criterion is based on the participants' narratives of their experiences rather than potential researcher biases (Patton, 2015). Hence, I used triangulation method which allowed for various data collection methods to verify valid findings (Creswell & Poth, 2018). I used the survey method, individual interview method, and journal prompts to gather information about participants' perception of the quality of student-faculty interactions in online education. To verify the phenomenon between participants, the triangulation of the three data collection sources was useful, along with conducting member checks (Daniel, 2018).

Ethical Considerations

This study generated information that included subjective accounts of experiences and private descriptions and details about participants' lives. Therefore, in addition to adhering to the guidelines of Liberty University's Institutional Review Board (IRB), participants' interests were managed with respect and dignity (Denzin & Lincoln 2005).

Therefore, adhering to IRB guidelines, each participant will receive a consent form (Appendix B) via an email communication, which they were asked to sign and return. The form informed the participants about the purpose of the study and the procedures. Specifically, the consent form also included that there were no known risks to their participation, clauses that voice confidentiality, assurance of the voluntary nature of the study, and the participant's right to withdraw from the study at any time. Lastly, participants were assured that their confidentiality was protected. They remained anonymous throughout the research and publication process unless they requested otherwise.

Participants were aware that interviews were recorded and used for the sole purpose of research, and that their identities were not and will not be revealed. Pseudonyms were used for names of all participants and universities to maintain the confidentiality and privacy of participants (Creswell 2013). Therefore, I ensured participants' anonymity by avoiding identifiable information in the analysis files by assigning fictitious names (Creswell & Poth, 2018). Lastly, data was stored and safeguarded using password protection for electronic files, all of which will be destroyed after three years.

Summary

The purpose of this study was to conduct a descriptive examination of the perspectives of first-year Division I student-athletes enrolled in online courses using social constructivism theory and self-determination theory. The aim of the study was to engage with the student-athletes and

document their perceptions of student-faculty interactions, and how faculty can offer more support and engage with American Division I student-athletes in online learning environments. Qualitative investigation is the appropriate approach to generate thick and rich knowledge from participants (Creswell and Poth, 2018; Moustakas, 1994). The goal was to use semi-structured, open-ended interviews surveys, and journal prompts, to dialogically engage with and encourage participants to invoke reasoning of thoughts and ideas about their experiences with online learning and their student-faculty experiences, rather than just providing their opinions (Brinkmann & Kvale 2005).

I used convenience and snowball sampling to recruit student-athletes who attended a Division I university in Missouri, participated in one or more collegiate sports, and were enrolled in one or more online courses. The interviews were recorded, transcribed, and coded based on emergent themes (Moustakas, 1994). Subsequently, theme-based data was examined and analyzed for connections and contrasts with literature, theories, and other relevant concepts to help understand the ways student-athletes perceive student-faculty engagement in online learning.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental phenomenological study was to understand the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. Student-athletes may not receive the support and engagement they need to succeed in online learning, which formed the basis of this study (Aicher & McNiff, 2017). By using a phenomenological design, I was able to focus on 11 student-athletes who were recruited through convenience and snowball sampling, all experiencing a common phenomenon and describing what they shared as they experienced it (Creswell & Poth, 2018). This chapter presents the research results of data analysis, includes a description of research participants, and responses to the research questions with developing themes. Individual interviews, surveys, and journal prompts were used to collect data. During the process of collecting and analyzing data, bracketing and member checking were employed to reduce bias, preconceived ideas, or predispositions that could affect the study results (Creswell, 2013; Moustakas, 1994). Also, a summary is provided to conclude the chapter.

Participants

Participants in this study were first-year student-athletes, male and female, between the ages of 18 and 22, enrolled in one or more online courses at an NCAA Division I university in Missouri, and in active season or training for their upcoming season. Student-athletes were selected by convenience sampling and snowball sampling, recruited with an introductory message, and after they agreed to participate in the study, each was verified a second time to ensure they met the study's conditions. This phenomenological study assigned a pseudonym to each participant to protect confidentiality. The demographic data of each participant are shown in the following table:

Table 1*Student-athlete Participants*

Student-athlete Participant	Gender	Age	Ethnicity	Athletic Discipline	Reason for Choosing University	Online course enrollments
Evelyn	Female	18	W	Women's track & field	Close to home/School's rank	3
Tom	Male	18	B	Men's track & field	Coach	3
Joe	Male	18	B	Men's track & field	Coach/Scholarship	2
Shante	Female	19	B	Women's tennis	Scholarship	3
Cody	Male	19	B	Men's football	Close to home/School's rank	2
Craig	Male	19	B	Men's football	Better Environment	3
William	Male	19	B	Men's track & field	School's rank	2
Mannie	Male	19	W	Men's track & field	Scholarship	2
Sharma	Female	20	H	Women's soccer	Scholarship	1
Kelly	Female	20	W	Women's track & field	School's rank	2
Monique	Female	20	W	Women's track & field	Scholarship	2

The participants in the study attended one of the Division I universities in Missouri between the ages of 18-22 participated in the study. Furthermore, student-athletes enrolled in one

or more online courses in different subjects comprise a moderately diverse group of participants.

Evelyn

Evelyn, 18 years old, is a first-year track and field student-athlete enrolled in three online courses. An in-state student-athlete, she receives no athletic scholarships. When asked about herself, what event she competes in, and why she chose her current university, Evelyn responded, “I am a small town a few hours away from the University, and I am a 400-meter dash and 4x4 relay runner. I chose my university because it was close to home, but it was also a Division I school, and I always wanted to compete at that level.” Evelyn is a first-year student majoring in Health Science and is currently enrolled in three online courses: Nutrition, Psychology, and Ethics. Evelyn's courses are both asynchronous and synchronous (Evelyn’s survey, July 13, 2022).

Tom

Tom, also 18 years old, is a first-year track and field student-athlete enrolled in three online courses at his university. As an out-of-state student-athlete, he receives a full scholarship. When asked about himself, what event he competes in, and why he chose the current university that he attends, Tom responded, “Long and triple jumper is my main event. I chose the university due to the coach at the time that recruited me. He was one of the only two athletes at the time to jump over 28 feet in the long jump and run under nine seconds in the 100-meter hurdles.” Tom is a first-year student majoring in Sports Management and is currently enrolled in these online courses: Nutrition, Sport Psychology, and Management. He stated that he enlisted in asynchronous and synchronous online courses for the flexibility of making his schedule and allowing him to more easily train and compete (Tom’s survey, July 13, 2022).

Joe

Joe, also 18 years old, is a first-year track and field student-athlete enrolled in two online

courses at his university. An international student-athlete, he receives a full scholarship. When asked about himself, what event he competed in, and why he chose the current university he is attending, Joe responded, “I traveled from outside of the United States to compete primarily as a triple jumper and sometimes long jump. I chose this university primarily because of the coach that recruited me. Yeah, he offered me a scholarship, so that was my primary reason for going.” Joe is a first-year student majoring in International Studies and is currently enrolled in Geography and Communication online courses. His academic advisors recommended synchronous and asynchronous online classes to have more flexibility in his schedule (Joe’s survey, July 13, 2022).

Shante

Shante, 19 years old, is first-year tennis student-athlete enrolled in three online courses. An international student-athlete, she receives a full athletic scholarship. When asked about what event she competed in and why she chose to attend her university, Shante responded, “I chose this university because of the dynamic tennis program, there was also a reasonable international student-athlete population, and the school had a great educational program. I wanted to be immersed in an environment with other Caribbean athletes.” Shante is a first-year student majoring in Business Management and is currently enrolled in Psychology, Management, and Marketing online courses. According to her, the classes were all asynchronous, and being a busy athlete, she enrolled in the online courses for convenience (Shante’s survey, July 14, 2022).

Cody

Cody, 19 years old, is first-year football player enrolled in two online courses at his Division I university. An in-state student-athlete, he receives no athletic scholarships. When asked about himself, what event he competed in, and why he chose the university he is currently attending, Cody responded, “I chose this university because it was close to home, about an hour

and a half, and I knew I wanted to compete at the Division I level from the time I was in high school.” Cody is a first-year student majoring in Public Health Science and is currently enrolled in a Management and Psychology online course. As an athlete, he chose asynchronous online courses for their convenience and flexibility (Cody’s survey, July 13, 2022).

Craig

Craig, 19 years old, is a first-year football player enrolled in three online courses. An out-of-state student, he receives a full athletic scholarship. When asked about himself, what event he competed in, and why he chose his current university, Craig responded, “I play football. I attend the university because it is peaceful, especially from my background, you know, where there are gangs and a not-so-safe neighborhood. So, I just wanted to be able to elevate, and I did not want to go somewhere that would make me lack focus. Not necessarily for the sports aspect, but more so, just so it allowed me to grow.” Craig is a first-year student majoring in Business and is currently enrolled in two online courses: Management and Health Science. For convenience, his academic advisor recommended he take asynchronous online courses so he could travel for his sport and complete assignments at his own pace (Craig’s survey, July 13, 2022).

William

William, 19 years old, is a first-year track and field student-athlete enrolled in two online courses at his university. An international student-athlete, he receives a full athletic scholarship. When asked about himself, what event he competed in, and why he chose his current university, William responded, “I compete in track and field short sprints ranging from 60 to 200 meters. I chose the university because it had diverse opportunities compared to the other universities offering scholarships. Also, it offered the major I was interested in, a pretty good business school.” He is a first-year student majoring in Health Science and is currently enrolled in two online courses: Communication and Sociology. For convenience, he takes asynchronous online

courses to complete assignments at his own pace without physically attending class during track season. (William's survey, July 13, 2022).

Mannie

Mannie, 19 years old, is a first-year track and field student-athlete enrolled in two online courses. An in-state student-athlete, he receives a full athletic scholarship. When asked about himself, what event he competed in, and why he chose his university, Mannie responded, "I compete in the high jump on the track and field team. I grew up few hours away, so I grew up a fan of the University. I was also offered an academic scholarship to study Journalism. So those things kind of fit together with me." He is enrolled in an online course in Communication and Journalism, both asynchronous classes, enabling him to fit his track schedule around them (Mannie's survey, July 15, 2022).

Sharma

Sharma, 20 years old, is a first-year soccer student-athlete enrolled in one online course at his Division I university. An international student-athlete, she receives a full athletic scholarship. When asked about what event she competed in and why she chose the university, Sharma responded, "I attend this university because I was offered a full scholarship to play soccer. Well, where I am from, it is called football." Sharma is majoring in Social Work and is currently enrolled in an online Psychology course. With the added flexibility and convenience of online courses, she enrolled in the asynchronous class (Sharma's survey, July 15, 2022).

Kelly

Kelly, 20-years old, is a first-year track and field student-athlete enrolled in two online courses at her Division I university. An out-of-state student-athlete, she receives no athletic scholarships. When asked about what event she competed in and why she chose the university, Kelly responded, "I am a long jumper at my university. I knew I wanted to attend this university

after I toured the campus for my visit, and just like I fell in love, I didn't want to leave or to go home. The university was a nice place, so I ended up going there.” Kelly is a first-year student majoring in Health Science and is currently enrolled in asynchronous online Nutrition and Psychology courses. With a busy track and field schedule, she took online courses that allowed her to travel and work out conveniently (Kelly's survey, July 18, 2022).

Monique

Monique, 20 years old, is a first-year track and field student-athlete enrolled in two online courses at her university. An international student-athlete, she receives a full scholarship. When asked about what event she competed in and why she chose her university, Monique responded, “I participate in women's track and field, more specifically the 60, 100 meters, and the 200 meters at the university. I was recruited from a small Caribbean Island. I chose this university because of the dynamics of the program, and I loved the athletes' chemistry with each other. The dynamic and the atmosphere with your coaches and teammates is essential. I knew I would be able to get a good education and do well in my sport.” Monique is a first-year student majoring in Health Science and is currently enrolled in an online Psychology course. Since the in-person class option ran concurrently with her training times, the asynchronous classes were the only option available for that class (Monique's survey, July 22, 2022).

Results

The purpose of this transcendental phenomenological study was to understand the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. A central research question and three sub-research questions guided this study. An analysis of the data was conducted by using surveys, individual interviews, and journal prompts to compile data. It is important to note that no participants withdrew from this study, and all completed the surveys,

participated in individual interviews, and completed a journal prompt. The data collection and analysis were conducted using the epoché and phenomenological reduction methods (Moustakas, 1994). The clustering of themes and textural descriptions was also assisted by Saldaña (2021) manual coding techniques.

The transcribed surveys, interviews, and journal prompts were read and reread carefully for accuracy and validity. In gathering, analyzing, and synthesizing data, I used the member checking technique to reduce presuppositions, bias, or feelings, using the epoché to “see” the participants' perspectives. Using horizontalization, each statement from all three data sources was given equal value, and repetitive statements were removed (Moustakas, 1994). Through phenomenological reduction, every statement was examined for potential textural meaning and coded using manual inductive coding (Moustakas, 1994, Saldaña, 2021). As a result of this analysis of the interviews, journals, and focus group, initial codes were developed into open codes. A total of three primary themes and eight subthemes emerged from open coding. Table 2 presents the themes and subthemes for all triangulated data sources.

Table 2

Themes, Subthemes, and Codes for all Triangulated Data Sources

Theme 1: Course Dynamic	
Subthemes	Codes
Online Learning Environment	Activities, attendance and grades, content, convenience, engagement, surveys, flexibility, interaction, guidance, learner type, reminders, structure, workload
Need to Connect	Academic achievement, activities, engagement, feedback, guidance, instructor support, interactions, level of confidence, motivation, participation, relatableness
Theme 2: Student Instructor Involvement	
Meaningful Interactions	Academic achievement, depends on the professor, engagement, feedback, guidance, instructor support, interactions, level of confidence, motivation

Dual Responsibilities	Academic achievement, accommodations, depends on the professor, flexibility, guidance, instructor support, level of confidence, motivation, outsourced help from tutors, relatableness, sense of belongingness, student-faculty relationships
Theme 3: Quality of Student-Instructor Interactions	
Support	Academic achievement, accommodations, content, depends on the professor, engagement, feedback, guidance, instructor support, interaction, sport related, relatableness, reminders, sense of belongingness, stigma
Impact on Academic Achievement	Academic achievement, activities, content, dependent on professor depends on the course, different learning abilities, engagement, expression of oneself, level of confidence, instructor support, interaction, learner type, workload, participation, structure, student-faculty relationship

After one-on-one interviews with participants and after reading their surveys and journals, it was evident that the components of self-determination theory affected the students' ability to engage and interact with their instructors in online learning. Based on the codes in Table 2, the student-athletes ability to engage in online learning was influenced by self-determination theory; the actualization aligns with theory. The codes mentioned involved aspects of perceived autonomy (providing clear instructions and guidance), relatedness (making the course interesting, sense of belongingness, one-on-ones, participating actively in activities), and competence (building confidence, getting a good grades, and receiving immediate feedback) (Handelsman et al., 2005, p. 187). The student's responses and codes indicate that student's active pursuit of excelling in their online courses are grounded in this theory of motivation, self, and mastery/performance (Jacobi, 2018).

Online learning content was delivered through the learning management systems, Blackboard and Canvas. In asynchronous or blended courses, students would meet via video conferencing software such as Zoom, Google Meet, or Teams to conduct face-to-face instruction sessions, student conferences, student group work, and individual meetings. Student-athletes

have benefited from the current shift from the traditional classroom setting to virtual instruction; it provides opportunities for student-athletes with different learning styles, accommodations, and flexibilities (Broffman et al., 2022; English et al., 2022).

Students-athletes' responses to the survey question about their perception of quality online education revealed several codes. As shown in Table 3, engagement, feedback, and interaction were the three most mentioned codes in the survey responses. Another set of codes that emerged included guidance, content, and instructor support. According to Joe, "I define quality online learning as interaction, engagement, and relevant content that will keep me interested in the class" (Joe, Personal Conversation, July 17, 2022). Samantha shared a similar perspective. The quality of online learning, according to Samantha, "consists of engagement, detailed instructions, good content, genuine interactions, and feedback" (Samantha, Personal Conversation, July 14, 2022). Tom, however, believes that quality online learning requires "consistency in learning objectives, visual aids, and time for one-on-ones" (Tom, Personal Conversation, July 13, 2022).

Students' views agree with those of other scholars who have argued that online education should not only focus on course contents (course design, syllabus, materials, evaluation methods, assessment methods, and faculty feedback) but also should reflect elements of traditional face-to-face classes (Keelson et al., 2022). To achieve quality online learning, it is important to identify and understand the relevant higher education community (Moorhouse & Wong, 2022). Thus, it was relevant to the research to describe and understand how student-athletes perceive online education quality.

Table 3

Codes to the Participant's Idea of Quality Online Education

Codes	Student(s)
Activities	Cody, Evelyn, Sharma
Guidance	Tom, Cody, William, Samantha
Engagement	Cody, Craig, Joe, Kelly, Mannie, Monique, Samantha, Sharma, Tom
Feedback	Craig, Evelyn, Mannie, Monique, Samantha, Tom, William
Flexible	Evelyn, Cody, Sharma
Interaction	Joe, Kelly, Mannie, Monique, Sharma, Tom
Instructor support	Tom, Cody, Sharma, Kelly
Relatableness	Joe, Shante, William
Content	Joe, Kelly, Mannie, Samantha
Self-paced	Evelyn, Mannie
Sense of Belongingness (Inclusivity)	Cody, Craig, Kelly
Visuals	Samantha, Monique
Instructor Support	Kelly, Shante, Tom

Course Dynamic

The theme of *course dynamic* emerged from the survey questions and the individual interviews. This research defines online learning environment as the atmosphere, experiences, and perceptions of learners. The theme was formed from the following subthemes: *online learning environment* and *need to connect*. In the interviews, the student-athletes were asked to describe their online learning environment (See Table 4). In most cases, student-athletes reported their online learning environments were primarily asynchronous; they did not have to log on to the computer simultaneously with their instructors or classmates to attend class. However, they were required to meet specific deadlines for their reading assignments and learning activities.

Four out of the 11 student-athletes reported participating in at least one synchronous learning session per week within their blended learning class.

Table 4

Participants' Responses to Online Course Structure

Student-athlete Participant	Only Asynchronous	Only Synchronous	Blended Combination of Asynchronous and Synchronous
Evelyn	X		
Tom	X		
Joe	X		
Shante	X		X
Cody	X		
Craig	X		X
William	X		X
Mannie	X		
Sharma			X
Kelly	X		
Monique	X		

Online Learning Environment

The subtheme *online learning environment* describes the dynamics of the student-athletes online-based environment, type of platform, activities integrated into the platform, digital solutions that enhance the learning experience, and other components imbedded in their experience. Understanding the environment helped identify whether student-athletes receive the support and engagement they need to succeed in learning and whether the environment meets

their needs while challenging them to enhance existing skills, interests, and knowledge of the course's content. In a survey, students were asked about their perceptions of the quality of online learning. Table 3 summarizes their expectations. Students' responses were strongly related to engagement, feedback, and interaction (See Table 3). Therefore, I can compare their expectations and experiences through the subtheme of *online learning environment*.

To further understand how student-athletes perceive the effectiveness and level of engagement in their online learning courses, questions were included that related to the student learning experience. The non-traditional classroom's limited face-to-face interactions required questions to be replaced or improvised by formats integrated online. Information was gathered about student learning experiences, working at different paces, time management, and their perception of engagement.

Shante, Craig, William, and Sharma were the four of the 11 participants who mentioned that they were enrolled in an online course that was a blended learning course comprised of a synchronous and asynchronous component. The other seven students were enrolled in an asynchronous course only. A few student-athletes admitted that they were encouraged by their academic advisor or coach to take online classes because of added flexibility or convenience (Tom, Joe, Shante, Cody, Craig, and Monique). The others made their own decision to enroll in the online class(es). Shante, who considers herself an autonomous learner, and who has had prior online learning experience, explains:

My online educational environment is currently taking one blended series class so far.

We meet once per week virtually for about 30-45 minutes for a lecture, and questions are sometimes addressed during those sessions, which was very helpful. But if the professor talks and talks without including the class, I will use the time to complete assignments.

The course material is available for me online to complete, sort of self-paced, but we

have reminders which are convenient. We have discussion boards, and a majority of the assignments involve a lot of papers. So, we really do not have one-on-ones, I guess unless someone requests. I am okay with the self-paced learning, but it is a lot of busy work (Samantha, Personal Conversation, July 25, 2022).

Tom, who was in asynchronous online classes and has experience in online learning, stated:

We had open book exams, which were challenging at the same time. We also had a lot of writing assignments, but I managed and did well academically. There is a heavy workload in online learning. I would say online learning is more self-paced but still has a time limit and timeframe (Tom, Personal Conversation, July 13, 2022).

Contrary to Shante and Tom, Craig came to his university with little online learning experience.

He asserted:

I mean, it's convenient; it just depends on the course. In my psychology class, the workload is much heavier for sure, and I don't know if it's because you know it's virtual, so they flood misinformation on us like the concept of you doing it online you don't have to come here physically, so you're you got more time. So, I might have three or four assignments more than my in-class courses (Craig, Personal Conversation, July 13, 2022).

With a very stern look he also mentioned, “And that's an undergrad. My workload is definitely more challenging in the online courses man, writing so many writing papers. However, like my health science class, we have to engage in discussion boards to three people with back-and-forth exchanges” (Craig, Personal Conversation, July 13, 2022).

Some students like William and Craig, who had no prior online learning experience, stated that online learning was flexible and convenient even though it's demanding and requires more time management. They appreciated that he did not have to rush from practice to class.

However, during the interview, he stated that his sport was a priority, and online learning was not preferred. William conveyed:

I usually just do the work before and try to get as much work as I can before and after competition, and I really don't pay too much attention to it because I am so focused on competition. You know I don't put education first. And if I miss an assignment, I do it at the hotel when I have free time, although it's not much free time since we're, you know, we have our track schedule already laid out for us (William, Personal Conversation, July 13, 2022).

William enrolled in online courses to have more time to train for track and field. He mentioned that online courses require less work and would require less effort; unfortunately, it turned out to be the opposite. It is apparent that the students rely on their online courses for the added flexibility. William, who is also in a blended learning class, expressed:

It is flexible, but it is very boring. It was depended on the course and professor really. We have a lot of assignments. I struggled a bit, especially to pay attention. Sometimes the topics are really good for discussion, or you are just attending for points. I always want to sleep watching the lecturer speak or while watching recordings. And I struggle, a little bit, with tests online because I was not paying attention to the content, and it is confusing. And I struggled a little bit with tests online because I was not paying attention to content. It is confusing because I am self-teaching myself (William, Personal Conversation, July 13, 2022).

McNiff and Aicher (2017) note that online courses and programs are often highly rated because of the convenience and flexibility they offer, and there was a consensus that online courses were convenient among student-athletes.

Higher education has seen a shift from the traditional classroom setting to online delivery, providing opportunities to students with different learning styles. Online learning, however, may not be ideal for all students since everyone learns differently. Depending on the course and the student's preferences, courses with no traditional classroom characteristics may negatively affect learners' engagement and progress. Like William, Joe admitted that “I almost failed my geography course. Quizzes I took on Blackboard were fairly easy; however, when I took the exam at the testing center, I was not prepared” (Joe, Personal Conversation, July 18, 2022).

Students like Warren and Joe may need additional support because of the structure and content of the virtual classroom. Their comments illustrate how ill-prepared they are for managing an online course and how little autonomy they have. Based on the above responses, Shante excels in online classes from her prior online learning experience, discipline, and learning style. As a result of Shante's discipline and her understanding of how online courses work, she requires less support. Feeling a sense of autonomy, Shante identified with the value of engaging in the behavior (i.e., completing her assignments). Shante internalizes the reasons for her actions and assimilates those rationales into her sense of self. Then, her actions become self-determined since she internalizes the values associated with completing her assignments. Unlike Shante, participants like Craig, William, and Joe have little experience with online learning and may initially need someone to guide them on how best to behave and perform.

Although online classes are flexible, student-athletes must have a degree of autonomy to complete coursework while balancing dual careers. Student-athletes believe that online learning is easier and requires less time than face-to-face courses. Even though they provide flexibility and convenience, students must still demonstrate self-discipline to study, prioritize efforts from

most to least important, manage their use of time, and prepare sufficiently for tests regardless of course delivery.

Need to connect

The *need to connect* was another theme that emerged from individual interviews and journal prompts. The need to connect refers to the student-athletes' perception of the level of engagement and interaction in their online course—socialization. Table 3 shows the students-athletes' responses to the survey question about their perception of quality online education. The responses also revealed that *engagement*, *feedback*, and *interaction* were the top three codes mentioned, followed by *guidance*, *content*, and *instructor support*. In an online course, student-athletes communicate primarily through written communication with classmates and professors. Emails and the school's online education portal allow them to communicate with professors and classmates. In addition, students use the portal—Canvas or Blackboard—to complete and submit coursework. Students can engage in virtual interactions with classmates and professors during videoconferences, particularly during synchronous sessions, though these conferences cannot replicate the dynamics of an in-person class.

The student-athletes were asked how they perceive the level of engagement and interaction in their online classes. Kelly, who is enrolled in two online asynchronous classes, reflecting on her experiences, acknowledged, “Honestly, I like the different group activities, discussion boards where you can interact with others and speak freely with respect and communication from instructors and student checkups.” She also said she could speak freely and respectfully on her discussion boards (Kelly, Personal Conversation, July 19, 2022).

Motivating students to engage in online courses can be explored using Self-Determination Theory (i.e., reaching levels of identification and integration) (Deci & Ryan, 1985; 2000). An individual who feels a sense of relatedness, competence, and autonomy

participates because of identification. Kelly is engaged and motivated by engaging in collaborative activities; this suggests that she experiences a sense of relatedness (i.e., a sense of belongingness or connectedness to her class). A sense of relatedness can be identified through one's expression of care and respect for classmates and instructors (Jacobi, 2018; Ryan & Deci, 2000).

For Kelly, discussion boards, along with other activities, were a means to connect, but for Monique, the discussion boards were the only engagement activity for Monique, who shared:

Mostly, you get interaction or engagement through discussion boards in an online course, that would cover the engagement. There was less engagement in the online setting, of course, less than traditional classroom. It was difficult to interact or feel a sense of engagement through emails or through self-paced assignments (Monique, Personal Conversation, July 14, 2022).

Kelly and Monique both expressed that they used discussion boards to engage with classmates and their professor. Kelly mentioned that she was able to speak freely, suggesting a perceived sense of competence. According to research, discussion boards in concert with other activities boost perceived competence and thus motivation. A balance among requirements, freedom in online discussions, relevant content, and effective feedback must be maintained (Jacobi, 2018; Ryan & Deci, 2000).

Some students suggested that the level of engagement and interaction varied depending on the class and professor, which seems obvious. Evelyn, who is enrolled in three online asynchronous classes, expressed:

I feel like it varies. Some classes required us to do weekly assignments, which I felt I was a little more engaging because then you are paying more attention throughout the semester, because you know you have certain deadlines. Versus some of them, it was just

like more self-paced, and just make sure you finished the course by the end of the semester. I felt like I was more on my own. So, it varied on the course setup and also the instructor (Evelyn, Personal Conversation, July 14, 2022).

Joe agreed with Evelyn and stated:

One of them was minimal as in one of them, it was you could, if you wanted to, you could complete a five-month class in like two months because you just read, do the readings, complete the assignments. There was no engagement and very few discussion boards. That was the geography class that I almost got an F grade in (Joe, Personal Conversation, July 18, 2022).

Joe chuckles and further explained, “And that's it, and that's how you pass the class. But I took another class that was very different, where there was a more rigid schedule with reminders and announcements. So, you couldn't complete the class quicker than the semester. It felt like, even though I was doing it from home, it felt like I was still involved in the class. You post and reply to discussion boards. I just felt a bit more like I was in a class because sometimes learning is from other students. Very different than the geography class” (Joe, Personal Conversation, July 18, 2022).

Many of the students reported that most of the courses were flexible (self-paced) but did not offer instructional options and direction while conveying choice (autonomy). Cody, Joe, and Warren reported not knowing what to learn. They are assigned readings and had a challenging time deciding which content would be relevant to the exam or quiz. It is the individual's responsibility to determine what they need to learn, in many self-paced courses. It is possible that Joe spent lots of time learning irrelevant information while ignoring the most relevant concepts or he didn't study enough.

Student-Instructor Involvement

Student-instructor involvement is the second theme that emerged from the interviews and journal prompts. It refers to the impact of student-instructor interactions or lack of interaction in online classrooms that affects engagement. The theme is further divided into two subthemes: *meaningful interactions* and *dual responsibilities*. According to Stone (2019), quality online learning involves aspects of engagement. Most academic research stresses the importance of student-teacher interactions, student-instructor relationships, and instructor-involvement (Stone, 2019; Vlachopoulos & Makri, 2019).

Meaningful Interactions

Meaningful interactions appeared as the student-athletes discussed their experiences of student engagement in online learning. According to online learning literature, online learning among students and instructors should be interactive and engaging to promote higher-level learning and social presence, and to illuminate meaning and promoted academic success (Stone, 2019; Vlachopoulos & Makri, 2019). The students-athletes' responses to quality online education (Table 3), also correlate with scholars who suggest that interaction and engagement are critical to creating a sense of presence and a sense of community for online learners, and to prompting transformational learning. (Personal interviews, 2022). The students were asked several questions during the individual interview and journal prompt about their experiences of student-instructor relationships, engagement, communication, and support. Mannie stated, "Yeah I think it varies depending on the professor, but I think overall they did a good job of giving me constructive feedback, and one of my instructors responded within 24 hours" (Mannie, Personal Conversation, July 19, 2022).

Like Mannie, Evelyn found:

When my professor is involved with the class even though it is a self-paced class, it makes them interact and things like that; it makes us interact with them, so that we can be

engaged, and it's not just like an individualized course where you're on your own. And then, when they're very responsive, you have any questions you can shoot them an email, and they respond quickly. That's helpful instead of feeling like you are on your own with it. So, interacting when they also interact with us in discussion boards and activities engages me. Of course, this did not happen in all courses. it depends on the professor (Evelyn, Personal Conversation, July 14, 2022).

In her journal prompt, Erika also indicated that their involvement allowed her “to feel like my instructors and classmates care about the outcome of the class which motivates me to do well” (Evelyn, Journal Prompt, July 13, 2022). Agreeing with Evelyn, Tom, further explained:

The most part, yeah. If I couldn't get in contact with my direct instructor, I could get in contact with the teacher's assistant and nine times out of 10, either way, you're going to be able to get in contact with somebody. Some professors are very dedicated and communicate. They'll go as far as to give you their personal number, you know (Tom, Personal Conversation, July 13, 2022).

Tom had two of three classes where he experienced meaningful student-instructor interactions. He believed:

The discussion between the professor is pretty much important. I'm a visual learner, you know, they'll make it a picture. You know if I tell them I need an example, they will provide it to me. They do communicate well, and they respond well to different questions and requests; that helps build my assurance (Tom, Personal Conversation, July 13, 2022).

Like Evelyn and Tom, a few of the other students also experienced the transactional nature of the interactions and relationship with their instructor, which is significant to their learning experience. Evelyn and Tom stated that their professors were responsive and supportive, which kept them engaged, included, and confident. Their statements suggest that their

educational needs are being met, enabling them to be self-regulated and self-determined. According to the self-determination theory (SDT), learning should support individuals' innate needs for autonomy, competence, and relatedness. In such environments, students are intrinsically motivated to engage in activities, perform well, and persevere (Ryan & Deci, 2017).

Some students recognized the importance of meaningful interactions; a few of them experienced this with their professors. Regrettably, it was not the case for most students.

According to Monique:

The level of engagement is, of course, less than traditional classroom setting, at least for the classes I took online because it's kind of difficult to interact with a professor, where the assignments and lessons are given and then you have to do those on your own, so it's not like you're seeing professors or even students in time real time. Mostly you get interaction or engagement only in discussion boards in an online course. (Monique, Personal Conversation, July 14, 2022).

Cody also found:

Sometimes I lacked confidence in my ability to complete assignments because the guidance was not there, I think our outline and expectations were not clearly communicated and frequently to me. It would sometimes take my professors and I many emails back and forth before I can get an explanation (Cody, Personal Conversation, July 13, 2022).

When instructors and students do not communicate effectively, students experience frustrations and misinterpretations in their learning experiences and are challenged in their social/emotional development. Nonetheless, Monique, Cody, and William agreed that they did not experience teacher involvement to remain engaged in their online courses. According to Monique, "I will complete my work regardless, but it sort of encourages me when I get that good interaction with

a professor so I can be more interested (Monique, Personal Conversation, July 14, 2022).

Importantly, Monique considered herself an autonomous learner, while William depended on his professor for guidance. The study shows that both autonomous and non-autonomous learners yearn for interaction with their professors. For example, Mannie stated, “sometimes that engagement or interaction professors give, that encouragement is like wow, just makes you more interested in the class and helps you understand from a different perspective” (Mannie, Personal Conversation, July 19, 2022).

Dual Responsibilities

Students mentioned that they had difficulty interacting with their professors, highlighting the benefit of this research. So, it was important to investigate whether athletic discipline affected their ability to connect with their professor. During their student-athlete careers, student-athletes occupy dual roles as students and athletes and must maintain double identities, especially those on academic scholarships. They may find it hard to meet outside of the online classroom or engage with them because of conflicting demands of a dual identity. Nonetheless, time for engagement does not have to be in-person; there are options for online engagement. Cody explained:

While I do have a busy schedule, I made time to meet with my professor for a one-on-one, if I needed to. In most cases I preferred virtual meets and so did they. So ultimately it was their decision, really it was dependent on a professor to provide a time (Cody, Personal Conversation, July 19, 2022).

Like Cody, Evelyn had positive results when she reached out to professors. She reveals:

I remember one time I had to reach out pretty quickly to ask about an assignment because I was traveling for competition within a few days. They responded within the 24-hour

period with their office hours, so I think, for the most part the professors that taught the online courses did a really good job (Evelyn, Journal Prompt, July 13, 2022).

The two student-athletes, although they didn't have athletic scholarships, were very busy because they aspired to make the travel team and be awarded a scholarship.

Sharma, however, a student-athlete who receives an athletic scholarship, reported, “while it can take professors 24-48 hours to respond with a time to meet, most times they are willing to meet. However, I must request it; it is not offered. I prefer in-person classes for that aspect because it’s a faster response.”

William, who also receives an athletic scholarship, voiced:

My schedule, unfortunately, did not work for one of my professor’s times. However, he provided an alternative; he sent me a recording from his in-person class so that I can go back and rewatch content. I think that the accessibility to going over the lectures and the online tools, I think those were helpful for me. So rather than asking to meet every time, I just request class recordings (William, Journal Prompt, July 13, 2022).

So, despite the student-athlete’s busy schedules and their scholarship status, they tried to make time to meet with their professors or come up with alternatives.

Social settings and social relationships can also play an important role in self-determination (Ryan & Deci, 2017). A sense of belongingness is critical in the development of self-determination. By cultivating close, genuine relationships with instructors, one can improve his or her self-determination.

Quality of Student-Instructor Interactions

The third theme that emerged from the interviews and journal prompts was the *quality of student-instructor interactions*. The theme describes how teachers and students interact in their online classroom relationship, how they support one another, and how these affect their

academic achievement. Across the theme, two subthemes exist: *support* and *impact on academic performance*. Thota (2015) suggests that online learning environments should facilitate collaborative learning processes, including interaction and discussion. To promote collaborative learning, teachers must engage students intellectually and emotionally in activities that build community and establish an engaging tone and atmosphere (Nash, 2022).

Support

The subthemes discuss the support and accommodations or the lack thereof student-athletes receive from their professors. Given that student-athletes have dual responsibilities, instructors may need to provide additional assistance or support. The terms used during the individual interviews to describe the type of support offered by instructors are *resource*, *strategy*, *extension*, and *one-to-one*. According to some student-athletes, the support enabled them to achieve academic and athletic success; it promoted engagement in learning and addressing any barriers to learning. During the interviews, student-athletes were asked if they let their professors know about their dual responsibilities. Tom was one of those student-athletes that notified his professor in a written email before the class started. During the interview he stated that:

One of my instructors invited me to come to his office hours. When we met, he told me he remembered my email and we discussed my sport, and it made me feel comfortable. Kind of broke the ice. Some professors like to see when student-athletes are trying, you know. When they see that you are trying hard, they would be more inclined to work with you and assist you. If they see that I am willing to learn, they will help (Tom, Personal Conversation, July 13, 2022).

Monique who also told her professor that she was a student-athlete, stating, “if I need extra help they would accommodate me” (Monique, Personal Conversation, July 14, 2022). Sharma also stated, “yes. I let them know in an email in case I have any conflicts beforehand so we can make

arrangements, as I am also instructed by my athletic advisor” (Sharma, Personal Conversation, July 14, 2022). She further explained:

I feel more comfortable, but I travel a lot and I have a hectic schedule, so they accommodate me. To achieve those standards in the classroom and not suffer through if I am lagging in the classroom, sometimes they will reach out to me and ask if I need additional assistance. I take advantage of it because I need to be eligible to play soccer. They allow me to take exams earlier or later as needed or they allow me to have more time to submit assignments. And they readily offer their office hours as needed (Sharma, Personal Conversation, July 14, 2022).

Mannie, who stated that he did not need accommodation, said, “while I do not have experience with needing any additional support as a student-athlete, my teammates have expressed that professors think student-athletes are lazy and privileged” (Mannie, Personal Conversation, July 19, 2022). Some students resist telling their instructors that they are athletes because they do not want to be an athlete who expects favors. Craig, for example, in his interview, admitted that he avoids telling his professors that he is a student-athlete. He stated, “I may be quite the opposite, because they think being a student athlete that, you know, everybody is holding you up on this pedestal” (Craig, Personal Conversation, July 14, 2022).

William stated:

I think, initially, that they don't believe I am interested in the course because I am an athlete and maybe it impacts my effort. I think, initially, I am not sure if they believe that I am fully interested in the class or I am just taking it to pass. Student-athletes carry a lot of stigmas. But I have a separate conversation with them and let them know I feel like that their interaction with me helps, especially when they're understanding, because the other Professor wasn't understanding (William, Personal Conversation, July 13, 2022).

Evelyn stated, “Because I know some professors have a stigma about athletes and may not accommodate our schedules. Most of the time that's not the case; we're trying to work with them” (Evelyn, Personal Conversation, July 14, 2022). William found that communication is the is critical and being flexible can be a major factor in his success. The interactions can help and he hopes that the instructors know that he is putting forth effort.

Impact on Academic Achievement

The second subtheme that emerged is the *impact on academic achievement*. This theme emerged from student-athletes' responses to questions as they described their experiences interacting with professors in online classes. Students' responses indicate that how they interact with their professors is directly related to their academic success and their ability to stay interested. Instructors' willingness to assist, support, accommodate, and interact with students matters to their achievement. Throughout the interview Evelyn stated multiple times that she was an autonomous learner and, “Luckily, the lack of interaction and engagement aspect did not really affect me as it did other students, but I know it can probably affect other athletes not being able to interact and engage with their professors” (Evelyn, Personal Conversation, July 14, 2022). She went on to explain how she wanted to be more engaged with her professors due to the impact that it has on a student’s achievement.

Mannie and Kelly who are also autonomous learners both had similar statements. Kelly explained:

I think it would probably just keep me more motivated because I wouldn't know that I would have certain things I needed to do in the course instead of just kind of doing it on my own. So maybe the investment and the interest would have higher results. I wanted to do well and of course I feel like having that interaction and engagement would probably increase my grades. So, if interaction and engagement was increased between me and the

instructor, I would have some interest in my hard classes (Kelly, Journal Prompt, July 18, 2022).

Joe—unlike Evelyn, Mannie, and Kelly—relied on student-instructor relationships, interaction, and engagement. He clarified, “I took some of those classes, where it was self-paced, but I still look forward to that interaction, even though it's online, I still feel like there could be some sort of interaction. Yeah, and I literally didn't know who the professor was. I failed my geography because there was no engagement. I was not interested in the class. No one to push me or encourage me or interact with me” (Joe, Personal Conversation, July 18, 2022).

Engagement limitations can cause students to lose interest in their learning experiences and affect their academic performance. According to Ryan and Deci (1985) the SDT, student autonomy is a characteristic of quality student-instructor interactions and engagement. The quality of student-instructor interaction motivates and empowers students, leading to increased engagement, and therefore enhanced academic achievement.

Outlier Data and Findings

This section contains one surprising finding. Six of the 11 student-athletes specifically mentioned the word “stigma” or alluded to the idea that professors do not like student-athletes. The literature review did mention the possibility of student-athletes experiencing stigma in their classes, and other research has mentioned stigma, but the studies were few and not as detailed (Clayton et al., 2015; Steele et al., 2020). However, the number of participants expressing their experience with stigma or stories about other teammates was surprising. For this research, over 50% of the student-athletes mentioned stigma.

Stigma

Craig provided some examples without the need to probe. Despite the requirement for student-athletes to inform their professors that they are athletes, he often refused unless the

situation warranted an accommodation. In his first experience he described:

I feel like they were harder on the athletes. You know and I've had a professor give me a poor grade on something just based off my being an athlete. They make it harder for the athletes so it's not just like peanuts. I think we definitely have a harder to engage with them, or just even a way to grade our papers. One actually wanted football tickets out of me (Craig, Personal Conversation, July 14, 2022).

He further explained that, "instructors think that we are lazy and do not trust that we will excel. I know that we are talking about online learning but for my in-person classes, when I had to physically attend, I didn't dress like the other athletes, I mean I used to dress up but not in athletic wear" (Craig, Personal Conversation, July 14, 2022). Evelyn stated, "some professors may have a stigma about athletes and may not accommodate based on our tight schedules. Most of the time we're trying to work with them" (Evelyn, Personal Conversation, July 14, 2022).

Also, Tom indicated, "If your professor knows you're an athlete or already knows you because you had previous conversations, they might be able to send you those slides from the lecture you know. Some professors don't like athletes already. So, if you go to them, you know, you show you can be proactive and show them that you care" (Evelyn, Personal Conversation, July 13, 2022).

Research Question Responses

In this study, I examined the perspectives of first-year student-athletes enrolled in one or more online courses attending Division I universities in Missouri. This transcendental phenomenological study consisted of one central research question and three research sub-questions. The research questions were intended to describe the student-athletes shared experiences related to factors that affected academic achievement as I examined the quality of student-faculty interaction in online education. The three themes identified during data

analysis—(a) *course dynamic*, (b) *student-instructor involvement*, (c) *quality of student-instructor interactions*—all supported student-athlete’ responses to each of the research questions below.

Central Research Question

What are student-athletes’ lived experiences of faculty interactions and academic engagement when learning in an online environment? Among the participants, faculty interactions and academic engagement with online learning varied across gender, sex, sport, learner, school, and scholarship status. According to 11 student-athletes, interaction with their professor can either be helpful or challenging, depending on the professor and the course. Of the eleven student-athletes who took online courses, ten said at least one of the professors was seldom interactive. Those who had positive experiences used terms such as helpful, willing to assist, and engaging." Many of the less-than-positive experiences included "boring," "not helpful," "not responsive," and "did not like student-athletes." Some autonomous learners like Evelyn and Kelly, for example, said professor engagement may not have directly affected their academic outcomes. According to Evelyn, "though it didn't really affect me, I felt like I still kind of got out of the course whatever I needed, regardless of whether there was a lot of interaction or like very minimal, me just having to kind of do it on my own, I think, regardless" (Evelyn, Personal Conversation, July 14, 2022). Kelly stated, "of course the amount of the interaction and engagement depended on the instructor, but I feel like having that interaction and engagement would probably increase success" (Kelly, Personal Conversation, July 15, 2022). While Craig, who was more dependent on his professor, stated:

I've had professors depending on the course just so passionate about what they do. I had a health science course, and I wasn't even confident about taking a science course, but my professor had so much enthusiasm up there; she was crazy fun in a virtual class. She was

just so passionate (Craig, Journal Prompt, July 14, 2022).

Sub-Question One

How do student-athletes perceive engagement in their online learning courses?

Engagement in online learning was perceived differently by student-athletes. It also depended on the course or the instructor. Many student-athletes expressed satisfaction with engagement in online learning, but others were dissatisfied with engagement levels and felt that online learning often did not meet their learning styles.

Students' learning styles vary based on their purpose, expectations, and experience with a given topic. This makes it impossible for the standard one-size-fits-all course to be effective. The benefits of effective online discussions are to provide opportunities for reflection and dialogue, according to Stone (2019). Thus, students learn from being engaged and expressing their own ideas during class, examining their ideas when challenged, and following through on new ideas from engagement and interaction in their classes. Kelly stated, "Honestly, I enjoyed the group work. The different group activities and discussion boards allowed me to interact with others, including my professor and speaking freely with respect. The times that my instructor communicated or reached out for checkups was great" (Kelly, Journal Prompt, July 18, 2022).

Craig, Cody, Monique, and Sharma mentioned that the level of engagement depended on the course. Sharma acknowledged, "I was pleased with the freedom to express myself in the discussion boards." At the same time, Monique stated, "mostly you get interaction or engagement through discussions boards in an online course, that would cover the engagement" (Monique, Personal Conversation, July 14, 2022). Often, only a handful of students participate in discussion boards, while the majority remain indifferent, uninterested, and disengaged.

Like Monique, Warren also experienced minimal engagement. William expressed, "for me, it wasn't so much the engagement because just me being able to self-teach myself, like the

material in terms content was there, and that was the engagement, me completing the assignments. So, most of it was what you have to do on your own, and sometimes I was confused because of the lack of explanation and detailed instructions that you would get from continuous feedback and engagement” (William, Personal Conversation, July 13, 2022).

As it related to the level of engagement, most of the student-athletes stated that the level of engagement depended on the course. Seven of the 11 student-athletes took a psychology course, and four of the participants enrolled mentioned that it was boring and there was a lack of engagement or interaction. Craig clarified, “The virtual courses is like you're not really sure if you're getting all that information has been provided because there is no engagement, or if it is like psychology courses at my university, I would never recommend because more so, depending on the course, your teaching yourself” (Craig, Personal Conversation, July 14, 2022).

Sub-Question Two

How do online student-athletes describe their interactions with faculty and the quality of faculty support in their online learning course? While there were varying experiences, it was noted that all students, whether autonomous learners or not, considered the interaction between instructors and students to be significant in the success of online learning. They also shared that student-faculty interactions, individual one-on-ones, effective guidance, and the ability to receive immediate feedback on assignments led to higher academic achievement and improved interests. According to Monique, “while the course was at our own pace, the professor encouraged us with immediate and extensive feedback to better improve the online learning experience” (Monique, Journal Prompt, July 15, 2022). Also, Cody stated:

Intellectually, I would say I was able to connect with my instructors via email, office hours, and discussion boards where we were able to have open dialogue on our interpretations of how we digested subject material. For the instructors that encouraged

this type of communication, I felt a stronger emotional connection in terms of comfort as opposed to the online course that didn't create that environment (Cody, Journal Prompt, July 15, 2022).

Mannie stated:

Some course instructors did a great job of effectively communicating goals and objectives and sending out reminders, creating introduction videos where we can see a live person and feel like we can relate to a real person. The courses where instructors allowed me to feel a strong sense of community and I was able to not only communicate and bounce ideas off the instructors but also my peers when instructors weren't accessible, made being a student-athlete so much easier.

Samantha, on the other hand, found:

I do not feel like I connect with most of my online professors intellectually or emotionally. There is not enough constructive feedback. I am aware that asynchronous classes are not meant to be face-to-face. But one of my online classes never connected with me. I believe the connection must either be forced by me or initiated by me (Samantha, Journal Prompt, July 16, 2022).

Some athletes believe their athletic background creates a stigma or stereotype. For example, Craig avoided telling his instructors about his dual responsibilities despite being required to do so. Regardless of race, all male student-athletes experienced stigma in their own way or heard stories from their teammates. Joe elaborated:

As a student-athlete, sometimes I do not feel a sense of belongingness. Some professors believe that student-athletes feel as though they deserve to be treated differently, but we just want little accommodations to have academic success. I do not want free grades

handed to me. I want the support and instructor-student interaction to succeed in class (Joe, Journal Prompt, July 16, 2022). Warren and Craig made similar statements.

Sub-Question Three

What factors do student-athletes perceive as contributing to overall quality of online education? In Table 3, students-athletes' perceptions of quality online education are summarized in several codes. *Engagement, feedback, and interaction* were the top three codes provided in the surveys. Another set of codes that emerged in the group included *guidance, content, and instructor support*. Interactions between instructors and students are critical for student success in online blended learning. The students reported that they are more engaged when there is more communication among students and instructors and more individual contact between instructor and student. Communication included immediate feedback on assignments, and relevant and effective information shared with them. Samantha said that “immediate feedback, clear guidelines, and engagement help enhance my whole learning performance and experience. I learn and remain engaged. Also, when they are providing in-depth feedback about assignments, it regulates my learning and motivation” (Samantha, Journal Prompt, July 16, 2022). Kelly also stated that, “instructor support and visuals, because I do not like reading many words because it becomes confusing and overwhelming, and activities so that I can feel included, play a large role in my academic success and interest (Kelly, Journal Prompt, July 18, 2022).

In addition, student-athletes want to feel that they are part of a community of learners in the online environment. Therefore, strategies that promote the feeling of belonging and connectedness are crucial. Mannie stated, “I believe that my voice does carry weight more in the online setting than in a traditional classroom when my professors add a comment to my discussion posts. It makes me feel less nervous and more confident. I am not as nervous to

comment in discussion boards, but I am a little nervous about speaking in class” (Mannie, Journal Prompt, July 22, 2022).

Summary

This chapter illustrated the findings of this transcendental phenomenological study regarding the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. The findings reflected the experiences of 11 participants using the self-determination theory of student-athletes enrolled in one or more online courses and were organized according to three themes (*course dynamic, student-instructor involvement, and quality of student-instructor interactions*), one outlier, one central research question, and three sub-research questions. By using textual and structural descriptions, the student-athletes' experiences were shared, providing a montage of the participants and the phenomenon being studied. In response to each research question, narrative responses were provided using these themes and participant quotations to support the answers. Student-athletes' candid quotes were used throughout this chapter to support the three themes identified during data analysis: (a) course dynamic, (b) student-instructor involvement and (c) quality of student-instructor interactions. The results from the surveys, individual interviews, and journal prompts revealed that through continuous and genuine student-instructor interaction and engagement, student-athletes could become self-determined when their needs for autonomy, relatedness, and competence are addressed. This led them to believe they were more engaged and performed greater academically once their controlled motivation or autonomy was fulfilled (Keshtidar & Behzadnia, 2017). However, when the student-athletes experienced a lack of interaction, engagement, and less sense of belongingness, it affected their self-regulation and self-determination, and they experienced a

decrease in autonomy that they perceived led to poor academic achievement and a decrease in interest.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental phenomenological study was to describe the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. Chapter five includes interpretations of the findings, policy and practice implications, theoretical and methodological implications, limitations, and recommendations for further research. The chapter concludes with a summary.

Discussion

This study described the student-athlete's lived experience, the impact of student-faculty interaction, and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. Student-athletes in chapter four shared their experiences through triangulated data sources such as surveys, interviews, and journal prompts; they were categorized into the following themes: (a) course dynamic, (b) student-instructor involvement and (c) quality of student-instructor interactions. The study's findings are discussed in this section in relation to the themes and supported by empirical and theoretical literature, as well as by narrative evidence from the participants. Interpretation of results, implications for policy or practice, theoretical and empirical implications, limitations and delimitations, and recommendations for future research are discussed in the chapter.

Interpretation of Findings

This section summarizes the thematic findings, followed by an interpretation of those findings. The results from the surveys, individual interviews, and journal prompts revealed that through continuous and genuine student-instructor interaction and engagement, student-athletes could become self-determined when their needs for competence, relatedness, and autonomy are

addressed. Ryan and Deci (2000) suggest that self-determination and integration can be facilitated by meeting three basic needs: autonomy, perceived competence, and relatedness.

The student-athletes experienced increased confidence, interest, and a sense of belongingness and were engaged through their experiences of positive and constructive interactions with their professors. This led them to perceive that they were more engaged and performed greater academically once their controlled motivation or autonomy was fulfilled (Keshtidar & Behzadnia, 2017). However, when the student-athletes experienced a lack of interaction, engagement, and less sense of belongingness, their self-regulation and self-determination were affected, and they experienced a decrease in autonomy that they perceived led to poor academic achievement and a decrease in interest. Those perceptions created increased frustration and self-doubt about their learning abilities which, in turn, increased some of their disdain for online courses. Student-athletes' shared experiences also uncovered one outlier, stigma/stereotype. Many student-athletes either experienced stigma or heard stories from their teammates, which may add negative perceptions of online learning and affect organic relationships with professors.

Summary of Thematic Findings

As a result of data analysis, three basic themes emerged: *course dynamic*, *student-instructor involvement*, and *quality of student-instructor interactions*, which aligned with the self-determination theoretical framework used in this study. The theme *course dynamic* included the subthemes of *online learning environment* and *need to connect*. The theme of the *course dynamic* focused on the perceptions of the student-athletes' class experiences in social interactions, platform type, activities included in the platform, digital solutions that enhanced their experience, and other components imbedded in their practice. Many undergraduate student-athletes who took online courses found that the courses gave them more flexibility and

convenience to accommodate their busy schedules. Many of the students reported that most of the courses were convenient and flexible (self-paced) but did not offer instructional options and direction while conveying choice (autonomy). Therefore, they had a challenging time deciding which content would be relevant to the exam or quiz. Since each student learns differently, online learning does not meet the needs of all students. In some instances where courses lack traditional classroom characteristics, students' engagement and academic progress were negatively impacted.

The theme of *student-instructor involvement* includes the subthemes of *meaningful interactions* and *dual responsibilities*. The theme relates to how student-instructor interactions affect students and their level of engagement in online classrooms. In their opinion, interaction and engagement, such as feedback, excellent communication, interactivity in discussion boards, responsiveness, and one-on-one conversations, are instrumental in creating a sense of presence and community for online learners, leading to transformational learning and perceived relatedness.

Of course, these outcomes often depended on the professor and course. Other students who had a less-than-positive experience said their dual responsibilities did not hinder their interaction with instructors, and the amount of interaction varied by professor. Student-athletes who needed interaction were either required to initiate interactions themselves or to seek assistance from the tutors who had been provided to them.

The theme *quality of student-instructor interactions* included the subthemes *support* and *impact on academic achievement*. The student's perceived competence, ability to stay interested, and academic achievement are positively aligned with their instructor's continuous involvement throughout the online course. Several student-athletes reported becoming more confident in their academic abilities when they connected with their instructors via email, office hours, and

discussion boards. Additionally, instructors' willingness to assist, support, accommodate, and interact with students makes a difference in their achievement, increasing the student's autonomy. Because online learning is primarily self-directed, a critical component is creating an environment that includes student-instructor engagement and interaction that create conditions for nurturing independent and autonomous learning.

Student-athletes Desired Conditions for Nurturing Independence. The primary purpose of online learning is self-directed learning, which requires student-athletes to be self-regulated and self-determined to succeed in their courses and remain eligible to compete in their sport. Creating conditions for nurturing an independent or autonomous learner in online learning environments requires the instructors and learners to work together. From the interviews and the journal prompts, many of the participants agreed that “the learning process is a two-way street” (Mannie, Personal Conversation, July 19, 2022). According to the student-athletes, effective instructional strategies aimed at engaging and interacting with them and hearing their voices were through class activities: discussion boards, group activities, class introductions, relevant content delivery, and one-on-ones. The students reported that these activities empowered them to engage and complete assignments. Students Kelly and Craig, for example, enjoyed the different group activities and discussion boards where students and instructors could communicate freely and interact with each other. The students found that engaging in these active and collaborative learning activities promoted connectedness and belonging. Furthermore, they were able to connect the course material on a personal level—which is critical to student intrinsic motivation and therefore allows the student-athletes to reach levels of identification and integration, which impacts their academic achievement (Jacobi, 2018).

Many students liked the flexibility of online courses that enabled them to move at their own pace. Students could also connect with each other through discussion boards and other

group activities that create a feeling of community. Students interacted with their instructors and classmates by engaging in activities, making the course more enjoyable, and replacing face-to-face communication (Tsai et al., 2021). Moreover, these interactions help to increase the student's autonomy, the goal of self-directed learning. Through interactions with other learners, student-athletes improve their retention of information (Sugden et al., 2021). Students grasp new knowledge and can guide their own learning (Hilts et al., 2018). The class activities should be continuous throughout the course to keep student-athletes engaged and motivated while learning new concepts (Sugden et al., 2021; Tsai et al., 2021).

One of the most often mentioned challenges for the student-athletes in online learning was staying motivated, interested, and engaged—which also correlates with other scholars and research (Alamri et. al., 2020). The message is that without an instructor physically present, instructors and student-athletes must find the motivation to self-regulate their work to achieve academic success.

Students Yearned for Student-faculty Engagement (Interaction and Support).

Students-athletes' motivation and academic performance are heavily influenced by their interactions with their classroom instructors, student-instructor relationships, and support (Jacobi, 2018; Snijders et al., 2020). Research defines engagement as how involved, motivated, or interested students are in their learning and how connected they are to their classes, content, professors, and each other (Tsai et al., 2021). According to student-athletes reporting positive student-instructor engagement, there was clear guidance and expectations, stimulating instruction, collaborative learning, and constant interaction with an effort built on relationships. When instructors interact with online students, they often show passion and a willingness to help, the magic of the human-to-human connection.

Students also reported that some instructors understood that an effective online classroom environment depends on motivation and respect, and that instructors' caring attitudes encourage students' engagement. Hence, to promote collaborative learning, teachers must engage students intellectually and emotionally in activities aimed at building a sense of community that establishes a positive tone and atmosphere (Doumanis et. al., 2019; Nash, 2022).

Evelyn mentioned, “the interactions and communication from the professor allow me to feel like my instructors care more about the outcome of the class, which motivates me to do well” (Evelyn, Journal Prompt, July 13, 2022). Also, Tom believed that his instructors showing support, and dedicating time to communicate with him, showed that they were invested and cared about his academic success and made him want to work harder (Tom, Journal Prompt, July 13, 2022). Some of the statements made by students are consistent with research about the benefits of positive student-instructor support and interaction; they also suggest that students can relate to empathetic and sensitive instructors, especially when dealing with dual responsibilities (Stone, 2019; Vlachopoulos & Makri, 2019).

In addition to the lack of engagement between students and instructors, students also felt stigmatized by their professors. Autonomous students persisted, even though they lacked the engagement of their instructors. In addition, instructor-dependent students lacked the drive and motivation to stay focused. Accordingly, students lacked a sense of belonging or community, especially instructor-dependent students. Instructor-student interaction, improved communication, individual contact between instructor and student, and immediate feedback on assignments are vital for engaging students. Effective guidance, activities to co-construct understandings, and relevant content information are also essential (Jacobi, 2018).

Discussion Boards are not a One-size Fit All. Engagement in online learning was perceived differently by student-athletes and also depended on the course or the instructor. While

the student-athletes expressed satisfaction with engagement in online learning, others were uncomfortable with engagement levels and felt that online learning did not always meet their learning styles. Among the frustration were the lack of instructor presence and limited interaction.

Furthermore, students' learning styles vary based on their purpose, expectations, and experience with a given topic. This situation makes it impossible for the standard one-size-fits-all course to be effective. While some instructors remained unavailable, provided limited feedback, and were less engaging, others relied only on discussion boards to engage their students. For example, Sharma was pleased with the freedom to express herself in the discussion boards, while Monique thought that discussion boards did not provide enough engagement. Studies show that a handful of students participate in discussion boards, while the majority remain disengaged or uninterested (Ransdell et al., 2018). Although online discussion boards or forums help students reflect on instructor contributions, enhance their ability to think and process at a higher level, provide an opportunity for meaningful interaction, assist shy or typically disengaged students in participating, students agreed there should be other opportunities and activities to engage.

Engagement (Interaction and Support) Affected Academic Achievement. Students' responses indicate that how they interact with their professors is directly related to their academic success or ability to stay interested. Moreover, students' achievement depends on instructors' willingness to assist, support, accommodate, and interact with them. For the students who reported that their professors create a learning environment that provides detailed instructions, guidance, visuals, constructive feedback, and interactive activities, they were able to engage, understand their assignments, and increase their autonomy in the class.

Evelyn, Cody, Tom, and William, a mixture of autonomous and instructor-dependent students, mentioned that because of the engagement and the interactions with their professors,

they understood their responsibilities and engaged by choice. Other student-athletes said that when feedback, mostly constructively, was provided and during one-on-ones, they gained confidence in their learning ability to navigate through the assignments. They further explained that the one-on-ones provided an opportunity to build a relationship and address content-related issues. For some student-athletes, the support enabled them to achieve academic and athletic success, addressing barriers to learning and promoting engagement in education. These findings correlate with existing literature that argues that engagement limitations can cause students to lose interest in their learning experiences and affect their academic performance (Jeno et al., 2018; Okada, 2021). According to Ryan and Deci (1985), student autonomy is a characteristic of quality student-instructor interactions and engagement. The quality of student-instructor interaction motivates and empowers students, leading to increased engagement and therefore enhanced academic achievement (Jeno et al., 2018; Okada, 2021).

Implications for Policy and Practice

The findings of this phenomenological study have significant policy and practical implications for student-teacher interactions and engagement in online learning. These recommendations are intended to support student-athletes and instructors' overall experience with engagement and interaction in online learning. The recommendations are also valuable to coaches, especially faculty developing, delivering, and maintaining online academic programs.

Implications for Policy

This research study has several policy implications for online learning in higher educational institutions. Students were motivated and empowered through student-instructor interaction, which led to increased engagement and enhanced academic achievement. The study also demonstrated how academic identity corresponds with motivation while maintaining learning interests (Afshar et al., 2014; Chen et al., 2020; Haslerig, 2018; Jeno et al., 2018;

Okada, 2021). Faculty who create, deliver, and maintain online academic programs must adopt policies that ensure instructors have access to tools, resources, and strategies in the Learning Management System to promote engagement and interactive experiences for online students.

The first policy implication is that each school within the higher educational institution should incorporate policies and expectations and provide resources that guide instructional design faculty to build online courses focused on quality learning. The instructional design team will should focus on ensuring that components of the course design, course syllabus, course materials, engagement strategies, and faculty feedback are embedded in the learning management system. This should ensure that instructors have relevant resources to provide a comfortable and proactive learning environment that meets the students' individual needs. The entire learning community will encourage sensitivity and a sense of relationship among the students. One of the foundations of quality online learning is identifying and understanding the relevant higher education community.

Students-athletes and their peers benefit from the quality of the course design and the instructor's active involvement (McNiff & Aicher, 2017). Courses must be designed, delivered, and governed by the university's policies, the schools' policies, and the department's policies, and ensure students are aware of these policies (Edge et al., 2022; Wiesenberg & Stacey, 2005). For example, the course design should encourage academic freedom and employ online learning best practices to create an outstanding learning experience that adheres to academic guidelines. Additionally, an aspect of course design should involve a community or space that promotes student-faculty interactions and clearly articulates support (course-related resources and faculty response time for email) (Chiu, 2021).

The second policy implication is that the online technical department at the higher educational institution can work with course engineers to build an online checklist or prompt

after each assignment in the learning platform. This checklist or prompt will ensure that professors communicate regularly with online students. Educational institutions and professors must share the responsibility for remedying the decrease in student engagement. This initiative will mandate professors and administration to interact with their students continually. This effort will hold the professors accountable for ensuring that students are engaged. Students who interact more with their professors will be more successful in their studies.

The third policy implication is that the online department within the college at the University may benefit from hiring researchers and analysts who research and focus on how to achieve an online “holistic social-cultural ecosystem,” which offers creative ways for students to be remotely involved the way that students have been on campus. The researchers and analysts can conduct research and generate feedback to enhance online learning. Research should also focus on aspects of self-regulated learning, cultural shifts, new student populations, and addressing their diverse needs while applying different learning theories. Researchers can then work with instructional designers to test enhancements. This research and creative testing of platforms will lead to a new program of extracurricular activities to engage the whole student.

The study's fourth implication is that university and student affairs professionals should pay increased attention to different academic disciplines. Specifically, students in some academic disciplines reported fewer faculty interactions than students in other disciplines (based on the type of interaction). According to the study, psychology students reported the lowest levels of student-faculty interactions, spent the least time interacting with faculty, and were most dissatisfied with faculty interactions.

The last policy implication that universities should implement is making online classes more intimate/condensed so that there is a sense of belongingness that creates an inclusive environment. Some research suggests that instructors who use smaller class sizes are more likely

to use learner-centered activities involving physical and mental challenges that stimulate learners: group work, simulations, and case studies (Wright et al., 2019).

Implications for Practice

While students were motivated and empowered through student-instructor interaction, which led to increased engagement and, subsequently, enhanced academic achievement, it may be effective for instructors to use media and activities relevant to the learning content that extends and contributes to student mastery of learning outcomes (Edge et al. 2022). Chiu (2021) argues that an effective structure provides numerous opportunities for student-instructor interaction and communication within the course content. Content should be relevant, and the syllabus should clearly state and measure the learning objectives as part of the structural strategy (Keelson et al., 2022). Students should be assessed for readiness, progress, and mastery of learning outcomes and receive summative feedback about their performances against grading criteria. A well-designed course and effective feedback are motivators because they help students to feel confident while navigating the course.

A second practical implication is that instructors should build relationships with all students and, for the purpose of this research, especially busy student-athletes. Establishing relationships can increase opportunities to interact, engage, and create a sense of community. Several students mentioned that they appreciated the existing relationships and would encourage more relationship-building activities with their professors. Moreover, they expressed a strong commitment to motivation after having experienced positive learning experiences. These experiences increased their level of confidence in their ability to learn. Relationships between students and faculty and social interaction are crucial to learning (Snijders et al., 2020). Deci and Ryan (2000) emphasize the importance of meaningful relationships and affective experiences in self-determination theory. As a result of natural occurring conditions such as choice, feedback,

and continuous dialogue, students are more likely to have healthy autonomy (support), relatedness (structure), and competence (involvement) (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan, 2017; Jacobi, 2018).

Theoretical and Empirical Implications

This study described the student-athlete's lived experience with the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. This section presents the theoretical and empirical implications of the study. Eleven participants described both positive and negative perspectives of student-faculty interaction in their online learning environment. The theoretical and empirical implications are mentioned in the subsections below.

Theoretical

The theoretical framework that guided this phenomenological research study was Deci and Ryan's (1985) self-determination theory. Deci and Ryan (1985) state that the self-determination theory is a psychological theory about motivation. The concept proposes that individuals become self-determined when their needs for controlled motivation or autonomy are fulfilled (Keshtidar & Behzadnia, 2017). Through human motivation, people can become self-determined when their needs for competence, relatedness, and autonomy are addressed (Deci & Ryan, 1985; Deci & Ryan, 2017). The findings of this study confirm Deci and Ryan's (1985) self-determination theory, support previous research that examined students' perceptions in social contexts in online learning, and help understand the psychological factors that influence students' academic outcomes in higher education. The theory helped this research identify and describe the student-athletes' inherent drive towards engagement and completing academic tasks that ensure growth and mastery.

The self-determination theory was used to examine the student-athletes' perceptions of their social contexts in online learning and then how the quality of online instruction affected their academic achievement. Specifically, the theory examines the student-athlete's level of intellectual challenge, active or collaborative learning, student-faculty interaction, educational experiences, and student-teacher engagement in online education by applying the three basic psychological needs: autonomy, relatedness, and competence (Chiu, 2021). In the study, the three components of self-determination theory were found to influence student-athlete perceptions of the quality of interaction between the student-athlete and instructor, motivation, engagement, and improved academic performance.

The motivation of student-athletes in online courses was also examined using self-determination theory. Student athletes' academic performances are heavily influenced by their interactions with their instructors in the classroom, student-instructor relationships, and support. In previous research, student-athletes were identified as being motivated by their interpersonal values and commitments, while others were motivated by external motivation (controlled by extrinsic rewards or punishments) (Keshtidar and Behzadnia, 2017). In contrast, students-athletes' responses indicated they lacked motivation because of limited or no feedback and guidance from their professors. Furthermore, students experienced external regulation in which they tied the perception of being controlled by extrinsic rewards or punishments to their scholarship and eligibility. Identification followed. Students completed assignments because of their instrumental value. Lastly, integration shows importance. Students chose to engage when they found meaningful learning from the student-instructor interaction as well as learning activities that fostered engagement.

Developing student motivation through student-faculty interactions is vital for online learning. According to Ulstad et al. (2019), motivation energizes one to engage in an intriguing

or relevant activity. The student-athletes have higher external reward motivation because they are driven to succeed due to their scholarship and eligibility requirements. They experienced lower intrinsic motivation from a lack of feedback, guidance, and engagement, which led to frustration, disengagement, and academic failure (Moller & Sheldon, 2020).

Autonomy reaffirms the idea that learning empowers both students and teachers, with responsibility not solely on the instructor (Maulana, 2016; Sheehan et al., 2018). Based on the self-determination theory, student-athletes in online learning have two essential needs: to be satisfied socially and succeed academically. The first need is to feel autonomous in completing school assignments. Autonomy increased among the student-athletes when instructors provided clear direction, considered the student-athlete's perspective, considered their feelings, and encouraged choice, independence, problem-solving, independent decision-making, and participation (Maulana, 2016; Sheehan et al., 2018).

Student-athletes retain information learned through interactions with other learners (Sugden et al., 2021). Concepts from activities and resources are integrated and internalized to help learners regulate their behavior as they gain understanding. Hilts et al. (2018) found that such interaction and activities helped students grasp new knowledge and guide their own learning. When the student-athletes experienced high motivation and autonomy, they displayed greater learning achievement than those with low motivation and low autonomy. Research conducted by Chen et al. (2020) demonstrates how motivation corresponds with students' academic identity, maintains learning interests, and promotes critical thinking.

Students reported that they took the initiative to start the interactive process in some cases. When students take the initiative, they maintain a sense of autonomy in the interaction. While guidance and scaffolded support are provided by the teacher and/or other peers, students maintain a level of control over what is said in the interaction, thus prompting novel language

and ideas. By maintaining control of their contributions, students are given the space to practice and apply their disciplinary understandings as well as make choices in the language they use to express these.

According to the student-athletes, instructional strategies and collaborative activities like discussion boards, group work, effective feedback, connections (feeling of belonging), and student-faculty relationships promote relatedness. Jacobi (2018) viewed these activities as effective for motivating students. Among first-year students, perceived relatedness impacts their academic achievement and motivation (Sheehan et al., 2018). However, these results differ from those of Butz and Stupnisky (2017), who argue that perceived relatedness has no impact on the perceived quality of online learning and student-faculty relationships. According to some scholars, students can benefit from more powerful feelings of relatedness, while other research suggests this may not always be the case. Butz & Stupnisky (2017) also indicate that some learners prefer independent thinking and individual work. Even so, those interactive activities and engagement were essential to the autonomous students in this study. They suggested that it may not directly impact their academic achievement but affects their engagement. According to the results of this study, many student-athletes, autonomous students, and instructor-dependent students perceived relatedness when their instructor showed interest and engagement in them (Orazbayeva et al., 2021).

In the interviews, the student-athletes expressed a desire to fit in, be part of a community, and feel a sense of belonging. Students also believed that instructors should understand their student's athletic endeavors and the pressures that student-athletes face when balancing dual roles (Orazbayeva et al., 2021). To fulfill relatedness needs, students need to feel accepted by their instructors (Butz & Stupnisky, 2017; Marshik et al., 2017). In other words, relatedness is about going beyond normal faculty behavior and relationships with students; it is about developing

relationships that promote mutual understanding and student-athlete academic and social integration (Marshik et al., 2017; Sheehan et al., 2018).

A supportive environment can boost competence. According to Deci and Ryan (1985), competence is an innate psychological need, and feeling effective in one's environment is essential to optimal well-being. Research shows that a competence-supportive environment can be formed by creating stimulating activities, constructive feedback, clear guidelines, and engagement that suits the level of learning ability and encourages confidence in their capacity to engage (Yurinova et al., 2022). Competence inspires confidence, which energizes motivation and a healthy feedback loop. Also, as a result of clear directions and instructions, freedom in online discussions, and effective feedback, the students reported a boost in perceived competence. The students viewed online discussion boards as a place to express themselves freely. In addition, when students received more responses from peers, they wrote longer messages, felt more connected, gained confidence, and felt more motivated. Consequently, their confidence level in their academic abilities increases their attention in online classes, leading to increased focus and academic success.

Empirical

Empirically, few studies have sought to investigate student-athlete-faculty engagement in online learning environments (McNiff & Aicher, 2017). While the research surrounding student-athletes is limited, there is research that explores faculty perspectives (O'Neil et al., 2021). This research aimed to understand and describe the student's perspective rather than the faculty's perspective. To determine whether students were receiving quality online education, it was important to listen to the voices of first-year student-athletes (Creswell, 2013). The findings of this research could help online faculty understand the unique needs of student-athletes and give a voice to the benefits and barriers that these athletes may encounter in their academic endeavors.

The study provided rich and robust descriptions of the students' perceptions in a higher education online setting and how university faculty could become more supportive and engage with their students, especially student-athletes. This transcendental phenomenological study has empirical implications for student-athletes, online instructors, athletic coaches, athletic advisors, and especially faculty developing, delivering, and maintaining online academic programs; the study will add to the literature focused on helping with first-year student-athletes succeed academically and socially.

First-year student-athletes are at the beginning of their collegiate experience; hence this research identified the problems that can be mitigated or improved as they continue their transition to a full-time student-athlete with its attendant responsibilities. Hence, this study's results benefit first-year student athletes who wish to take online classes or are preparing to take online courses. These findings provide substance to determine if online learning is the right fit, if they are prepared for online learning, and have the self-discipline.

As student-athletes and academic advisors continue to gravitate to online courses, they should understand that based on the findings from research, online courses require a distinctive skill set and level of discipline to achieve academic success. Findings from this study revealed that the educational outcomes for student-athletes enrolled in online classes vary according to depth of engagement provided by instructors, student-faculty interactions, collaborative learning, enriching educational experiences, class type, instructor, and level of academic challenge which correlate with findings from previous research that studied student-athletes and online learning (Alamri et al., 2020; Kim & Lundberg, 2016; Weldon et al., 2021).

Even though many reports many indicate limited engagement, autonomous learners and student-athletes who were prepared for the workload, had time management skills, and had a baseline level of discipline had a better experience (in at least one class) than students dependent

on their professors. Even though responses indicated limited engagement, the autonomous who were prepared for the workload, had time management skills, and had a baseline level of discipline had a better experience (in at least one class) than students dependent on their professors. While busy practice and travel schedules may encourage student-athletes to register for online learning courses, not all student-athletes are ready for the challenge. For some, the notion that online courses offered flexibility and convenience appeared to be a myth and more of an inconvenience and burden. While busy practice and travel schedules may encourage student-athletes to register for online learning courses, not all student-athletes are ready for the challenge. For some, the notion that online courses offered flexibility and convenience appeared to be a myth and more of an inconvenience and burden.

Student-athletes who took more than one online class described their experiences as positive. The results are consistent with current limited research that studies student-athletes (Doumanis et. al., 2019; Nash, 2022). Some of the participants in this study experienced heavy class workloads, job demands, and athletic discipline. For the student-athletes who did not have positive experiences with student-faculty engagement, persistence did not affect them because of their external regulation (punishment, loss of a scholarship, suspension, etc.) but experienced a lack of motivation, which negatively affected their academic achievement. Online learning is not a one-size-fits-all, and online learning will not accommodate every student's learning patterns. As a result, student-athlete experiences will vary depending on the quality of online learning offered at the educational institution and how engaged the professors are. However, student-athletes, online instructors, athletic coaches, athletic advisors, and especially faculty developing, delivering, and maintaining online academic programs, particularly at the Division I NCAA level, can use the findings from this study to better understand student-faculty experiences in online learning.

Limitations and Delimitations

The qualitative phenomenological study had several limitations and delimitations. The limitations include potential weaknesses of the study that cannot be controlled. Delimitations, on the other hand, are decisions the researcher makes to limit or define the study's boundaries.

Limitations

Research studies are not without limitations, and the present study is no exception. As a first limitation, this study only included Division I student-athletes. The first challenge was determining a specific time for student-athletes to participate in all three data collection methods to develop our understanding of the phenomena. Despite these limitations, the data collected provided saturation in several overarching themes, indicating that enough participants participated in the study.

The study's second limitation was the method of data collection: individual interviews. I decided that even though all instrumentation questions were open-ended, it would be better to present the questions verbally instead of revealing the questions beforehand to ensure candid answers. Some participants found it difficult to explain some of their answers. Data triangulation analysis, however, showed that the candidates' responses were consistent and aligned.

Delimitations

The delimitations limited the scope and defined the boundaries of my study. The delimitation for this study was only choosing to recruit first-year student-athletes. First-year student-athletes are at the beginning of their collegiate experience. It was essential to identify that group to identify the problems that can be mitigated or improved as they transition to a full-time student-athlete with its attendant responsibilities. The second delimitation was that the study was limited universities in one state, Missouri. The study was also delimited to Division I universities in Missouri. Only first-year student-athletes enrolled in one or more online courses,

age 18-22, and maintained eligibility at the research sites were eligible to participate. The generalizability of the study could be enhanced by expanding the states, participant eligibility, and research site.

Recommendations for Future Research

As a result of the study findings, limitations, and delimitations, a few recommendations are offered. The sample population for this study was relatively small. The methodology required a sample size of 10 to 15 participants from Division I universities in Missouri. It is therefore recommended that further research consider a larger sample size and expand to other colleges for analysis and comparison. In the future, a larger sample size and a variety of geographical locations in the country would have been more valuable for gathering data. Even though Missouri has over 15 NCAA-sponsored collegiate sports disciplines, only five were included in this study since it was conducted by snowball sampling and convenience sampling. A minimum of two to three participants from all sponsored athletic disciplines also should be considered for future research.

Secondly, future research should consider longitudinal data in examining the impact of student-faculty interaction on academic achievement to improve the reliability and generalizability of the study's findings (Shirilla et al., 2022). A longitudinal study is a type of correlational and observational research that will examine the same group of student-athletes over time (weeks, months, or years). It may then be repeated throughout the study (Shirilla et al., 2022).

As a third recommendation, future research should use a mixed-method approach. Using mixed methods requires conceptual rigor (Molina-Azorin, 2016). A mixed-method approach combines contextualized insights, generalizability, and the numerical value of qualitative data

collection and analysis in one study (Molina-Azorin, 2016). In addition to offering different perspectives, these approaches can be combined to provide more in-depth results.

Finally, each component of SDT theory needs more research regarding online learning (Butz & Stupnisky, 2017; Chiu, 2021). Educators and course designers should continue to examine the social objectives of online courses to address the unique needs of students, especially student-athletes, since they require various interaction techniques to facilitate the authentic connection that characterizes actual relatedness (Butz & Stupnisky, 2017).

Conclusion

The purpose of this transcendental phenomenological study was to describe the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. The theoretical framework guiding this transcendental phenomenological research study was Deci and Ryan's (1985) self-determination theory which was used to answer one central research question and four sub-research questions. Surveys, individual interviews, and journal prompts were used to answer the research questions. Eleven Division I first-year student-athletes from universities in Missouri were selected using convenience and snowball sampling to participate in this research study. They described their shared experiences with student-faculty engagement in online learning and how it affected their academic achievement.

Analysis of the findings of this study produced three themes and eight sub-themes. Data analysis and synthesis followed the methods outlined by Moustakas (1994) and were further assisted by Saldaña's (2021) manual coding approach. The primary themes were *course dynamic*, *student-instructor involvement*, and *quality of student-instructor interactions*. The subthemes were *online learning environment*, *need to connect*, *meaningful interactions*, *dual responsibilities*, *support*, and *impact on academic achievement*.

This study found that quality student-faculty relationships positively affected self-directedness, motivation, engagement, student satisfaction, and academic achievement. The students reported that the three aspects of the SDT—autonomy, relatedness, and competence—impacted their self-regulation and affected their motivation to engage and achieve academic success. The student-athletes experienced increased motivation and self-regulation when they were engaged, and they experienced a sense of belongingness. However, they experienced a significant decrease in motivation and self-regulation when they perceived there was limited interaction, feedback, and a sense of belongingness, which caused frustrations and poor academic achievement. The level of student-faculty interactions depended on the instructor and the course. Also, its perceived effects varied by different learner types: autonomous and instructor-dependent.

In self-determination theory, Deci and Ryan (1985) emphasize the importance of affective experiences and meaningful relationships. The theory helped direct this study to identify the naturally occurring conditions such as choice, feedback, and continuous dialogue from instructors (Deci & Ryan, 1985; Deci & Ryan, 2000; Deci & Ryan, 2017; Jacobi, 2018). Student-athletes need to feel as connected to their instructors and their learning as their traditional counterparts. The findings from this study may have a profound impact on the student-athlete community and offer significant empirical outcomes to those with little understanding of the importance of meaningful relationships in the classroom, whichever format the classroom takes.

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Appendix A

IRB Approval



July 13, 2022

Shinelle Proctor
Rachel Hernandez

Re: IRB Exemption - IRB-FY21-22-1118 THE IMPACT OF STUDENT-TEACHER INTERACTIONS ON ACADEMIC ACHIEVEMENT: A PHENOMENOLOGICAL STUDY EXAMINING THE PERCEPTIONS OF FIRST-YEAR UNIVERSITY STUDENT-ATHLETES WITH ONLINE EDUCATION.

Dear Shinelle Proctor, Rachel Hernandez,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

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

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at irb@liberty.edu.

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

Appendix B

Consent Form

Consent

Title of the Project: The Impact of Student-Teacher Interactions on Academic Achievement: A Phenomenological Study Examining the Perceptions of First-year University Student-athletes with Online Education.

Principal Investigator: Shinelle Proctor, Doctoral Candidate, Liberty University

Invitation to be Part of a Research Study

You are invited to participate in a research study. To participate, you must be between 18 and 22 years of age, a first-year student-athlete attending an NCAA Division I university in Missouri, and enrolled in one or more online courses. Participants must have maintained their eligibility status. 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?

My research study aims to understand the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. In addition, this study will contribute to the researcher's completion of her dissertation research.

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 things:

1. Complete a survey. The survey should take approximately 20 minutes to complete.
2. Participate in a one-on-one, virtual interview with the researcher that should take approximately 60 minutes to complete. The interview will be audio and video recorded and transcribed.
3. Respond to 11 journal prompts that should take approximately 30 minutes total to complete.
4. Finally, you be asked to review the transcripts from your interview to ensure their accuracy. Transcript review should take approximately 20 minutes to complete.

How could you or others benefit from this study?

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

Information from this study may benefit other student-athletes, faculty, and administrators now or in the future to better identify practices that can be adopted and encouraged in online environments to help ensure that online students are socially and academically engaged in their online courses, especially student-athletes who are full-time students and deal with significant dual responsibilities.

Liberty University
IRB-FY21-22-1118
Approved on 7-13-2022

What risks might you experience from being in this study?

The risks involved 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 using pseudonyms. Interviews will be conducted in a location where others will not easily overhear the conversation.
- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews will be recorded and transcribed. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

How will you be compensated for being part of the study?

Participants will not be compensated for participating in this study.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not 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 those relationships.

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

If you choose to withdraw from the study after completing some or all the procedures, please contact the researcher at the email address/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 Shinelle Proctor. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Rachel [REDACTED].

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 Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at 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.

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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

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Appendix C

Recruitment (Social Media)

I am conducting research as part of a Doctor of Philosophy (PhD) requirement at Liberty University. My research study aims to understand the impact of student-faculty interaction and its perceived effects on academic achievement in online education for student-athletes attending a Division I university in Missouri. To participate in this study, you must be between 18 and 22 years of age; a first-year, Division I student-athlete attending a university in Missouri; and enrolled in one or more online courses. Participants must also have maintained their eligibility status. Participants will be asked to complete a survey (20 minutes), participate in an audio- and video-recorded, one-on-one virtual interview with the researcher (1 hour), and complete 11 journal prompts (30 minutes). Additionally, participants will also have the opportunity to ensure the accuracy of the transcriptions from their individual interview (20 minutes). If you would like to participate and you meet the study criteria, please direct message me. You can also contact me at [REDACTED] or [REDACTED] for more information and to schedule an interview. A consent document will be emailed to you if you choose to participate.

Appendix D

Survey Questions

14. Please tell me about yourself (Name, etc.).
15. What is your gender?
16. What is your age?
17. What is your ethnic/racial background?
 - g. White
 - h. Black or African American
 - i. American Indian or Alaska Native
 - j. Asian
 - k. Hispanic or Latino
 - l. Native Hawaiian or Other pacific Islander
18. Please share whether you had an online learning experience in high school.
19. What university do you attend?
20. Please specify whether you are categorized as an in-state student, out-of-state student, or international student.
21. Please share if you receive an athletic scholarship. Please specify whether it is partial, half, or a full scholarship. If you do not receive any form of athletic scholarship, please state that you do not receive any athletic scholarship.
22. What NCAA Division I collegiate sport(s) do you participate in at the university? Please list all sports of participation and specify whether they are the men or women's team.
23. How many online courses do you take? Please list all online courses.
24. Please describe the structure of the online course(s). Is it synchronous (real-time), asynchronous (various times and places in elapsed time), or a combination if the two?

25. What factors led you to choose an online course or courses rather than traditional in-class instruction?
26. What is your idea of quality online education?

Appendix E

Individual Interview Questions

1. Tell me about yourself and describe why you chose this university.
2. What do you perceive as engagement? SQ1
3. How do you perceive the level of engagement in online learning? SQ1
4. How do you perceive the effect (positive or negative) of student-faculty engagement as it relates to your academic achievement? SQ2
5. From a student-athletes perspective, how do you feel about the communication and interactions between yourself and your online instructor? SQ2
6. From a student-athlete's perspective, in your online course(s), how accessible is the instructor? SQ2
7. Describe the support offered by the online instructor. SQ2
8. Describe the interactions with the instructor when it comes to feedback in you online course. SQ2
9. Please describe how the engagement or lack thereof affects your academic achievement in online instruction. SQ2
10. Describe how student-teacher interaction influences academic achievement. SQ2
11. How does your athletic discipline affect your interaction with faculty? SQ2
12. What factors do you think determine the quality of student-instructor relationships or faculty support in the online instruction you receive? SQ2
13. How does student-faculty involvement and interaction affect your academic achievement as a student-athlete? SQ2
14. From a student perspective, describe the online educational environment? CRQ
15. Describe your competition season. SQ2

16. What are the requirements for taking classes to stay academically and athletically eligible? SQ2
17. How does your professor know that you are a student-athlete? SQ2
18. What accommodations does your professor offer to his/her student-athletes? SQ2
19. Describe your experiences of online learning during competition season? SQ3
20. How does the workload in your online program compare with traditional in-class instruction, especially as a student-athlete? SQ3
21. What do you think are the important factors determining the quality of online education? SQ3
22. From a student-athlete's perspective, what would you suggest to improve the quality of the student-faculty interaction experience? SQ3
23. In what ways could online education programs serve both your educational and athletic needs? SQ3
24. From a student-athletes perspective, how can student learning objectives and outcomes be achieved through online education? SQ3
25. From a student-athlete's perspective, how would you rate the overall quality of the online education you receive? SQ3

Appendix F

Journal Prompt Questions

1. Please tell me about yourself (Name, etc.).
2. Please describe your perception of the level of autonomy (feeling of choice and support) provided in the online class(es). For example, does the instructor encourage you to think independently, have a voice that carries weight, and constructively use any freedom like you would in a traditional setting? CQ & SQ3
3. In what ways does autonomy (feeling of choice and support) impact your academic performance? CQ & SQ3
4. What suggestions would you provide to improve the level of autonomy? CQ & SQ3
5. Please describe your perception of the level of relatedness (involvement and feeling of belonging) provided in the online class(es). For example, does the instructor create an environment where there is a sense of belonging, closeness, support from others, and understanding of the needs of student-athletes? CQ & SQ3
6. In what ways do you connect, both intellectually and emotionally to you instructors and course work? CQ & SQ3
7. How does relatedness (involvement and feelings of belonging) impact your academic performance? CQ & SQ3
8. What suggestions would you provide to improve the level of relatedness (involvement and feeling of belonging)? CQ & SQ3
9. Please describe your perception of the level of and competence (structure and feeling capable) provided in the online class(es). For example, does the instructor communicate course goals and objectives and clearly explain assignments? Is the instructor responsive

to student questions, and does he/she provide detailed feedback on assignments and exams? CQ & SQ3

10. How does competence or confidence impact your academic performance? CQ & SQ3

11. What suggestions would you provide to improve the level of competence? CQ & SQ3