2019

Athletics and Faith: A Quantitative Analysis on the Relationship of Athletic Participation and Spiritual Development

Griffin O. Gardner

Recommended Citation

Gardner, Griffin O., "Athletics and Faith: A Quantitative Analysis on the Relationship of Athletic
Participation and Spiritual Development" (2019). *Master of Arts in Higher Education (MAHE) Theses*. 134.
https://pillars.taylor.edu/mahe/134

ATHLETICS AND FAITH: A QUANTITATIVE ANALYSIS ON THE

RELATIONSHIP OF ATHLETIC PARTICIPATION AND SPIRITUAL

DEVELOPMENT

_____

A thesis

Presented to

The School of Social Sciences, Education & Business

Department of Higher Education and Student Development

Taylor University

Upland, Indiana

_____

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Higher Education and Student Development

_____

by

Griffin O. Gardner

May 2019

CERTIFICATE OF APPROVAL
_____

MASTER'S THESIS
_____

This is to certify that the Thesis of

Griffin O. Gardner

entitled

Athletics and Faith: A Quantitative Analysis on the Relationship of Athletic Participation
and Spiritual Development

has been approved by the Examining Committee for the thesis requirement for the

Master of Arts degree
in Higher Education and Student Development

May 2019

_____   _____
Skip Trudeau, Ph.D.   Date   Todd Ream, Ph.D.   Date
Thesis Supervisor   Member, Thesis Hearing Committee

_____
Kim Case, Ph.D.   Date
Member, Thesis Hearing Committee

_____
Tim Herrmann, Ph.D.   Date
Director, M.A. in Higher Education and Student Development

Abstract

The purpose of the study was to examine the relationship between athletic involvement and spiritual development. Historically, athletics has been examined as an outlet of spirituality, but previous studies have not examined spirituality as a product of athletic involvement. The following question guided this study: "To what extent, if any, does college athletic involvement impact spiritual development?" This study took a longitudinal quantitative approach, leveraging archival survey data to conduct a means comparison study of the responses to particular survey items for athletic and non-athletic students. Though no statistical significance existed between the results of the two populations, the study still offers key implications for future research and practice. Implications for practice for the examined institution include making cautious assumptions about student athletes, understanding that athletics does not negatively impact spiritual development, and affirming that athletic recruitment abides by institutional standards and does not recruit exceptional students to general admissions standards. Implications for future research include conducting additional archival studies on student athletes to better understand their experience at the institution, grouping future research on athletics by institutional type, and further examining the role of the coach in shaping the student athlete experience.

Acknowledgments

Many individuals assisted me in the writing of the thesis. I want to thank my thesis supervisor and committee members, Dr. Skip Trudeau, Dr. Todd Ream, and Dr. Kim Case, for their assistance throughout the thesis process. Your expertise and experience equipped me to complete and polish the thesis.

I want to thank the MAHE faculty for equipping me with the skills, concepts, and perspective to effectively engage the research process. I specifically want to thank Dr. Scott Gaier for his role in modeling and teaching me how to be a scholar practitioner, and how to critically engage in the patterns of this world.

I want to thank my cohort, for their friendship and support throughout the academic year. You all provided valuable support, encouragement, and motivation to finish the thesis and program well.

Most importantly, I want to thank my wife, Madison Gardner, for your continued support and love throughout the difficulty of writing this thesis. I am thankful for your presence through many evenings at the library, and many stressful nights of me wrestling with the contents of my thesis. A paragraph cannot describe gifts and blessings you have provided to me throughout the course of the thesis process, but for this acknowledgments section, this will have to do. You are the best.

To all of you, with great sincerity, I thank you.

Table of Contents

List of Tables

Chapter 1

Introduction

Many cultures throughout history have wed sports and religion (Sage & Eitzen, 1997). The Mayans and Aztecs used sports and physical activities as part of their religious rituals and ceremonies. The Zuni played games they believed would bring rain (Sage & Eitzen, 1997). The ancient Greeks saw sports as a religious act to honor the king of the gods, Zeus, and they reserved their most important athletic meetings as part of religious festivals (Sage & Eitzen, 1997). The Greeks even believed their gods would compete against each other in sport (Pfitzner, 2009). Pfitzner (2009) wrote, "The games were considered holy, as rites in which the gods were honoured by physical and artistic achievement" (p. 50). In much of history, sports and spirituality were tightly linked.

Before and during the birth of Christianity, sport was utilized as a way of conveying spiritual truths (Pfitzner, 2009; Sage & Eitzen, 1997). Pagan philosophers argued disciplining the soul and body were more heroic feats than any achievement of any athlete (Pfitzner, 2009). Pfitzner noted, "God's athletes of piety are Olympic participants in the noblest contest, striving for the truly valuable crown that no festal gathering can offer" (p. 53). The Apostle Paul referenced running a race, claiming prizes, and training for games in order to communicate spiritual practices (Sage & Eitzen, 1997).

The longstanding connection between spirituality and sport, dating back into the early years of the Common Era, suggests people have assumed a link between the two

before any empirical research has affirmed this relationship. The purpose of this study was therefore to empirically measure this assumed link and examine whether the athletic participation of college athletes impacts their spiritual development.

Introduction of Examined Constructs

Spiritual development. Many researchers have written on spiritual development and how it manifests itself in individuals (Astin, Astin, & Lindholm, 2011; Chickering, 2006; Fowler, 2000; Mayhew, 2004; Parks, 2000; Sheldrake, 2007; Stamm 2006a/2006b). This study examined Parks (2000), Chickering (2006), and Fowler (2000) and united their voices to formulate a definition capturing the breadth of spiritual development. Due to the number of significant voices in the conversation on spiritual development, this study sought to reconcile all the voices into a single expansive definition covered in Chapter 2. The study categorized the expansive literature surrounding spiritual development into three observable aspects: spiritual practices, spiritual tolerance, and spiritual self-awareness. Due to the numerous benefits associated with spiritual development, researchers inquire into the factors attributed to faith development (Astin, 2004; Astin & Astin, 2010; St. John & Parrish, 2012). This research examined whether athletics impacts spiritual development.

College athletics. College athletics was previously examined as an outlet for spirituality (Preece, 2009; Raikes, 2010; Storch, Kolsky, Silvestri, & Storch, 2001). Sports and athletics have been used as a way of instilling religious virtues in its participants. Religious institutions have leveraged sport for its ability to instill determination, perseverance, and teamwork in its participants (Banwell & Kerr, 2016; Krattenmaker, 2010; Pfitzner, 2009; Sage & Eitzen, 1997; Watson, 2007). In response to

the literature, this study examined whether the athletic experience contributes to the spiritual development of athletes engaged in it.

Rationale

This research sought to inform the work of athletic coaches, university administrators, and admissions offices as they seek to improve coaching, oversight of athletic programs, and recruitment of college athletes. The findings of this study could potentially give athletics coaches, especially at faith-based institutions, a fuller understanding of the spiritual impact of their work. Administrators would gain greater understanding of the link between athletics and spiritual development of their athletes. Whether athletics positively or negatively contributes to spiritual development, relevant personnel will possess a greater understanding of how athletics contributes to the college student experience. Lastly, admissions officers could leverage the findings of the study to counsel prospective students on how athletic participation potentially affects their spiritual development on campus.

Athletes experience university life differently from to non-athletes through added components of consistent practices, competitions, and structured physical development. College athletics requires a level of discipline and subjects athletes to daily athletic practices. The study examined quantitative archival data comparing athletes with students who do not participate in athletics on their spiritual development during their college years. This study explored the potential link between athletic involvement and spiritual development in college. To what extent, if any, does college athletic involvement impact spiritual development? This study contributes to answering the following question: does college athletic involvement impact spiritual development?

Chapter 2

Literature Review

Athletics

College athletics remains a topic of inquiry as researchers seek to understand how athletic participation impacts the student experience. Researchers have long studied how the student athlete experience differs from the non-athlete experience (Drum, Ladda, Geary, & Fitzpatrick, 2014; Higbee & Schultz, 2013; Kamusoko & Pemberton, 2012; Pascarella et al., 1999). Previously, researchers examined the relationship between athletics and cognitive development, well-being and persistence, first-year experience class interactions, and the adjustment of athletes to college (Drum et al., 2014; Higbee & Schultz, 2013; Kamusoko & Pemberton, 2012; Pascarella et al., 1999). These studies generally define athletics as full-time, rostered, resident athletes on teams featuring coaches, competitive schedules, and practice times (Drum et al., 2014; Higbee & Schultz, 2013; Kamusoko & Pemberton, 2012; Pascarella et al., 1999). Recently, researchers began examining the link between athletes and non-athletes in regard to spirituality (Bell, 2009; Moore, Berkley-Patton, & Hawes, 2011; Storch et al., 2001; Raikes, 2010).

Spiritual Development

Faith, defined as meaning making, is inseparable from human existence (Fowler, 2000; Mayhew, 2004; Parks, 2000). Regardless of faith tradition, religious affiliation, or lack thereof, all people hold non-negotiable truth claims requiring faith to aid them in

making meaning of the world around them (Parks, 2000). James Fowler (2000) noted

humans live in contingency, which is to say humans live without certainty. Fowler

(2000) elaborated on this claim:

> In the midst of contingency, suckled on uncertainty, we spend our blessed and
>
> threatened years becoming selves through relationships of trust and loyalty with
>
> others like us –persons and communities. We attach to one another in love; we
>
> struggle with one another in fidelity and infidelity. We share our visions of
>
> ultimate destiny and calling, our projections in hope, our moments of revelation in
>
> awe, and our fear in numbness or protest. We are language related, symbol-
>
> borne, and story-sustained creatures. We do not live long or well without
>
> meaning. . . . That is to say, we are creatures who live by faith. (p. 39)

Simply put, humans are inherently spiritual beings (Fowler, 2000). However, to make

this claim, one must discuss what is meant by spirituality and spiritual development.

Difficulty arises when attempting to define spiritual development. Many higher

education professionals believe spiritual development should have no place in higher

education (Chickering, 2006). The phrase "spiritual development" must often be

discussed in more neutral terms to appease those who bristle at the mention of spirituality

in higher education, at least as it has been previously understood. However, once an

acceptable common language to describe spirituality emerges, humanists share the same

desires for spiritual development in college students as do traditionally spiritual

individuals (Chickering, 2006).

Spiritual development has been divided into two categories—spirituality and

religiosity—allowing for clarity in what researchers intend when discussing the topic

(Mayhew, 2004; Sheldrake, 2007; Stamm, 2006a). Spirituality has been defined as a form of personal commitment to inner development affecting the whole person (Stamm, 2006a). Matthew Mayhew (2004) proposed a definition of spirituality similar to Parks' (2000) definition of faith: "Spirituality is the human attempt to make sense of the self in connection to and with the external world" (p. 669). Philip Shedrake (2007) suggested spirituality "refers to the deepest values and meanings by which people seek to live" (p. 1). Rather than a commitment that engages us intermittently throughout the week, spirituality suggests an all-encompassing way of life (Mayhew, 2004; Sheldrake, 2007; Stamm, 2006a). Religion, by contrast, provides both external motivation and validation to drive the inner search for spiritual development (Stamm, 2006a). Religion, typically sought in communities, carries external goals of social identity, health, and wellness in addition to the sacred pursuits of a given faith while also providing external validations for spiritual development through baptism and confirmation (Stamm, 2006a). As the grip of organized religion loosened over time, spirituality emerged to provide an alternative perspective on long discussed issues (Stamm, 2006a).

Social and cultural shifts in America laid the foundation for the emerging marketplace of spirituality (Stamm, 2006b). The language describing a person's inner faith journey shifted to "quest" rhetoric to describe the transformations and changes that take place (Mayhew, 2004; Stamm, 2006b). This "quest theology" removes authority from theologians and church leaders and entrusts it to the individual (Sheldrake, 2007; Stamm, 2006b). In contrast to past religious beliefs, spirituality openly embraces pluralism and tolerance of other theologies reflected in their quests (Stamm, 2006b). No longer are people content to practice the faith of their parents but rather seek to create

their own faith with near limitless points of access to the divine (Stamm, 2006b).

Sheldrake (2007) suggested a desire for immediacy mixed with consumerism created a

memory-less culture, resulting in a view that tradition is a conservative force from which

individuals must break free. The product of such an environment is an "amorphous

spirituality" that embraces diversity and pluralism but removes the ability to question

others' commitments (Stamm, 2006b).

James Fowler (2000) believed secularization contributed to this amorphous

spirituality by cracking the traditional views of meaning. Increased lifespans, a general

increase in mobility, and around-the-clock news all changed the way individuals relate to

their environment and world (Fowler, 2000). As lifespans increased, vocational

understandings shifted the emphasis to enjoying life rather than investing comparatively

shorter lifetime into serving others and building community. Mobility unrooted people

from their immediate communities and taught people to think of themselves as

individuals rather than a part of a community. Lastly, continuous news deteriorated the

barrier between news and entertainment, suggesting to individuals all of life catered to

their interests. These factors shifted society's focus toward material wealth and away

from service to society as they had the comfort to live their longer lives outside of their

immediate community (Fowler, 2000). In the light of this setting, there is little mystery

to how society embraced an amorphous spirituality.

Sharon Daloz Parks (2000) provided a clearer understanding of this "amorphous

spirituality." Parks (2000) defined faith as creating meaning in response to surrounding

circumstances and life events. If humans fail to create meaning and life is perceived as

fragmented, people are prone to suffer from confusion, distress, or even despair (Parks,

2000). Faith, in Parks' (2000) view, "is not simply a set of beliefs that religious people have; it is something that all human beings do" (p. 32). Faith has a remarkable place in the maturation of young adults and college students. Parks (2000) claimed:

> To become a young adult in faith is to discover in a critically aware, self-conscious manner the limits of inherited or otherwise socially received assumptions about how life works—what is ultimately true and trustworthy, and what counts—and to recompose meaning and faith on the other side of that discovery. (p. 7)

Parks' definition illustrates a picture of faith in which maturing adults naturally question the tradition given to them in their youth.

The emergence of the spiritual marketplace becomes clearer through Parks' (2000) understanding of faith. Young adults increasingly turned their back on traditional faith structures and sought to forge their own spiritual quest, as discussed by Stamm (2006b) and Sheldrake (2007). Parks (2000) saw spirituality as a better vehicle for this pursuit, as it is more personal and less public than religiosity. Spirituality gives more room for authenticity when compared to religion where one may feel the need to contrast one's position to orthodox doctrine (Parks, 2000). Young adults seek a faith tailored specifically for them because only then can they engage it wholly. As Parks (2000) wrote, "A trustworthy ultimacy is composed by feelings as well as thoughts, by being touched as well as by intellectual persuasion" (p. 33). Faith, possessing both affective and cognitive dimensions, requires both emotional and intellectual authenticity to fully satisfy young adults. A quest theology—informed by the marketplace of spirituality—satisfies this authenticity.

Spiritual Development in Higher Education

Spiritual development is a traditionally underappreciated component of higher education (Astin et al., 2011). It has been given many definitions, but Astin and colleagues (2011) defined spiritual development as actions that benefit either spirituality or religiousness. Some practices impact spirituality, religiousness, or both, and all fall under a working definition of spiritual development (Astin et al., 2011).

Spirituality, in Astin et al.'s (2011) terms, refers to the inner lives of students. More specifically, it refers to how students wrestle with and answer big questions such as "Who am I? What are my most deeply felt values? Do I have a mission or purpose for my life? Why am I in college? What kind of person do I want to become? What sort of world do I want to help create?" (Astin et al., 2011, p. 3). An increasing number of students are drawn to engage their spirituality once they come to college, and institutions do well to assist students in exploring these questions (Astin et al., 2011).

In this study, the researcher examined spiritual development as a blend of three components. Spiritual practices make up the first, such as daily faith life, church attendance; member of a faith community. Spiritual tolerance—defined as knowledge of other faith communities, understanding a plurality of beliefs, and tolerance of other faiths—serves as the second component. The third and final, spiritual self-awareness, pertains to spirituality's relationship to identity, perceived spiritual strength, and perceived value of faith. This definition sought to inclusively reconcile the many voices involved in the discussion of spiritual development. Liturgical practices, tolerance, and self-awareness contribute to faith development, whether religious or spiritual. The

following research on athletics and spirituality uses definitions of spirituality aligning with the definition proposed by this study.

Practical Benefits of Spiritual Development

Researchers linked spiritual development to increased equanimity, involvement, and quality of life (Astin et al., 2011; Kuh & Gonyea, 2006; Lau, Hui, Lam, Lau, & Cheung, 2015). Students engaging in spiritual practices possessed higher levels of these characteristics when compared to students who did not engage in spiritual practices (Astin et al., 2011; Kuh & Gonyea, 2006; Lau et al., 2015). When the research of Kuh and Gonyea, Astin and colleagues, and Lau and colleagues are combined, a broad picture of the benefits of spirituality emerges.

Astin et al. (2011), who viewed equanimity as the chief benefit of student spiritual development, defined equanimity as the ability to find meaning in hardship. Activities most likely to improve equanimity include meditation, prayer, and self-reflection and less expectedly include physical activities such as dance, yoga, and athletics (Astin et al., 2011). Equanimity has been linked to improvements in grade-point-averages, leadership skills, psychological well-being, self-assessed ability to get along with other races and cultures, and satisfaction with college (Astin et al., 2011). Spiritual development has also been linked to increasing student involvement, as seen in the National Survey of Student Engagement (NSSE) (Kuh & Gonyea, 2006).

Kuh and Gonyea (2006) described increased involvement in students openly practicing religion on college campuses. Students who engage in spirituality-enhancing practices exercise more, attend more cultural events, and more likely perform community service (Kuh & Gonyea, 2006). Additionally, they tend to be more satisfied with college,

spend more time in extracurricular activities, and view out-of-class learning more positively (Kuh & Gonyea, 2006). Kuh and Gonyea (2006) asserted, "Students who view the out-of-class climate as supportive of their social and nonacademic needs report greater gains in all of the outcomes on the NSSE survey, including a deepened sense of spirituality" (p. 46). Kuh and Gonyea's (2006) research suggests spiritually practicing students are more involved in their college years, a trait Astin (1984) linked with increased learning and personal development.

Along with equanimity, increased learning, and personal development, Lau et al. (2015) found another benefit of spiritual development. In a study of Chinese undergraduate students, Lau et al. (2015) examined the relationship between spirituality and quality of life. Lau et al. (2015) understood spirituality as the experiential and personal ways an individual relates to the sacred or transcendent. As higher education continues its mass expansion, more students enter universities (Lau et al., 2015). High levels of stress make the transition difficult for many; Lau et al. (2015) examined how spirituality enhances quality of life as students adjust to the rigors of higher education.

As universities organize campus programs to help students transition to higher education, spirituality is often overlooked (Astin et al., 2011; Lau et al., 2015). However, research suggests spirituality as a causal predictor of improved quality of life, and adopting spirituality focused strategies to improve quality of life is defensible (Lau et al., 2015). Additionally, Astin et al. (2011) found spiritual development a predictor of equanimity, and Kuh and Gonyea (2006) found it predictive of student involvement. Regardless of the faith attached to spirituality, it continues to impact the quality of life,

equanimity, and involvement of students who possess spirituality (Astin et al., 2011; Kuh & Gonyea, 2006; Lau et al., 2015).

According to existing literature, spiritual development should be attractive to both faith-based and secular institutions. As schools begin to take an interest in the benefits of spiritual development, the value of a study observing the impact of athletics on college student spiritual development grows.

Athletics and Spiritual Development

Previous studies viewed athletics as an expression of spirituality (Preece, 2009; Raikes, 2010; Storch et al., 2001). Gordon Preece (2009) wrote of a "Protestant Play Ethic" valuing competition in sports and effort out of a love for the game, modeling God's playful spirit. Mark Raikes (2010) studied how Division I athletes expressed their faith through their athletic competitions.

Spirituality is a valuable resource for student athletes, giving them strength to rely on in difficult times and demanding games (Raikes, 2010). Many athletes also view their talents as a gift from God and accept a responsibility of modeling character traits because of this mindset (Raikes, 2010). Spirituality helps student athletes process their own achievements and hold a healthy view of their peers (Raikes, 2010).

Storch and colleagues (2001) affirmed this view, finding athletes possess generally higher organizational and intrinsic religious beliefs. They gathered qualitative data indicating athletes use their faith to provide a sense of stability, security, and order to their lives as athletes (Storch et al., 2001). Though athletes tended to hold stronger religious beliefs, the implications were limited to fostering stronger coach-athlete relationships or therapist-athlete relationships (Storch et al., 2001). The study focused on

improving an individual's athleticism, not necessarily in nurturing the athlete's faith. To

better understand athlete spirituality, the United States Sports Academy also examined

institutional practices on their athletes' spiritual strength (Bell, 2009).

Nathan T. Bell (2009) of the United States Sports Academy examined the

religious strength of athletes and non-athletes at religion practicing institutions (RPI) and

non-religion practicing institutions (NRPI). Bell (2009) measured the faith of athletes

using the Santa Clara Strength of Religious Faith Questionnaire and found that RPI

students held stronger faith in comparison to NRPI institutions. Additionally, Bell (2009)

discovered that, at the two Division III institutions in the Midwest, non-athletes at the

RPI possessed a stronger faith than athletes from the same institution (Bell, 2009). This

finding counters the previous study by asserting that athletes are not necessarily more

religious than their non-athlete counterparts. At NRPIs, little separates the religious faith

of the athlete and the non-athlete (Bell, 2009). However, this piece of evidence has not

stopped Christians from using sport as a vehicle to transmit their beliefs.

An Assumed Link

The literature assumes a historical, positive relationship between athletic

involvement and spiritual development (Banwell & Kerr, 2016; Krattenmaker, 2010;

Pfitzner, 2009; Watson, 2007). Victor Pfitzner (2009) covered the historical piece of

previous cultures utilizing sport as an expression of ritual-based faith. Tracing the trend

of philosophical arguments, Pfitzner (2009) described how philosophers refined athletic

competitions into opportunities to discipline the body in order to gain lasting rewards in

the form of peace and strength of mind. Working through history up to Paul of the New

Testament, Pfitzner (2009) laid out the biblical use of this theme:

Paul's use of athletic imagery has more to do with language that was 'in the air' than with personal experience and powers of observation; his use clearly presupposes the long tradition of images and terms from the games in both pagan philosophy and Hellenistic Judaism. (p. 57)

This biblical metaphor of sport and spirituality served as the foundation for a form of muscular Christianity.

Muscular Christianity was the product of Charles Kingsley's attempt to promote masculinity and religion through sport (Watson, 2007). Kingsley saw sport as a way of providing bravery, endurance, fairness, and honor to individuals while driving out enviousness (Watson, 2007). In light of a popular dualism, sport and athletic competition provided opportunities for constructed disciplining of the body (Watson, 2007). The Fellowship of Christian Athletes, Athletes in Action, and Pro Athletes Outreach all owe their roots to Charles Kingsley's vision and inspiration to utilize sports to promote religious virtues (Krattenmaker, 2010; Watson, 2007).

Tom Krattenmaker (2010) wrote on the goals of Fellowship of Christian Athletes, and groups like it, as he described how evangelical Christianity embraced sport as a vessel for the Gospel. Krattenmaker (2010) described the pivotal role of a faith coach, a form of team chaplain, as a communicant of the Gospel. Researchers Banwell and Kerr (2016) examined the roll of coaches in spiritual development and found traditional coaches were poor tools of spiritual development. Krattenmaker (2010) suggested employing faith coaches, staff similar to chaplains, dedicated to supporting the spiritual development of the team. Although such staff play a pivotal role in the spiritual development of athletes, many teams lack such a role. Banwell and Kerr (2016)

acknowledged most traditional coaches lack the ability to nourish spiritual development in a way comparable to dedicated faith coaches. They proposed traditional coaches lack the declarative knowledge to construct procedures to facilitate spiritual development (Banwell & Kerr, 2016). Coaches cannot be expected to effectively facilitate development they do not understand. Additionally, other factors more intrinsic to the athletic experience may link athletics and spirituality.

Athletic Liturgies with a Spiritual Direction

James Smith (2016) posited humans are more than what they think but largely what they do. Tish Warren (2016) agreed, claiming people are shaped every day by their practices, rituals, and liturgies that make them who they are. While great thoughts and ideas may shape human thought, the real essence of a person is found in their actions, their habits, their liturgies (Smith, 2016). Warren (2016) claimed practices, rituals, and liturgies make people who they are. New knowledge and information do not always alter how individuals live their lives, but habits, when formed, do.

Smith (2016) claimed, "To be human is to be a liturgical animal, a creature whose loves are shaped by our worship" (p. 23). People are inherently liturgical animals, shaped by the actions they routinely do, often unconsciously. Smith (2016) and Warren (2016) noted that people are what they worship; one's worship guides one's loves. The actions and habits a person does constitute their daily liturgies, their daily worship. These actions inform a person's loves and therefore expose what he or she truly loves.

The liturgies of athletics can be directed to favor spiritual development. Chris Baldwin (2015) of Princeton's Institute for Youth Ministry described how CrossFit, a fitness gym-club hybrid, adopted an emphasis on creating better community members.

Rather than focusing on gaining mass and improving fitness, CrossFit desires for their members to be able to assist in repairing hurricane damage and aiding the immediate needs of their communities (Baldwin, 2015).

Athletics, similarly, can be framed to reflect a religious liturgical stance either through the intentions of an individual player or through the guidance of a coach. In this way, athletics can foster a liturgical, daily form of worship and begin to orient the true worship of a person's heart. Warren (2016) wrote, "Our hearts and our loves are shaped by what we do again and again and again" (p. 33).

Warren (2016), after checking her phone every morning, described a warped perspective of reality where she believed all glowing screens bring good news. By contrast, athletic involvement can infuse a belief that good things come through hard work and determination. The way individuals perceive the achievement of good things changes how they relate to the world.

Daily liturgies provide a powerful form of deep knowledge referred to as kinesthetic knowledge. Smith (2016) reflected on growing up in Michigan and receiving a question for directions concerning a particular street. As a child, Smith (2016) did not know his city from a street name perspective, but he knew his city by heart and how to get around quickly. His knowledge was not a head knowledge but a kinesthetic knowledge gained by doing, a form of muscle memory. Warren (2016) claimed most of what people do is precognitive, appealing to this deeper form of ingrained knowledge. Daily liturgies provide us the kinesthetic form of knowledge and teach us to love something rather than to know it. As such, a spiritual development built on a liturgy of athletics could prove an effective means of promoting spiritual development.

Conclusion

Does college athletic involvement impact college student spiritual development? Existing literature builds a case suggesting athletic participation can have a positive impact on spiritual development. Previous studies examined the religious beliefs of athletes but only as they impacted athletic performance. This research examined spiritual development as impacted by college athletic involvement. In particular, this study sought to answer the following unresolved question: "To what extent, if any, does college athletic involvement impact spiritual development?" Previous literature compares the religious status of athletes, but does it address development? The existence of various Christian athlete organizations from college groups to Saturday church recreational leagues bear witness to this assumed yet unverified link. Research further examining and attempting to verify this connection is the first step to further understanding the student athlete experience, especially as it relates to spiritual development in college. Research in this area also informs further understanding of what factors contribute to spiritual development in college.

Chapter 3

Methodology

Approach and Design

A quantitative survey design was an appropriate approach to relate explore the study's research question: To what extent, if any, does college athletic involvement impact spiritual development? Survey designs seek "to describe the attitudes, opinions, behaviors, or characteristics" of a given population (Creswell, 2012, p. 376). Within the framework of survey designs, a cohort design is a longitudinal study of a particular subpopulation conducted over time (Creswell, 2012). For this study, a survey design examined the spiritual development of college athletes from a small, faith-based, liberal arts institution in the Midwest. This study analyzed archival survey data of previous cohorts of athletes and analyzed the spiritual development of both athletes and non-athletes over a four-year period. Comparing surveys of freshmen athletes to the surveys of the same class four years later captured a longitudinal description of athlete spiritual development.

Additional analyses can be made by comparing survey responses of freshman students to senior students in a single survey administration year. Though this added approach fails to follow a specific cohort, it provides an avenue of assessing spiritual growth in athletes and non-athletes by comparing their spirituality in the first year of college to their spirituality near the end of senior year, even if the seniors and first-year

students belong to different cohorts. After comparing the spiritual development score means of the athletes to non-athletes, the relationship between athletic involvement and spiritual development was interpreted as positive, negative, or unrelated.

The study examined archival data from the National Survey of Student Engagement (NSSE), the Cooperative Institutional Research Program (CIRP) Freshmen Survey (TFS), and the College Senior Survey (CSS) to compare athletes' spiritual development to non-athletes' spiritual development.

Participants

This study examined the archival surveys of the 2011 CIRP, the 2015 CSS, the 2014 NSSE, and the 2017 NSSE data from a small, private, faith-based, liberal arts institution in the Midwest. The participants were undergraduate students from the following years: freshmen from the 2011 TFS data set, seniors from 2015 CSS data set, freshmen and seniors from the 2014 NSSE data set, and freshmen and seniors from the 2017 NSSE data set. The chosen data sets allowed the study to follow two separate graduating classes from freshmen to senior year. The institution's assessment office issued the respective survey in each of the given years, and all completed surveys were examined in this study.

Procedures

The raw survey data for NSSE, CIRP, and CSS, are stored and maintained by the university. Permission to use this data was requested from the institution's assessment office. The survey data identified students by their identification number, allowing the comparison of students between the various instruments. Also, the identification number as the only identifying feature of the student response assured respondent confidentiality.

Instruments

The NSSE, organized by George Kuh (2001), "annually assesses the extent to which students at hundreds of four-year colleges and universities are participating in educational practices that are strongly associated with high levels of learning and personal development" (p.12). Administered to hundreds of colleges, the survey analyzes benchmarks determined to have a profound impact student learning in college and provides reliable information to colleges (Kuh, 2001). NSSE permits institutions to add customized items to the survey. The Council for Christian Colleges & Universities (CCCU) formed a consortium group and agreed on faith-based questions to add to the NSSE instrument of participating CCCU institutions. These faith-based questions provide a reliable data set to measure the spirituality of college students in conjunction with the other two surveys.

The CIRP Freshman Survey (TFS) and the College Senior Survey (CSS) both originated from the Higher Education Research Institute (HERI) (HERI, 2017). Since 1966, the CIRP served American higher education as the largest and longest running empirical study on higher education (HERI, 2017). HERI developed TFS and CSS to measure dispositions and attitudes for both incoming freshman and exiting seniors.

These valid, reliable, and widely used surveys collected data from over 1,900 institutions and over 15 million students (HERI, 2017). This research examines the 2011 freshman survey and the 2015 senior survey due to their survey items measuring the spiritual development occurring in students in college. The surveys contain questions coded for spiritual and pluralistic beliefs and can be used to measure the spiritual dispositions and growth between members of a college class.

Survey Items

From the TFS, CSS, and NSSE survey, 21 items were selected as measuring the three aspects of spiritual development defined by the study. The survey items chosen have been proven valid by the HERI institute and NSSE respectively, and each reflect one of the following aspects of spiritual development as defined by this study: spiritual practices, spiritual self-awareness, and spiritual tolerance.

Spiritual practices. Spiritual practices—describing daily faith life, church attendance, and membership in a faith community—are assessed by the following self-reported items from the three surveys:

1. Significance of integrating spirituality into my life (from CSS; GOAL16);

2. Frequency of attending a religious service (from CSS; GENACT04);

3. Hours spent in a typical week praying or meditating (from CSS; HPW10);

4. Frequency of performing volunteer work (from CSS; GENACT07);

5. Frequency of attending a religious service (from TFS; ACT01);

6. Probability to participate in volunteer work (from TFS; FUT14); and

7. Disposition toward daily actions being affected by relationship with God (from NSSE CCCU consortium; CCCO1c).

All items positively contribute to the concept of spiritual practices of discipline. Questions relating to community service, or working for a purpose higher than a single individual, was included to reflect spirituality captured by the service activity.

Spiritual self-awareness. Spiritual self-awareness—the relationship between spirituality and identity, perceived spiritual strength, and perceived value of faith—is described by the following self-reported items from the three selected surveys:

1. Comparative rating of spirituality (from CSS; RATE16);

2. Significance of developing a meaningful philosophy of life (from CSS; GOAL11);

3. Comparative rating of spirituality (from TFS; RATE17);

4. Significance of developing a meaningful philosophy of life (from TFS; GOAL14);

5. I have a personally meaningful relationship with God (from NSSE CCCU consortium; CCCO1a);

6. My relationship with God contributes to my sense of well-being (from NSSE CCCU consortium; CCCO1b); and

7. Even if people around me opposed my Christian convictions, I would still hold fast to them (from NSSE CCCU consortium; CCCO1d).

All items contribute to conceptualizing strength in spiritual self-awareness. Items 5-7 are scored by students selecting a response from a Likert scale describing their agreement or disagreement with the statement. Agreeing with the statement to each degree indicates strength in spiritual self-awareness, while disagreeing in varying degree indicates to weakness in the area.

Spiritual tolerance. Spiritual tolerance—defined as knowledge of other faith communities, understanding a plurality of beliefs, and tolerance of other faiths—is measured by the following survey items:

1. Ability to see the world from someone else's perspective (from CSS; DIVRATE1);

2. Tolerance of others with different beliefs (from CSS; DIVRATE2);

3. Ability to see the world from someone else's perspective (from TFS;

    DIVRATE1);

4. Tolerance of others with different beliefs (from TFS; DIVRATE2); and

5. I believe I need to be open to consider new insights and truths about my faith

    (from NSSE CCCU consortium, CCCO1e).

All items positively relate toward demonstrating strength in tolerance. The HERI survey design permits institutions to see how students change over time by including identical questions on both the freshman and senior surveys such as items 1 and 2 compared to 3 and 4. These questions allowed the study to compare freshman means to senior means and evaluate the change in tolerance over time.

Data Analysis

For each survey used in the study, athletic status was the independent variable, placing students into one of two groups: athletes and non-athletes. Items from each of these surveys were identified as measuring one of three aspects of spiritual development, the dependent variables, as defined by the study: personal perception, daily practices, and tolerance of other's beliefs. The means of the items were compared, and t-tests were used to determine whether the results display statistically significant differences. The two groups were compared for each of the three aspects of spiritual development.

The breadth of survey items and data sets examined by this study provided an expansive exploration into the relationship between athletic involvement and spiritual development. The results, covered in the following chapter, provide a broad snapshot of this relationship and whether the relationship is positive, negative, or absent.

Chapter 4

Results

The purpose of the study was to determine the effect, if any, participation in athletics had on the spiritual development of college students. This chapter is divided into three primary sections: descriptive statistics, the tables and t-tests, and descriptions of important t-test cases. The descriptive statistics include means, standard deviations, and sample size (N) for all survey items. Sample sizes varied between survey questions in the same survey due to some respondents omitting questions. The tables all present descriptive statistics from each survey question for each population side-by-side. The t-tests include labels of the specific question and then relevant descriptive statistics for each survey item. Finally, highlighted cases from the table and t-tests are described to bring attention to special cases in the data set.

Descriptive Statistics

The descriptive statistics used in the means comparison are displayed in Tables 1, 2, and 3. Means, standard deviations, and sample sizes are reported for both athletic and non-athletic populations. Following the table of means, the t-tests report the significance of any differences between the two means.

The tables are sorted into two sections: tables of means and tables of t-tests. Both sets of tables are sorted into three sections, one for each component of the study's definition of spiritual development. The first table of each section displays spiritual

practices, time spent performing actions such as attending church and praying; the second displays spiritual self-awareness, student responses to questions assessing how much they value their faith; the last displays spiritual tolerances, student responses to questions assessing how they perceive others who think differently. T-tests for the TFS survey were omitted for this study. After taking t-tests of the other three survey questions, the results suggested t-tests of the TFS survey did not add any additional insight to the displayed results.

Table 1

Spiritual Practices Means

Survey Item	N		Mean		Std. Deviation	
	Athletic	Non-Athletic	Athletic	Non-Athletic	Athletic	Non-Athletic
GENACT04 CSS15	38	151	2.74	2.87	0.554	0.34
GENACT07 CSS15	38	151	1.95	1.96	0.517	0.631
HPW10 CSS15	37	151	3.35	3.54	1.317	1.13
GOAL16 CSS15	38	151	3.66	3.75	0.534	0.519
CCCO1c NSSE14FY	35	163	4.34	4.40	0.838	0.750
CCCO1c NSSE14SR	19	137	4.32	4.44	0.582	0.766
CCCO1c NSSE17FY	38	109	4.45	4.45	0.504	0.659
CCCO1c NSSE17SR	28	146	4.39	4.30	0.629	0.764
ACT01 TFS11	44	354	2.93	2.94	0.255	0.264
FUT14 TFS11	42	347	3.21	3.28	0.813	0.775

Table 2

Spiritual Self-Awareness Means

Survey Item	N		Mean		Std. Deviation	
	Athletic	*Non-Athletic*	*Athletic*	*Non-Athletic*	*Athletic*	*Non-Athletic*
RATE16 CSS15	38	151	3.87	3.74	0.777	0.83
GOAL11 CSS15	38	151	2.97	2.99	1.102	0.952
CCCO1a NSSE14FY	35	164	4.51	4.52	0.562	0.696
CCCO1b NSSE14FY	35	164	4.46	4.60	0.701	0.661
CCCO1d NSSE14FY	35	162	4.40	4.44	0.651	0.687
CCCO1a NSSE14SR	19	136	4.63	4.63	0.496	0.643
CCCO1b NSSE14SR	19	137	4.58	4.66	0.507	0.647
CCCO1d NSSE14SR	19	137	4.47	4.53	0.513	0.630
CCCO1a NSSE17FY	38	109	4.79	4.67	0.413	0.510
CCCO1b NSSE17FY	38	109	4.76	4.72	0.431	0.511
CCCO1d NSSE17FY	38	109	4.47	4.61	0.603	0.561
CCCO1a NSSE17SR	28	146	4.64	4.55	0.488	0.665
CCCO1b NSSE17SR	28	146	4.61	4.62	0.629	0.613
CCCO1d NSSE17SR	28	146	4.46	4.38	0.627	0.697
RATE17 TFS11	44	349	3.68	3.79	0.771	0.819
GOAL14 TFS11	42	347	2.31	2.50	1.024	0.969

Table 3

Spiritual Tolerance Means

Survey Item	N		Mean		Std. Deviation	
	Athletic	Non-Athletic	Athletic	Non-Athletic	Athletic	Non-Athletic
DIVRATE1 CSS15	38	151	4.13	4.03	0.623	0.657
DIVRATE2 CSS15	38	151	3.92	3.81	0.749	0.795
CCCO1e NSSE14FY	35	161	4.37	4.39	0.598	0.681
CCCO1e NSSE14SR	19	137	4.21	4.48	0.787	0.665
CCCO1e NSSE17FY	38	109	4.34	4.52	0.669	0.571
CCCO1e NSSE17SR	28	146	4.36	4.48	0.559	0.635
DIVRATE1 TFS11	44	353	3.73	3.80	0.758	0.724
DIVRATE2 TFS11	44	353	3.66	3.71	0.776	0.786

The greatest difference between any two means from the above tables is 0.271.

At first glance, all the means appear close together. The following t-tests display through

the p-value (Sig. 2 tailed) whether the means differ significantly from each other.

Additionally, if the number 0 falls between the lower and upper confidence interval, the

results can be considered to indicate no strong difference between the two means

(Independent samples t-test, 2018).

Table 4

Spiritual Practices T-Tests

Survey Item	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
						Lower	Upper
GENACT04 CSS15	-1.838	44.245	0.172	-0.131	0.094	-.0.059	0.320
GENACT07 CSS15	-0.116	187	0.907	-0.013	0.111	-0.206	0.231
HPW10 CSS15	-0.863	186	0.389	-0.185	0.214	-0.238	0.608
GOAL16 CSS15	-0.954	187	0.341	-0.090	0.095	-0.097	0.277
CCCO1c NSSE14FY	-0.392	196	0.696	-0.056	0.143	-0.337	0.225
CCCO1c NSSE14SR	-0.668	154	0.505	-0.122	0.183	-0.239	0.483
CCCO1c NSSE17FY	-0.018	145	0.985	-0.002	0.117	-0.230	0.234
CCCO1c NSSE17SR	0.595	172	0.552	0.091	0.154	-0.395	0.212

Table 5

Spiritual Self-Awareness T-Tests

Survey Item	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval Lower	Upper
RATE16 CSS15	0.896	187	0.371	0.133	0.149	-0.427	0.160
GOAL11 CSS15	-0.073	187	0.942	-0.013	0.179	-0.339	0.365
CCCO1a NSSE14FY	-0.080	197	0.936	-0.010	0.126	.0.258	0.238
CCCO1b NSSE14FY	-1.178	197	0.240	-0.147	0.124	-0.392	0.099
CCCO1d NSSE14FY	-0.350	195	0.727	-0.044	0.127	-0.295	0.206
CCCO1a NSSE14SR	0.043	153	0.966	0.007	0.154	-0.310	0.297
CCCO1b NSSE14SR	-0.504	154	0.615	-0.078	0.155	-0.228	0.384
CCCO1d NSSE14SR	-0.343	154	0.732	-0.052	0.151	-0.247	0.351
CCCO1a NSSE17FY	1.305	145	0.194	0.120	0.092	-0.301	0.062
CCCO1b NSSE17FY	0.513	145	0.608	0.048	0.093	-0.231	0.062
CCCO1d NSSE17FY	-1.222	145	0.224	-0.132	0.108	-0.081	0.345
CCCO1a NSSE17SR	0.667	172	0.506	0.088	0.132	-0.349	0.173
CCCO1b NSSE17SR	-0.073	172	0.942	0.009	0.127	-0.241	0.260
CCCO1d NSSE17SR	0.568	172	0.570	0.081	0.124	-0.361	0.200

Table 6

Spiritual Tolerances T-Tests

Survey Item	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval	
						Lower	Upper
DIVRATE1 CSS15	0.834	187	0.405	0.098	0.118	-0.331	0.135
DIVRATE2 CSS15	0.746	187	0.456	0.106	0.143	-0.388	0.175
CCCO1e NSSE14FY	-0.110	194	0.913	-0.014	0.124	-0.259	0.232
CCCO1e NSSE14SR	-1.628	154	0.106	-0.271	0.167	-0.058	0.600
CCCO1e NSSE17FY	-1.607	145	0.110	-0.181	0.113	-0.042	0.403
CCCO1e NSSE17SR	-0.951	172	0.343	-0.122	0.129	-0.132	0.376

Results

The means of both athletic populations and non-athletic populations for every question examined appear close. Whether first-year or senior, little difference exists between the means of the two populations over the six-year period from TFS 2011 to NSSE 2017.

The greatest difference between means is found in the 2014 NSSE Senior Spiritual Tolerance question with a difference of 0.271. Even in the case exhibiting the greatest difference between the two populations, no significant difference in scores exists for athletes (M = 4.21, SD = 0.787) and non-athletes (M = 4.48, SD = 0.665) in regard to spiritual tolerance; t(154) = 1.628, p = 0.106. This result represents the greatest difference between any means in the data set. This case possesses the greatest difference between means and the lowest p-value. The examined case with the greatest difference between means failed to reject the null hypothesis claiming the means of the two populations can be assumed to be the same. Because all other survey items examined

have closer means, the data suggests that, for any survey question examined, no statistical significance exists between the two means.

Additional t-tests affirm the initial result. Examining self-reported church attendance of senior students in CSS 2015, no significant difference was found in scores for athletes (M = 2.74, SD = 0.554) and non-athletes (M = 2.87, SD = 0.34) in their church attendance; t(44.245) = 1.389, p = 0.172. This result affirms the initial t-test in suggesting no statistically significant difference exists between athlete and non-athlete students in church attendance. Further t-tests were conducted of survey items from the various surveys to see if any survey item would reject the null hypothesis that the means of athletic and non-athletic students were the same.

Summary

The means of the selected survey items displayed no statistically significant differences in any examined item. Regardless of survey item, year, or academic year, no statistically significant difference emerged between athletic populations and non-athletic populations in regard to their scores on selected survey items assessing spirituality. The collective weight of the means and t-tests suggest the true mean of the athletic population does not differ from the true mean of the non-athletic population. The two populations, in regard to their spirituality as defined by survey responses to selected questions, cannot be concluded as different. Given the amount of literature suggesting differences of experience between athletic students and non-athletic students, further discussion is warranted to examine why no statistical significance appeared in this study.

Chapter 5

Discussion

The results suggested the two studied populations, athletes and non-athletes, do not differ spiritually at the start or end of their college years at this particular institution. The existing literature suggested differences exist between athletic college students and non-athletic college students and detailed how many believed athletics a natural avenue for instilling virtue and spiritual development into the lives of its participants. The following discussion of this study seeks to offer suggestions for why this study found similarities rather than differences.

At first glance, the means of comparison appear similar. With only a maximum distance of 0.271 between any questions among the surveys, the central tendencies of the two populations never differed far from each other. The study covered a six-year period, sampled both first year students and senior students, and examined three different aspects of spiritual development. Despite this breadth, the p-values of the t-tests did not suggest the two populations should have different means. The data fails to reject the null hypothesis that the means of athletes and non-athletes differ, suggesting the true means of the two populations could be the same. Research has commonly discussed the differences between athletic populations and their non-athletic peers.

These findings are in contrast with the review of literature that would suggest a difference exists between these groups. Storch et al. (2001) found athletes generally

possessed higher organizational and intrinsic religious beliefs, but Bell (2009) found non-athletes at the examined religious practicing Division III institutions possessed a stronger faith than athletes from the same institution. This study found no statistical difference between athletes and non-athletes. Of the institutions referenced in previous studies, Storch and colleagues examined the University of Florida, and Bell examined the Division III institutions in the Midwest. Institutional differences could explain the differences within the findings.

For the particular institution examined in this current study, the faith-based nature could play a part in the spiritual development of the two populations. By nature of being a Christian institution, the school already seeks to attract spiritually focused students. An examination of the first-year student spiritual assessments suggests that the athletic students are no exception to this practice, as the average of the athletic students is not statistically different for any individual metric covered by the survey.

The faith-based nature of the institution may also explain why the athletic participation does not appear to impact spiritual development while they are at the institution. In comparison to the Division III schools in the Midwest that Bell (2009) examined, discipleship-focused athletic departments could also account for elevated spiritual levels by comparison. Pfitzner (2009) and Watson (2007) both advocated for the effective use of sport in conveying religion and spiritual emphasis, and, in a discipleship focused format, sport would be leveraged to emphasize particular religious and spiritual truths. However, if spiritual development is emphasized across the institution, involvement in athletics could do relatively little to alter the trend for athletes. Athletes live in the same residence halls, attend the same classes, and share similar opportunities

for campus events like chapel. If spiritual development primarily occurs in these spaces, athletic participation may not affect the development in an observable manner. However, given the quantitative nature of the analysis, it is difficult to explain for certain what factors do or do not contribute to interpreting the findings. The findings only suggest no statistical difference between the two populations at this particular institution.

Implications

From the findings of this study, at least three implications for practice emerge: assumptions should be made cautiously about the two groups; athletic participation does not appear detrimental to spiritual development; and the athletic department has evidence they do not accept or select exceptions to spiritual standards.

First, for this particular institution and other institutions like it, faculty and administrators may want to demonstrate caution when making assumptions about the athletic population. Athletes attract special attention due to their status, but demonstrable differences between populations are not always present. In regard to the spiritual development of athletes compared to non-athletics, no discernible differences were found. The study suggests other assumptions of athletic students should be empirically investigated before assumptions are made between the differences of athletic students and non-athletic students.

Second, not only do the students display no statistically significant difference when they enter the institution, but they also do not display a difference when they leave the institution. Upon exit of the institution in their senior year, no statistical difference was found between athletic students and non-athletic students. Though the impact of the athletic experience on spiritual development remains uncertain, the study suggests it does

not negatively impact the spiritual development of students who participate in athletics. These results can be advertised in admissions to parents of students considering competing in college athletics. Parents can be assured that college athletics does not negatively impact their students' spiritual development. It is also of important note to athletic coaches that their programs do not detract from the students' spiritual development.

Although the study found no statistical significance between the means of athletic students and their non-athletic peers, this information remains significant. Assumptions made about the spiritual development of athletic students can be substituted for empirical, data-driven observations of athletes' spiritual development in comparison to their peers. Athletic experience can powerfully impact the college experience of participating students, but accurate descriptions of the impact can fluctuate depending on institutional context and other surrounding factors.

Third, the athletic department of this institution can demonstrate they do not recruit students who would otherwise not be admitted. The examined school asks all accepted students to sign a statement of faith expressing a faith commitment in line with the institution. More critical university stakeholders may assume athletic programs at this institution, and institutions like it, accept students who do not fit this particular piece of the institutional mission. According to this study, over six years, athletic programs consistently accepted and recruited students who report similar levels of spiritual development as non-athletic peers. Across all survey, categories, and items, no statistical difference is found in the first year of students at this institution. The athletic students appear no different than the general student body in regards to spiritual development.

Future Research

The study highlighted the importance of understanding the contextual nature of the student athlete experiences. For the particular portion of spiritual development examined, no statistical difference exists between athletes and non-athletes. Opportunities for future research include studying the differences in academic performance or involvement of athletes and non-athletes to provide more quantitative descriptions of the athletic experience for smaller faith-based institutions. Prior research focusing on spiritual development of student-athletes failed to capture the experience of athletes at this institution; perhaps other studies fail to describe the impact of athletic involvement on academic performance or campus involvement. Further archival studies could make use of existing data to study the athletic experience in contrast to students not participating in athletics.

Comparing the results of this study to the literature suggests institutional context could play a significant role in the student athlete experience. The prior studies mentioned were conducted at various institutional types, and the findings failed to agree. Perhaps capturing a broader picture of the student athlete experience is too ambitious, and smaller descriptives should be compiled of student athletes from similar institutional types. Division 1 student athletes may behave similarly to those of other Division 1 schools, but to extend their findings to athletes from faith-based NAIA institutions seems ambitious. Rather than attempting to capture a broad picture of the student athlete experience, research should examine institutional type as a primary cause of the varying experiences of athletes. Should institutional type prove to be a significant explanatory

variable to student athlete experience, further studies could focus how to improve the experiences of student athletes.

Future studies should also further examine the role of the coach on spiritual development. Similar to institutional type, different coaches at different institutions are tasked with prioritizing different results. While winning is emphasized at all levels of coaching, a small faith-based school with a discipleship-driven philosophy toward coaching may take different actions than a revenue-producing coach at a large Division 1 school. Further, some institutions may expect coaches to make spiritual development a significant piece of their coaching, and others may even consider emphasizing it as a distraction. Even within families of coaching, diversity exists between coaching styles and approaches toward handling a team, depending on size, sport, and traditions. Further study could drill down into the impact a coach has on student athletes' experiences, both on and off the field.

Limitations

Limitations of this study include the limits of a quantitative study, a small sample size for some survey populations, the study taking place at a single institution, and the assumption that athletic involvement is the primary determining factor between two students. The limitations of this study clarify the scope and application of the research findings and should guide how the findings of this study are applied to other institutions.

First, the study had a narrow scope and sought to answer a particular question: does athletic involvement impact spiritual development? The study focused on finding a statistically significant difference between the means of athletes and non-athletes in regard to the self-reported answers to spiritual questions. The study, in this form, could

not explain the effect or non-effect of athletic experience but could only express whether a difference existed. This inability to explain the effect is a primary limitation of the study, as all other inferences are left up to the researcher and readers.

Second, a small sample size reduces the chance of finding statistically significant differences. As the sample size of a population decreases, the potency of an individual response increases, and the chances of the population capturing the central tendency of the represented population decreases. A larger sample size is preferred in nearly all cases, but some surveys of this study reported only 19 athletic responses. This limitation is mitigated through the collective weight of the other surveys examined with stronger response rates. No examined survey question suggested the means were sufficiently different to reject the assumption that the means of the two populations are the same. Whether the sample size of the population was 19 or 45, the data suggested the means of the populations were not statistically different.

Third, the study was only conducted at a single institution. If more institutions were examined, the study could have provided to a more general athlete-to-non-athlete comparison, but restricting the study to one institution limited the applicability of the study to the single institution and those like it. The institution studied is a private, faith-based, liberal arts institution in the Midwest. The institution requires a statement of faith and a written testimony as admissions components and encourages whole-person education. The institution emphasizes the integration of faith and learning and prioritizes discipleship for its students. The results are most useful to institutions matching the above descriptors and have limited applicability to schools that do not resemble the examined institution.

As mentioned in the above paragraph, a host of other contributing factors impact the spiritual development of students at the examined institution. By sifting the students into two populations based on athletic involvement, the study inherently asserts that athletic involvement is the primary difference-maker. This pseudo-experimental model allows this study to properly address the research question but can leave the results difficult to interpret after the data is analyzed. The answer demands additional questions to be resolved for the answer to be meaningful. In the case of this study, athletes and non-athletes possess no difference in regard to their scores on spiritual development. This lack of statistical significance does not indicate athletics does not impact the spiritual development of college students, but there is no evidence of it doing so in this particular institutional context.

Conclusion

An exploration of the literature demonstrates the great benefits of spiritual development on students regardless of institutional type. The literature demonstrated multiple facets of spiritual development and how the term and idea has been understood through years of study. After deciding on three categories of spiritual development—practices, self-awareness, and tolerance—the study examined the relationship between athletics and spiritual development and inquired as to what impact, if any, athletics had on spiritual development.

At a small, Christian, liberal arts institution in the Midwest, the study compared the means of spiritual assessments reported through institutional surveys over the course of six years. The means comparison revealed no statistical difference between athletic and non-athletic populations for any survey item over the six years of data examined.

In the case of this study, finding no significant difference between the populations still offers a valuable insight into the two populations. The study provides the institution valuable data concerning their student athletes and may assist in correcting false assumptions about this population of students. The study invites further investigation into the student athlete experience at this institution and others like it, as any institution may produce different results than prior studies at other institutions.

Though the athletic population reported nearly identical results to the non-athletic population in regard to spiritual development, this result invites further research into both contributing factors to college student spiritual development and into understanding the impact of athletic involvement on the college experience. Understanding the athletic experience includes understanding what aspects of a college education it impacts and what aspects it does not. Research of this nature plays a key role in understanding particular details of a specific population. Given the impact of institutional context, understanding how a college relates to similar institutions is crucial for incorporating best practices into university action. Continuing the practice of short, quantitative studies, institutions could determine for themselves the impact their college experience has on their students over time. Making the practice an institutional priority remains the next step in connecting this private, faith-based, liberal arts college in the Midwest to a more comprehensive understanding of how its college experience continues to shape its students.

References

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, *25*, 297–308. Retrieved from https://www.middlesex.mass.edu/

Astin, A. W. (2004). Why spirituality deserves a central place in liberal education. *Liberal Education*, *90*(2), 34–41. Retrieved from https://files.eric.ed.gov/fulltext/EJ682573.pdf

Astin, A.W., & Astin, H. S. (2010). Exploring and nurturing the spiritual life of college students. *Journal of College & Character*, *11*, 1–9. doi:10.2202/1940-1639.1724

Astin, A. W., Astin, H. S., & Lindholm, J. A. (2011). *Cultivating the spirit: How college can enhance students' inner lives.* San Francisco, CA: Jossey-Bass.

Baldwin, C. (2015). Sports and youth ministry: Community. *Princeton Theological Seminary.* Retrieved from http://iym.ptsem.edu/sports3/

Banwell, J., & Kerr, G. (2016). Coaches' perspectives on their roles in facilitating the personal development of student athletes. *Canadian Journal of Higher Education*, *46*(1), 1–18. Retrieved from http://journals.sfu.ca/cjhe/index.php/cjhe/article/view/185109

Bell, N. T. (2009). Strength of religious faith of athletes and nonathletes at two NCAA Division III institutions. *United States Sports Academy*. Retrieved from

http://thesportjournal.org/article/strength-of-religious-faith-of-athletes-and-nonathletes-at-two-ncaa-division-iii-institutions/

Chickering, A. W. (2006). Our orientation. In A. W. Chickering, J. C. Dalton, & L. Stamm (Eds.), *Encouraging authenticity and spirituality in higher education* (pp. 5–36). San Francisco, CA: Jossey-Bass.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson.

Drum, J., Ladda, S., Geary, C., & Fitzpatrick, C. (2014). Athlete and non-athlete adjustment to college. *Metropolitan Universities*, *25*(1), 39–62. Retrieved from https://journals.iupui.edu/index.php/muj/article/view/20561/20161

Fowler, J. W. (2000). *Becoming adult, becoming Christian: Adult development and Christian faith.* San Francisco, CA: Jossey-Bass.

Higbee, J. L., & Schultz, J. L. (2013). Responding to the concerns of student-athletes enrolled in a first-year experience course. *Contemporary Issues in Education Research*, *6*, 155–162. doi:10.19030/cier.v6i2.7724

Higher Education Research Institute [HERI]. (2017). About HERI. Retrieved from https://heri.ucla.edu/about-heri/

Kamusoko, S. D., & Pemberton, C. L. A. (2013). Student-athlete wellbeing and persistence: An in-depth look at student-athlete perceptions. *Journal for the Study of Sports & Athletes in Education*, *7*, 41–61. doi:10.1179/1935739713Z.0000000003

Krattenmaker, T. (2010). *Onward Christian athletes: Turning ballparks into pulpits and players into preachers.* Lanham, MD: Rowman and Littlefield Publishers.

Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change*, *33*(3), 10–66. doi:10.1080/00091380109601795

Kuh, G. D., & Gonyea, R. M. (2006). Spirituality, liberal learning, and college student engagement. *Liberal Education*, *92*(1), 40–47. Retrieved from https://www.aacu.org/publications-research/periodicals/spirituality-liberal-learning-and-college-student-engagement

Lau, W. W. F., Hui, C. H., Lam, J., Lau, E. Y. Y., & Cheung, S.-F (2015). The relationship between spirituality and quality of life among university students: An autoregressive cross-lagged panel analysis. *Higher Education*, *69*, 977–990. doi:10.1007/s10734-014-9817-y

Mayhew, M. J. (2004). Exploring the essence of spirituality: A phenomenological study of eight students with eight different worldviews. *NASPA, 41*, 647–674. doi:10.2202/1949-6605.1392

Moore, E. W., Berkley-Patton, J. Y., & Hawes, S. M. (2011). Religiosity, alcohol use, and sex behaviors among college student-athletes. *Journal of Religion and Health, 52*, 930–940. doi:10.1007/s10943-011-9543-z

Parks, S. D. (2000). *Big questions, worthy dreams*. San Francisco, CA: Jossey-Bass.

Pascarella, E. T., Truckenmiller, R., Nora, A., Terenzini, P. T., Edison, M., & Hagedorn, L. S. (1999). Cognitive impacts of intercollegiate athletic participation: Some further evidence. *The Journal of Higher Education*, *70*(1), 1–26. doi:10.2307/2649116

Pfitzner, V. C. (2009). We are the champions! Origins and developments of the image of

God's athletes. In G. Preece & R. Hess (Eds.), *Sport and spirituality: An exercise

in everyday theology* (pp. 49–64). Hindmarsh, SA: ATF Press.

Preece, G. (2009). When I run I feel God's pleasure: Towards a Protestant play ethic. In

G. Preece & R. Hess (Eds.), *Sport and spirituality: An exercise in everyday

theology* (pp. 25–48). Hindmarsh, SA: ATF Press.

Raikes, M. H. (2010). *Exploring the essence of student-athlete spirituality: A

phenomenological investigation of NCAA Division I athletes* (Doctoral

dissertation). Retrieved from ProQuest Dissertations and Theses. (3439113)

Sage, G. H., & Eitzen, D. S. (1997). *Sociology of North American sport* (6th ed.).

Madison, WI: Brown and Benchmark.

Sheldrake, P. (2007). *A brief history of spirituality*. Malden, MA: Blackwell.

Smith, J. K. (2016). *You are what you love*. Grand Rapids, MI: Brazos Press.

St. John, E. P., & Parrish, D. (2012). Creating discursive space for religion and

spirituality in universities: A review essay. *Christian Higher Education*, *11*, 131–

137. doi:10.1080/15363759.2010.515500

Stamm, L. (2006a). The dynamics of spirituality and the religious experience. In A. W.

Chickering, J. C. Dalton, & L. Stamm (Eds.), *Encouraging authenticity and

spirituality in higher education* (pp. 37–65). San Francisco, CA: Jossey-Bass.

Stamm, L. (2006b). The influence of spirituality and religion in shaping American higher

education. In A. W. Chickering, J. C. Dalton, & L. Stamm (Eds.), *Encouraging

authenticity and spirituality in higher education* (pp. 66–92). San Francisco, CA:

Jossey-Bass.

Storch, E. A., Kolsky, A. R., Silvestri, S. M., & Storch, J. B. (2001). Religiosity of elite college athletes. *Sport Psychologist*, *15*, 346–351. doi:10.1123/tsp.15.3.346

Warren, T. H. (2016). *Liturgy of the ordinary: Sacred practices in everyday life*. Downers Grove, IL: InterVarsity Press.

Watson, N. J. (2007). Muscular Christianity in the modern age: 'Winning for Christ' or 'playing for glory'? In J. Parry, S. Robinson, N. J. Watson, & M. Nesti (Eds.), *Sport and spirituality: An introduction* (pp. 80–94). New York, NY: Routledge.