

THE IMPACT COACHES BEHAVIORS HAVE ON STUDENT-ATHLETE SPORTSMANSHIP ACTIONS
AND THE TRANSLATION OF ATHLETE CHARACTER INTO THE CLASSROOM

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2021

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Beldon, Zachary David. *The Impact Coaches Behaviors Have on Student-Athlete Sportsmanship Actions and the Translation of Athlete Character into the Classroom*. Doctor of Philosophy (Higher Education), August 2021, 119 pp., 7 tables, 1 figure, references, 99 titles.

Administrators and coaches in universities and colleges have focused on their students' moral development since the beginning of the higher education system. Students who participate in sports activities have acknowledged that they develop many life skills, including ethical behaviors, that can translate to non-sport environments, such as the classroom. Students who participate in organized sports programs in college often acknowledge their coach as a significant source of their development, due to the amount of time athletes and coaches spend with each other. Recently, instances of cheating have become widespread throughout American higher education. In this dissertation, I seek to evaluate the role that coaches, and overall sports participation has on the development of students' ethical behaviors both within sports and outside of the sport environment. I conducted three quantitative studies to evaluate the role that coaches play in the development of ethical behaviors in sports (as measured through sportsmanship), the similarities and differences in sportsmanship between participation in varsity or club sports, and the role that sports participation has on self-reported instances of cheating. I find that coaching behaviors that instill sportsmanship behaviors are similar to behaviors identified in youth sports and that the coaching behaviors are more predictive of coaches caring that their athletes act in a sportsmanlike way within varsity athletes than club athletes. Lastly, this study also indicates that participation in recreational sports programs is related to self-reported instances of cheating. The three studies identify that sports participation influences the development of ethical behaviors within college students.

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ACKNOWLEDGEMENTS

I would not have completed this dissertation without the support of many people. First and foremost, I would like to express my gratitude to my fantastic advisor Dr. Hyun Kyoung Ro, for providing me with amazing feedback and positive support throughout this journey. Thank you for your guidance, patience, and assistance in helping me develop as a scholar. I also want to thank my committee members, Dr. Joseph Walker, Dr. John Collin, and Dr. Veronica Baldwin for their time, feedback, guidance, suggestions, and expertise. In addition, I would like to thank Dr. Hongxin Li for supporting me throughout my PhD process.

Most importantly, I would like to thank my amazing wife Abby for supporting me and putting up with me when I got frustrated throughout this journey. My sister Melissa for helping me copy edit my dissertation, and my parents, Lori and Rob, and brother Matthew for their endless support and love throughout my education.

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CHAPTER 1

INTRODUCTION AND CONCEPTUAL FRAMEWORK

Participation in organized sports programs in higher education is one of the most popular out-of-class time activities that college students participate in. The impact that sports participation has on the development of college students has been under-researched for several decades. College has been recognized as an environment for students to develop their character and ethical beliefs. Participation in sports programs has been recognized as an area in which students develop life skills, including ethical behaviors, that transfer to their lives outside of the sports industry. In sports, the ethical behaviors are shown through how athletes act, with athletes of good character and ethical behaviors being recognized as displaying good sportsmanship behaviors. Unfortunately, the media does not report on instances of sportsmanship behaviors, because it is not deemed newsworthy, instead news organizations highlight unsportsmanlike behaviors.

Coaches and athletes have a unique relationship in college, due to the amount of time they spend with each other (Gayles, 2015). With instances of unsportsmanlike behaviors being covered nationally by various news media (Bumbaca, 2020), coaches are tasked with ensuring that their athletes do not conform to actions depicted across the media. Since coaches are the most important authority figure in sports programs, coaches' behaviors and actions towards their athletes are vital contributing factors to athletes' morality and character development. This dissertation looks at how different coaching behaviors influence the development of sportsmanship behaviors in collegiate student-athletes, how the type of collegiate sports environment plays a role in the sport experiences, and whether participation in sports

programs is related to instances of academic dishonesty. Therefore, I adapted Terenzini and Reason's (2005) college impact model to assess how the out-of-classroom and inside the classroom experiences impacts the development of students moral and ethical behaviors.

This dissertation is designed to evaluate students' athletes' experiences in out-of-classroom experiences and the impact those experiences have on the development of students' character, based on the college impact model presented by Terenzini and Reason (2005). The college impact model builds on the social psychological and sociological standings regarding the effect of college on students established by Astin (1977; 1985), Tinto (1975, 1993), Pascarella (1985), and the organizational impacts established by Berger and Milem (2000).

Terenzini and Reason's (2005) college impact model dictates that students' precollege characteristics and experiences, as well as students' college experiences shaped by the organizational context of the institution and the surrounding peer environment, affects student outcomes. Precollege characteristics and experiences consist of students' precollege background characteristics such as sociodemographic traits (e.g., gender, race/ethnicity, age, socioeconomic status growing up) and their academic preparation and previous performance (e.g., quality of their curriculum in grade school, grades, and abilities in grade school; Reason, 2009). Research has shown that precollege characteristics influence student development and experiences throughout college. However, since administrators and practitioners cannot control these characteristics, it would behoove them to focus on experiences and characteristics that they can control (Pascarella & Terenzini, 2005; Reason, 2009).

Terenzini and Reasons' (2005) college impact model further dictates that the organizational context of the institution indirectly influences collegiate student outcomes, by

shaping the kinds of educational experiences students have in college. Berger and Milem (2000) recognized that traditional research which looked at the impact college organizations effects college students was traditionally categorized into two groups: structural-demographic features of the institution, and organizational behavior dimension. Reason (2009) identified that studies which examined the structural-demographic features traditionally looked at institutional traits including the size, institutional type (public vs private), curricular mission, and/or admissions selectivity. Studies that looked at organizational behavior assessed the organizational behavior, culture, and climate (Reason, 2009). Overall, the organizational context dimension asserts that institutions differ in vital aspects that could impact student experiences and outcomes such as their structural-demographic features and their organizational behaviors.

Terenzini and Reason's (2005) college impact model does not identify all features of the college organization that could shape student outcomes, rather they provide examples of potential influential elements throughout the organizational context (Ro et al., 2013). Most researchers rely on easily accessible structural features including type of control (public vs private), mission, size, selectivity of admissions, geographic location, religious affiliation, student mix (undergraduate-graduate), and student housing. Research shows that structural and demographic traits of institutions have limited impact on between-college effects and therefore are more often becoming control variables in student development research (Reason, 2009; Ro et al., 2013). Instead, organizational behavior features like the culture of faculty, internal structure, policies, and practices have been shown to impact student experiences and outcomes directly (Reason, 2009; Ro et al., 2013). Reason (2009) surmised when evaluating how the organizational contexts influence student outcomes and development, the institutional

effects are more about what an institution does for students than what the institution is about.

The individual-student aspect of the Terenzini and Reasons' model consists of students experiences in three educational settings: curricular, classroom, and outside of the classroom. Students' curricular experiences include their experiences within their general coursework, their academic major choice, the extent of their socialization with that field, and their exposure to other academic experiences at the institution (e.g., internships, cooperative education, and study abroad; Reason, 2009). Students experiences in the classroom includes the pedagogical approaches used by faculty and the type and frequency of feedback received by those faculty in classes (Reason, 2009). Finally, student experiences outside of the classroom and beyond their courses and field of academic study includes the student's residential status, employment status, and involvement in various extra-curricular activities (e.g., Greek Life, Student Government Association, varsity athletics, recreational sports, etc.; Reason, 2009). These types of student experiences cover the most important experiences for college students (Reason, 2009).

The final aspect of Terenzini and Reasons' model evaluates student outcomes. Terenzini and Reason originally developed their college impact model to be flexible to guide various college student outcomes. Most notably, Terenzini and Reason's model has been utilized to evaluate student persistence in college. However, Terenzini and Reason state that their framework could be used for research examining any aspect of student development in college, stating "students' development of their verbal, quantitative, or subject matter competence; higher-order cognitive skills and intellectual interests; moral reasoning skills and development; psychosocial development; value and attitudinal changes; persistence into the second or

subsequent years, degree completion, and post-graduation outcomes” (p. 13). In this dissertation, I study students’ character development, as measured through sportsmanship and cheating behaviors.

Overall, Terenzini and Reasons (2005)’s college impact model provides the conceptual framework for this study as it indicates that college student outcomes are influenced by student’s pre-college characteristics, the organizational context of the institution, and students experiences both inside and outside the classroom. Although originally developed to study outcomes of first-year students, the model has been readily adapted to evaluate various experiences and outcomes of undergraduate students (e.g., Foreman & Retallick, 2012; Reason, 2009; Ro et al., 2013). Within this dissertation the model provides the general framework which establishes that student’s pre-college characteristics and their experiences on college campuses directly influences the development of their character, as measured through sportsmanship and cheating behaviors. Specifically, the studies presented focus on the impact that experiences in out-of-classroom activities, organized sports programs, has on the development of athletes’ character, while controlling for pre-college characteristics.

The following chapters contain three empirical studies based on Terenzini and Reason (2005)’s model as a conceptual framework. In Chapter 2, I specifically evaluate student-athletes experiences with different coaching behaviors and how those behaviors contribute to the development of sportsmanship through identifying whether their coach cares that they act appropriately. Specifically, I assess whether coaching behaviors at the youth level are still prevalent at the collegiate level. Since instances of unsportsmanlike behaviors in collegiate sports are being covered throughout the media (Bumbaca, 2020), research is needed to identify

the impact that coaches have on their athlete's behaviors. This study identifies the impact that various coaching behaviors have on the development of sportsmanship behaviors within college sports programs. Furthermore, this study identifies the pertinent coaching behaviors that influences students' perceptions that their coach cares that they act in a sportsmanlike way. The results of this study indicate that within college sports, athletes perceive only five coaching behaviors (*emphasizes, instructs, models, rewards, and punishes*) that directly relate to their perceptions of their coach caring that they act in a sportsmanlike way. Furthermore, coaches that strive for the holistic development of their athletes should focus on *instructing* their athletes how to be good sports and *model* appropriate desired behaviors. Sport administrators can use these results to refocus collegiate coach training seminars to ensure that coaches are trained in the holistic development of their athletes.

In Chapter 3, I again evaluate student athletes' experiences with various coaching behaviors, but I do so to compare athletes' experiences across different types of sport programs. I also compare student athletes' sport skill development experiences based on the type of sports program they are enrolled in. Students that wish to participate in organized intercollegiate sports programs in college face two options, club sports or varsity sports. Although both options allow for students to compete against students from other institutions, the structure of both programs is drastically different. This study identifies the impact the sports type (club or varsity) has on athletes' perceptions that their coach's behaviors indicates that their coach cares that they act in a sportsmanlike way. Furthermore, this study identifies the differences across the two sport types and the social development outcomes that are commonly associated with sports participation. The results of this study illustrate that overall,

the assessed coaching behaviors were more predictive of students' perception that their coach cares that they act in a sportsmanlike way. Furthermore, the results also indicate that club sport athletes rated wanting to *develop a new skill* and *be physically active* as more important in their participation than it was for varsity athletes. Therefore, due to the structural and experiential differences in sports programs, recreational sports programs should receive more institutional funding to further develop and support programs.

In Chapter 4, I evaluate the relationship that participation in organized sports activities as an out-of-classroom activity and students' own beliefs about cheating, as well as their perceptions of their peers' behaviors and beliefs about cheating to assess what contributes to students' self-reported cheating behaviors. Specifically, I assess whether the focus on the development of ethical behaviors in sports (i.e., sportsmanship) translates out of the sports programs and into the classroom as measured through self-reported instances of academic dishonesty. Instances of academic dishonesty have been prevalent in the American higher education industry for decades. McCabe and Trevino (1997) identified participation in student organizations as a contributing factor to an increase in cheating behaviors. Sport coaches have recognized their impact on the development of their athletes beyond technical sports skills. Students that participate in NIRSA backed sports are faced with an emphasis on everyone demonstrating sportsmanship behaviors (i.e., ethical behaviors) throughout competition (Rothwell & Theodore, 2006). This study explores the impact that participation in sports programs in college has on the frequency of self-reported instances of cheating. This study identifies that participation in NIRSA-sponsored programs is directly related to self-reported instances of cheating. Furthermore, I found that a student's beliefs about cheating and their

observations of cheating at the institution are highly related to self-reported instances of cheating. Therefore, due to students' beliefs about cheating and observations of cheating being most significant predictors of cheating, faculty and higher education administrators should remind students annually about potential repercussions if students elect to cheat.

In Chapter 5, I lay out the contributions and implications that my dissertation has on future research and institutional policy and practice. Specifically, I highlight the implications that offer how student experiences in out-of-classroom activities through sports help develop their ethical and moral behaviors. Furthermore, I provide implications for sport administrators and coaches regarding the holistic development of athletes through the teaching of sportsmanship. Lastly, I present implications for both higher education faculty and administrators in order to further mitigate cheating behaviors in college.

CHAPTER 2

EXAMINING RELATIONSHIPS BETWEEN COACHING BEHAVIORS AND SPORTSMANSHIP DEVELOPMENT AMONG COLLEGE STUDENT-ATHLETES

Introduction

The moral development of college students has been a concern for college administrators since the founding of higher education (Patton et al., 2016; Mayhew et al., 2016). In sports, an athlete's morality is often tied to their actions, which are characterized as either sportsmanlike or unsportsmanlike. The National Center for Education Statistics (NCES) estimates that 19.9 million students are currently enrolled in the American Higher Education system ("Fast Facts: Back to school statistics", n.d.). Of those 19.9 million students, nearly 500,000 participate in a varsity, NCAA sanctioned sport ("Student-athletes", n.d.), and another 2 million participate in an organized club sport (Pennington, 2008). Due to the amount of time that coaches and athletes spend with each other, they develop a unique relationship (Gayles, 2015). Prior research indicates that coaches have a considerable impact on their athlete's behaviors, moral development (i.e., sportsmanship), and motivations (Caron et al., 2018; Horn, 2002; Vella et al., 2013).

When an athlete or coach displays unsportsmanlike behaviors, those actions and behaviors often become the focus of the news. For example, when the head coach of the Georgia State Football team appeared to snub the opposing coach from the University of Pittsburgh following their loss, video from the handshake appeared across the news media (Bumbaca, 2020). On the other hand, instances of appropriate sportsmanship behaviors are often left out of the news-cycle as they are viewed as acceptable behaviors and not

newsworthy. Research has indicated that instances of both unsportsmanlike and sportsmanlike actions have been connected to athletes' morality and character (Bolter & Weiss, 2013). Since coaches are the significant adult and authority figure in sports programs, Bolter and Weiss (2013) found that coaches are key contributors to their athletes' morality and character development, as measured through sportsmanship. Athletes have also acknowledged that when their coaches appear to accept unsportsmanlike actions, the athletes believe that those actions are appropriate and acceptable (Bolter & Kipp, 2018).

With instances of unsportsmanlike conduct being covered nationally by various news sources, it is important for researchers to identify the specific behaviors that coaches utilize to train their athletes to act appropriately. Since athletes and coaches spend numerous hours training, researchers have examined the impact that coaches have on the character development of their athletes (Caron et al., 2018; Horn, 2002). For example, prior research utilizing the Sportsmanship Coaching Behaviors Scale (SCBS) has indicated there are five-to-six behaviors (emphasizing, expecting, instructing, modeling, punishing, and rewarding) that coaches utilize in youth sports that contribute to the development of sportsmanship behaviors (Bolter & Kipp, 2018; Bolter et al., 2018; Bolter & Weiss, 2013). However, no research has been conducted which specifically examines the impact that college coaches have on the development of sportsmanship behaviors of college athletes. Researchers need to identify if the coaching behaviors that are recognized in youth sports are still prevalent at the collegiate level to ensure that college student-athletes act appropriately by displaying appropriate sportsmanship behaviors.

College sports observers and scholars agree the top priority of college coaches is to win games (Ott & Bates, 2015). Since the focus of collegiate sports is on winning rather than skill

development, more research is needed to assess the impact that the coach's behavior of focusing on winning in collegiate athletics influences the development of an athletes' moral/character development as assessed through sportsmanship. Terenzini and Reason's (2005) model illustrates how students' co-curricular experiences have a direct impact on student development and retention. Framed by Terenzini and Reason's (2005) model, this study evaluates individual student experiences within the college sports programs and the development of sportsmanship behaviors.

Purpose and Research Questions

Overall, the purpose of this study is to identify the relationship between college athletes' experiences of coaching behaviors and the development of sportsmanship. To assess the previously identified coaching behaviors that contribute to the development of sportsmanship, I will validate the SCBS for use by college students. Identifying the coaching behaviors that are pertinent to the development of appropriate sportsmanship behaviors will help researchers identify the behaviors that influence the development of unsportsmanlike actions in college athletics. The specific research questions that guide this study are:

- 1) What factors construct the development of sportsmanship through coaching behaviors from the responses of college student athletes?
- 2) To what extent do the athletes' experiences of coaching behaviors relate to their perception that their coach cares that they act in a sportsmanlike way?

By answering these questions, this study seeks to identify the extent that coaching behaviors have on the development of sportsmanship actions in competitive collegiate athletes.

An adapted version of Terenzini and Reason's (2005) model is used to evaluate the co-

curricular experiences of individual collegiate student athletes to assess the development of sportsmanship in college athletes. I collected data from 180 college student athletes at one large minority serving research focused institution. Utilizing Confirmatory Factor Analysis and simultaneous multiple regression analyses, I offer implications for both academic and sports administrators by revealing the impact that different coaching behaviors have on college students.

Significance

This paper identifies the impact that coaching behaviors can have on the development of sportsmanship in college athletes. By identifying the structure of coaching behaviors that play a role in the development of sportsmanship, coach trainings can focus on desired behaviors of the coaches, rather than game plan and skill development. This study also identifies which specific coaching behaviors contributes the most to the athlete's perceptions that their coach cares that they act in a sportsmanlike way. By identifying the most pertinent behaviors, sport administrators can address their coaches' behaviors' during their annual reviews. Furthermore, by assessing the validity of the SCBS within college students, future research can look at the impact that coaching behaviors have on athletes' ethical behaviors in other areas of higher education.

Literature Review

For several decades, researchers examined how coaches influence their athletes through coaching behaviors (Horn, 2002). Despite the depth of research conducted on coaching behaviors, researchers have focused on the general impact of coaching behaviors on student-

athletes and the development of sportsmanship separately. Little research has been done to assess the role that coaches play in the development of college athlete's sportsmanship. In this section, I review literature that addresses the impact that coaching behaviors have on collegiate student-athletes, and sportsmanship as a category of moral behavior.

The Impact of Coaching Behaviors on College Student-Athletes

Within the sports industry, coaches acknowledge the need to approach coaching from a holistic mindset (Cassidy, 2013). Mallett and Rynne (2010) state that holistic coaching within sports is described as the role the coach plays in facilitating the growth and development (e.g., physical and psychosocial aspects) of the athlete. They identified that research which utilized self-determination theory found numerous benefits of a holistic approach to coaching beyond simple performance outcomes (Cassidy, 2013; Mallet & Rynne, 2010). The benchmarks of coaching behaviors have been drawn from the holistic coaching perspective across the sports spectrum (Cassidy, 2013). Specifically, Lyle (2002) found that in participatory/recreational styled sports programs, holism is the benchmark for coaching, whereas in performance sports, holistic approaches are used as a comparison tool amongst coaches.

Coaches' behaviors and actions are often a reflection of their experiences within the sports environment (Day, 2013). Day (2013) reported that modern coaches constantly utilize other coaches as resources that aide in the continuing development of their own skills in coaching. Day (2013) also found that coaches' behaviors are heavily influenced and reflective of the behaviors that were utilized by their coaches, back when they were athletes in the sport. Therefore, coaches' behaviors and actions are often reflective of what the coaches learned from their sports environments back when they were an athlete, and through observationally

learning how other coaches behave during practices and games.

Successful coaches who promote development of their athletes, often utilize observational learning techniques for athletes to “learn appropriate behaviors from individuals who model good behavior” (Connolly, 2017, p. 2). A model is recognized as any person whose actions and behaviors motivate an observer’s response. Since coaches have legitimate authority over athletes, they are responsible for deciding who starts and plays, training skills, and allocating scholarships; therefore, coaches are some of the most credible models in the eyes of their athletes (Yukhymenko-Lescroart et al., 2007). Consequently, the implications of coach’s behaviors need to be assessed, to identify the impact behaviors have on the development of college student athletes.

As part of the growing acceptance of holistic coaching, college coaches are facing increasing expectations and duties within their institutions. Cunningham and Dixon (2003) identified varsity intercollegiate coaches are responsible for multiple areas within their programs, including team performance in competition, athlete’s academic success, athlete recruitment, athlete satisfaction, and ethical behaviors. Numerous studies have confirmed ethical behaviors as a necessary outcome for athletes that participate in intercollegiate sports competitions (Doherty & Johnson, 2001; Putler & Wolfe, 1999; Trail & Chelladurai, 2000). Doherty and Johnson (2001) specifically reported that the head coach is ultimately responsible for laying the foundation for acceptable ethical behaviors of all the coaches and players within their program.

A large portion of the literature on college coaches’ behaviors assesses the impact that different behaviors have on the motivations of student-athletes (Amorose & Horn, 2000, 2001;

Hollembeak & Amorose, 2005; Matosic & Cox, 2014; Wu et al., 2014). Specifically, researchers have gauged the influences that coaches' behaviors have on athlete's intrinsic motivation (Amorose & Horn, 2001; Hollembeak & Amorose, 2005). Amorose and Horn (2001) assessed the intrinsic motivation levels of first-year college student-athletes in relation to their perceptions of their coach's behaviors and their scholarship status. Amorose and Horn (2001) found that neither the students' scholarship status nor their involvement in the sport impacted their intrinsic motivation levels. However, Amorose and Horn (2001) did find that coaches who utilized instructing and training coaching behaviors saw higher levels of intrinsic motivation within their athletes. Furthermore, the coaching behaviors of training, instruction, and positive feedback have also been identified as being significant predictors of an athletes' competence, as well as intrinsic motivation (Hollembeak & Amorose, 2005).

Recently, researchers have set out to gain an understanding of how coaches actions impact the development of athlete's morals through sportsmanship. An athlete's morals are often identified by how they act; and in sports, a person's moral actions or inactions are identified as sportsmanship or unsportsmanship behaviors. Bolter and Weiss (2012) developed a survey instrument which assesses the impact that various coaching behaviors have on an athlete's sportsmanship development. The Sportsmanship Coaching Behaviors Scale (SCBS), was developed using an extensive literature review, focus groups, expert panel reviews, and a pilot study. Currently, the SCBS includes 24 items that evaluates six common coaching behaviors that foster sportsmanship development. The six coaching behaviors that are assessed through the SCBS are a) modeling good sportsmanship, b) punishing athletes for poor sportsmanship, c) instructing good sportsmanship, d) setting expectations for good

sportsmanship, e) rewarding good sportsmanship, and f) emphasizing winning over good sportsmanship (Bolter & Kipp, 2018; Bolter et al., 2018). Currently, the SCBS has been validated as a scale that evaluates the coaching behaviors' influence on developing sportsmanship in youth athletes (Bolter & Kipp, 2018; Bolter & Weiss, 2013), youth sport coaches and physical education teachers (Bolter et al., 2018), and parents (Beldon & Walker, 2019, 2020).

Furthermore, Bolter and colleagues (Bolter & Kipp, 2018; Bolter et al., 2018; Bolter & Weiss, 2013) found that the behaviors that are assessed through the SCBS are also connected to the development of prosocial and antisocial behaviors towards both an athletes' teammates and their opponents.

Sportsmanship

Regardless of the level of sports competition, there is an inherent expectation that all individuals involved in the sport will act in a sportsmanlike way. While the concept of sportsmanship has been around since competitive sports started, there has yet to be a consensus regarding exactly what sportsmanship is and what it looks like (Carr et al., 2012). Keating (1964) provided the first serious attempt to define what sportsmanship is, when he defined it as its own moral category (Carr et al., 2012). Keating (1964) described sportsmanship as:

Honorable victory is the goal of the athlete and, as a result, the code of the athlete demands that nothing be done before, during, or after the contest to cheapen or otherwise detract from such a victory. Fairness or fair play, the pivotal virtue in athletics, emphasizes the need for an impartial and equal application of the rules if the victory and a quiet composure in defeat testify to an admirable and extraordinary self-control and, in general, dignify and enhance the goal of the athlete. (p. 35)

Therefore, Keating (1964) is credited with laying the foundation for sportsmanship as

participants playing fairly, controlling one's actions, and abiding by the rules.

Arnold (1984) recognized three approaches to sportsmanship as: a) a means of social union, b) a means in the pleasure and promotion, and c) a form of altruism. These three approaches ensures that sporting competitions are characterized by acting fairly and respectfully towards all players, coaches, and referees, regardless of the score, while also being concerned with the welfare of others. Arnolds three-pronged approach to sportsmanship can be viewed as an overarching construct that has helped future iterations of the definition of sportsmanship become more specific.

Beller and Stoll (1993) sought to define sportsmanship conduct through the lens of NCAA-sponsored student-athletes and coaches. Beller and Stoll (1993) found that athletes recognized appropriate sportsmanship behaviors as helping your team win in competition, being a good guy on your team, supporting your team, and speaking up for your teammates. Beller and Stoll (1993) further detailed that good sportsmanship actions can only occur when the established rules, whether they are written or unwritten, are followed by everyone involved. Conversely, college coaches concluded that sportsmanship is defined by the culture of the team and environment, indicating that the concept of sportsmanship is subjective to each person and not a standard universally accepted concept. Since coaches identify sportsmanship as a construct that is subjective to the surrounding environment, further research is needed to identify the impact that college coaches have on developing sportsmanship in their athletes.

The National Collegiate Athletic Association (NCAA) defined sportsmanship as: "a set of behaviors to be exhibited by student-athletes, coaches, game officials, administrators, and fans in athletic competition. These behaviors are based on values, including respect, civility, fairness,

honesty, and responsibility” (Kampf, 2006, p.20). Combining the definitions of Arnold (1984), Keating (1964), and the NCAA, it can be surmised that sportsmanship is characterized by playing within the rules, being respectful towards one another, and being fair towards your opponent. Strand et al. (2008) validates this definition as they recognized sportsmanship as, “a concern and respect for the rules and officials, social conventions, the opponent, as well as one’s full commitment to one’s sport and the relative absence of a negative approach toward sport participation” (p. 302).

Ultimately, the common thread amongst the definitions provided above is the mutual respect towards others and the rules of the game. Since this study evaluates student-athletes, the definition of sportsmanship by the NCAA will be the guiding definition for this study, as it is already implemented across a portion of the collegiate sports system. Since coaches believe that sportsmanship is defined by the culture of the location, and instances of unsportsmanlike conduct being covered across the media, research is needed to assess the impact that coaches’ behaviors have on the development of sportsmanship at the collegiate level.

Conceptual Model

Terenzini and Reason’s (2005) college impact model is adapted to examine the development of sportsmanship in collegiate student-athletes. Reason et al. (2007) identified that the outcome variable in Terenzini and Reason’s college impact model can be identified as any student outcome, including cognitive development and psychosocial change. Similar to the adaptation done by Foreman & Retallick (2012) to assess the development of leadership outcomes, the adopted framework for this study includes pre-college characteristics and student experiences, with a focus on out-of-class experiences. Since sportsmanship has been

previously connected to a persons' ethical and moral behaviors, and therefore a psychosocial change, the outcome variable for this study will be the athletes' perception that their coach cares that they act in a sportsmanlike way. The pre-college characteristic included for this analysis is the gender of the athlete.

Regarding the individual student experiences, this study evaluates the out-of-classroom experience component in Terenzini and Reason's (2005) college impact model. One of the most common out-of-classroom activities throughout education is the participation in organized sports programs. Prior research indicates that coaches are one of the most vital sources of development for athletes (Caron et al., 2018; Connolly, 2017; Doherty & Johnson, 2001; Horn, 2002; Vella et al., 2003). Due to the enormous impact that coaches have on the development of athletes, the behaviors deployed by coaches can have a dramatic impact on the experiences of their athletes. As such, for this study, each student's experience in their sports environment will be assessed by the athlete's responses to the SCBS to evaluate the frequency that different coaching behaviors are implemented by their coaches to develop athlete sportsmanship.

The conceptual model proposed in this study extends Terenzini and Reason's (2005) college impact model by identifying the relationship that individual student experiences have with the development of sportsmanship. Since the outcome variable in Terenzini and Reason's model could include any aspect of student outcomes, including cognitive development, psychosocial and attitudinal change, and persistence, this study illustrates that the model can be used to assess the perceptions that athletes have of their coach's behaviors in relation to their belief that their coaches care that athletes act in a sportsmanlike way. Thus, the conceptual model used here considers students pre-college characteristics, the out-of-class

experiences and athletes' individual perceptions, and the belief that college coaches care that athletes act in a sportsmanlike way.

Methods

Data collection occurred during the beginning of the spring 2020 academic semester. In total, the dataset consists of 180 participants from the researched institution that participated in an organized sports competition. The collected sample was not intended to be reflective of only student athletes who compete solely in either NCAA or NIRSA programs, rather the sample is designed to examine collegiate student-athletes that participate in any organized sports competition. The purpose of this study is to identify the relationship between college athletes' experiences of coaching behaviors and the development of sportsmanship. Toward this end, I utilized a survey approach to gather quantitative responses in terms of the frequency and perceptions of demonstrated coaching behaviors utilized by college coaches.

Sample

Convenient sampling methods were used for data collection. All participants were enrolled at least half-time at the researched institution and were currently athletes of either an NCAA or NIRSA sponsored sports program. The researched institution consists of roughly 38,000 students with approximately 350 students participating in an NCAA sponsored sports program (Guess, A. personal communication, Spring 2020), and another 500 students participating in club sport programs (Wells, H., personal communication, Spring 2021). The researched institution is recognized as a Tier-1 research-focused institution that is recognized as minority-serving. The institution is located in the southwest part of the United States and is

located in an urban-rural community. Overall, the undergraduate student body consists of 45.8% white students, 23.4% Hispanic/Latino students, 12.6% Black/African American students, and 6.4% Asian students. The student body consists mostly of female students (52%) with the average age being 22 years old. The institutions mission states that the institution emboldens students to flourish in a rapidly changing world through its caring and creative community.

Overall, the collected sample consists of 180 participants that participated in either a club or varsity sport program at the researched institution. Participants ranged in age from 18 years old ($n= 30$, 18%), to 23 years or older ($n= 18$, 11%), with most of the participants identifying as either 20 ($n= 37$, 22.6%) or 21 ($n= 41$, 25%). More women ($n= 98$) completed the survey instrument than men ($n= 73$). The majority of the sample identified as White ($n= 102$, 72.3%), with Native Hawaiian or Pacific Islander ($n= 13$, 9.2%) having the second most responses, followed by those identifying as other ($n= 12$, 8.5%), Black or African American ($n= 7$, 5%), and Asian ($n= 4$, 2.8%). Participants ranged across the spectrum in relation to their participation in sports programs, with participants playing volleyball ($n= 24$, 13.3%), rock climbing ($n= 20$, 11.1%), Basketball ($n= 18$, 10%), Fencing ($n= 18$, 10%), Rugby ($n= 16$, 8.9%), Tennis ($n= 16$, 8.9%), Swimming ($n= 14$, 2.3%), Equestrian ($n= 12$, 6.7%), Football ($n= 7$, 3.9%), Soccer ($n= 5$, 2.8%), Softball ($n= 4$, 2.3%), Track and Field ($n= 4$, 2.3%), and Baseball ($n= 2$, 1.1%).

Data Collection

After receiving approval from the governing institution's Institutional Review Board to proceed with data collection, several data collection methods were used to obtain a valid sample for this study. Data collection came from the completion of the survey instrument both on physical and electronic copies of the instrument. Numerous safeguards were included to

avoid having participants complete the survey multiple times. Safeguards included making in-class announcements prior to posting any flyers, allowing for the announcements to include statements about the flyers that will be posted and not needing to complete the survey more than one time. Furthermore, flyers were placed in buildings that did not have any in-person announcements made, for a limited amount of time. Separating collection method strategies, allows myself the opportunity to remind student-athletes that if they completed the instrument previously, then they do not need to complete the survey through another method. All data is kept confidential and anonymous, as the only identifying information includes participants age, specific sport, race/ethnicity, gender, and length of participation under the coach.

Instrument

An adapted version of the SCBS instrument was deemed as an appropriate measurement scale for this study due to its specificity in assessing coaching behaviors and their impact on the development of sportsmanship. Originally, the SCBS includes 40 items that evaluates 12 coaching behaviors (Bolter & Weiss, 2012). While conducting model confirmation in youth athletes, physical education teachers, grade school coaches, and parents the survey was reduced to 24 items which cover six coaching behaviors (Beldon & Walker, 2019; Bolter & Kipp, 2018; Bolter et al., 2018). However, Beldon and Walker (2020) indicated that in the adult population (aged 18 and up), the instrument is highly redundant, and suggest shrinking the SCBS down to 18 items. This study utilizes a reduced version of the SCBS, consisting of 18 items with three items per coaching behavior.

Prior to collecting data within college students, I shrunk the original SCBS from 24 to 18 items, by evaluating content validity with content experts. Two researchers evaluated the

content of each question and removed one item from each coaching behavior factor that had the most conceptual overlap with another item and had minimal impact on the subscale alpha coefficient when evaluating the data previously collected from adult participants. Furthermore, another Ph.D. candidate was asked to validate and triangulate the removal of each item. Additionally, a question was added that inquired about whether the athlete perceives that their coach cares about their players' sportsmanship attitudes. The remaining questions inquired about participant demographics including their gender, age, race, duration of participation of participating in the sport and with their coach, along with items inquiring about athlete motivations. Overall, the survey used in this study consist of 30 items.

Data Analysis

This study was conducted using quantitative analysis techniques. The overall goal of the study is to further validate the SCBS instrument for usage in college student athletes and to evaluate the impact that the coaching behaviors have on athletes' perceptions of coaches' preferences that they act in a sportsmanlike way. As such, data were input into IBM SPSS 25.0 software to assess data normality. After verifying data normality, data was analyzed using Confirmatory Factor Analysis (CFA) techniques in IBM AMOS software and multiple regression in IBM SPSS 25.0.

Before I conducted the analyses, I checked the data for incomplete surveys and data normality. Data analysis revealed a small amount of missing data (less than 5%). Since there was no recognizable pattern of the absent values, the missing data were deemed missing completely at random. In order to minimize the impact on the items mean and standard deviation, I used mode imputation (Downey & King, 1998; Tabachnick & Fidell, 2019). All values

of skewness (<12.001) and kurtosis (<13.001) were suitable, indicating normally distributed data (Kline, 2005). Further analysis of response frequency rates indicated that participants used the complete range of scores (1-5) for the majority of the items, revealing item variability in student athletes' perceptions of coaching behaviors. Evaluation of the mahalanobis distance for the data set confirmed multivariate normality for the entire sample.

Confirmatory Factor Analysis

To answer the first research question of the study, a confirmatory factor analysis was conducted to identify the model fit of the data collected. The proposed model for this study has previously been validated by Beldon and Walker (2020) and Bolter and Kipp (2018). To assess the fit of the data to the proposed model, I evaluated several fit indices: model χ^2 , root mean square error of approximation (RMSEA), Tucker-Lewis Index (TLI), or Non-normed fit index (NNFI), comparative fit index (CFI), and standardized root mean square residual (SRMR). To achieve acceptable fit, the model needs to have an RMSEA value less than .08 (Hooper et al., 2008), a TLI/NNFI should be greater than .95 (Hooper et al., 2008), and CFI and SRMR should be less than .08 (Hu & Bentler, 1999; Tabachnick & Fidell, 2019).

Multiple Regression

To answer the second question posed in this study, a simultaneous multiple regression analysis was conducted. Following similar procedures used when analyzing data from the SCBS, factor aggregate scores were created and used as predictor variables (Bolter & Kipp, 2018; Bolter & Weiss, 2013). Factor aggregate scores were created by summing all the items that went into the creation of the latent factor and then dividing by the number of items within that

factor. The simultaneous regression analysis included aggregate scores for each of the coaching behaviors confirmed in the CFA being regressed into the dependent variable of the athlete's perception that their coach cares that they act in a sportsmanlike way.

After completing the standard multiple regression analysis, I computed the structure coefficient and the squared structure coefficients to assess each factors' independent contribution to predicting the dependent variable. Structure coefficients were evaluated in combination with the beta weights, to address each factors' unique contribution to predict the dependent variable, due to the predictor variables being moderately correlated amongst each other (Yeatts et al., 2017). Structure coefficients were calculated as the Pearson's correlation between each predictor variable and the predicted dependent variable (Yeatts et al., 2017). Squared structure coefficients identify each items unique contribution to the overall effect observed in the multiple regression analysis and is calculated by squaring the structure coefficient.

Limitations

This study is not without limitations. Most notably, the sample includes data collected from one institution. With data collection being limited to one institution, the study has limited generalizability to all other institutions. For example, the results may not be generalizable to a school that competes at the NCAA Division II or Division III level. To address this limitation, future researchers should seek to replicate this study to identify whether the results translate to other competition levels. Therefore, a delimitation of this study was that the data was collected only at one institution. Another limitation for this study is the coaches' gender is not included in the analysis. College sports are dominated by male coaches, therefore an analysis

comparing male and female coaches proves challenging within the data set collected.

Results

Confirmatory Factor Analysis

Similar to prior confirmatory factor analyses utilizing the SCBS framework (Beldon & Walker, 2020; Bolter & Kipp, 2018, Bolter et al., 2018; Bolter & Weiss, 2012, 2013), the CFA of this study consists of 6 latent variables that are covaried amongst each other and are equally formed from the items with the SCBS. Using the entire collected sample (n=180), the six-factor confirmatory factor model revealed acceptable fit with the data set as indicated by model fit indices, $\chi^2 (120) = 196.099$, $p < .01$, CFI = .97, TLI = .96, RMSEA = .06 (CI: .04-.07), SRMR= .04. However, multicollinearity among factors was evident across the model and following the recommendations from Beldon and Walker (2020) and Bolter and colleagues (Bolter & Kipp, 2018; Bolter et al., 2018), the *expects* factor was removed due to high correlations with other factors.

The revised 5-factor model proved to be a better fitting model $\chi^2 (80) = 128.066$, $p = .001$, CFI= .98, TLI= .97, RMSEA= .06 (CI: .04-.06), SRMR= .04. All factor loadings were statistically significant ($p < .05$) and ranged from .78 to .99. Subscale alpha coefficients proved to be acceptable across all factors with *Rewards* $\alpha = .84$, *Models* $\alpha = .86$, *Punishes* $\alpha = .91$, *Instructs* $\alpha = .88$, and *Emphasis* $\alpha = .92$. With the five-factor model holding acceptable model fit and all subscale alpha coefficients proving to be high, the five-factor model was adopted for subsequent analysis (Figure 2.1). Table 2.1 indicates the correlation matrix of the five latent factor model.

Figure 2.1

Proposed Model for SCBS in College Students

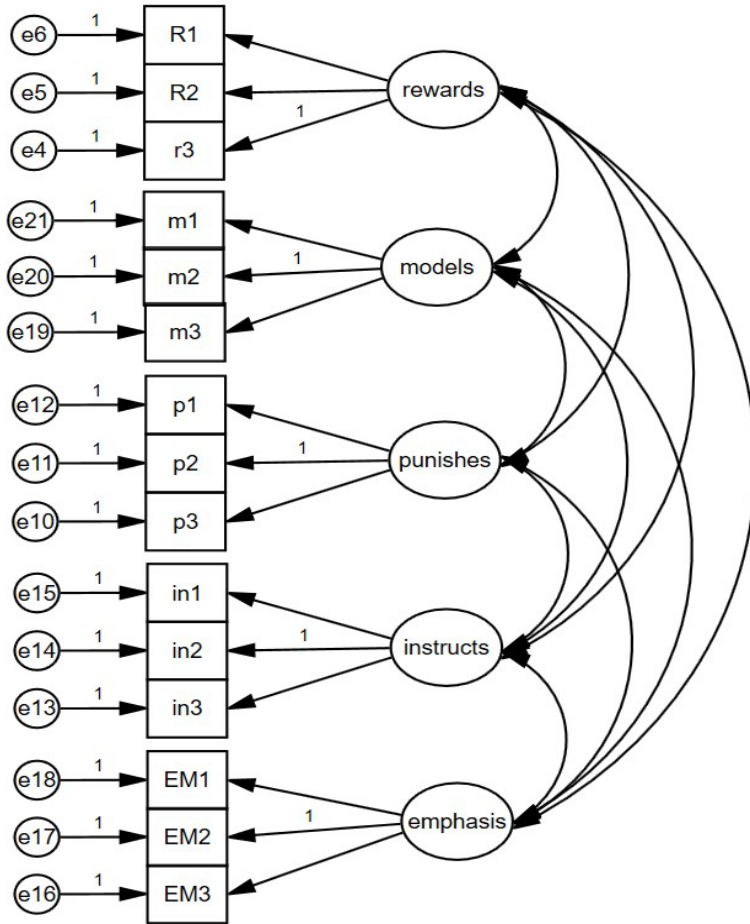


Table 2.1

5 Factor SCBS Covariance Matrix

	Rewards	Models	Punishes	Instructs	Emphasizes
Rewards	1	.74*	.45*	.83*	-.10
Models		1	.17	.85*	-.28*
Punishes			1	.32*	.30*
Instructs				1	-.15
Emphasizes					1

*indicates $p < .05$

Multiple Regression

To evaluate the impact that the different coaching behaviors have on the student-athletes' perceptions that their coach cares that they act in a sportsmanlike way (Research Question 2), the aggregate scores of each of the five coaching behaviors were regressed into the coach's cares variable. To control for athletes' gender, the sample size decreased due to participants not reporting their gender and the final sample included 171 participants. The result of the omnibus regression analysis was statistically significant at $\alpha=.05$, $F(6,170) = 30.120$, $p<.001$, with a moderate effect size of $R^2=.524$ and an adjusted R^2 of .507, indicating a slight reduction when accounting for sampling error. After inspecting inter-item correlations between the five-factors, three-factors were highly correlated (*instructs-models* $r= .75$, *instructs-rewards* $r=.74$).

Table 2.2

Regression Results Predicting Athletes Perceptions that Coaches Care for Sportsmanlike Behaviors

Variable	<i>B</i>	SE <i>B</i>	β	R_s	R_s^2	R^2
Constant	.205	.434				.524
Gender	.269	.104	.147	-.088	.008	
Rewards	.116	.075	.129	.774	.599	
Emphasizes	-.059	.046	-.076	-.297	.088	
Punishes	.047	.050	.060	.319	.102	
Instructs	.335	.087	.353*	.954	.910	
Models	.070	.104	.061	.818	.669	

*indicates $p<.05$.

To control for the remaining multicollinearity issue within the multiple regression analysis, structure coefficients and beta weights were both evaluated to identify each behavior's unique

contribution to the overall regression model (Yeatts et al., 2017). Table 2.2 displays the resultant coefficients from the omnibus regression model, including beta weights and structure coefficients.

Overall, when looking at the five evaluated coaching behaviors, the coaching behavior of *instructing*, was the only statistically significant predictor when looking at structural beta weights. However, due to inherent multicollinearity within the model, squared structure coefficients indicated that the coaching behaviors of *instructing*, *rewarding*, and *modeling* each explained over 50% of the observed effect by themselves. Specifically, the coach's behavior of *instructing* athletes to act in a sportsmanlike way accounted for roughly 91% of the overall obtained effect. The coaching behavior of *modelling appropriate* sportsmanship behaviors had the second largest impact on the observed effect, accounting for roughly 67% of the overall effect. The coaches *rewarding* appropriate sportsmanship behaviors had the third largest impact on the observed effect, explaining about 60% of the observed effect. The coaching behaviors of *emphasizing winning over being a good sport* and *punishing* each explained less than 15% of the overall effect by themselves and are considered poor predictors of athlete perceptions that their coach cares that they act in a sportsmanlike way.

Discussion and Implications

The overall purpose of the study is to identify the relationship between college athletes' experiences of coaching behaviors and the development of sportsmanship. To address the overall purpose of the study, a confirmatory factor analysis was conducted to validate the model structure of the SCBS within college athletes, and a simultaneous multiple regression analysis was conducted to evaluate the impact of the coaches' behaviors had on the athletes'

perceptions of coach's attitudes towards sportsmanship. This study validated that the shortened SCBS instrument used in this study is an acceptable measurement scale to evaluate college athletes' perceptions of coaching behaviors, in relation to the development of sportsmanship and ethical behaviors.

Validating Coaching Behavior Structure

The results of the present study revealed that the 15-items SCBS instrument evaluated performed well in assessing the multidimensional construct of developing sportsmanship in college athletes. Particularly, the results of the CFA revealed that the reduced version of the SCBS maintained factorial validity and internal consistency within a new sample of college student-athletes. Specifically, this study validated that a 15-item SCBS is an acceptable measure to evaluate the multidimensionality of college student athletes' perceptions of their coaches' behaviors. In addition, both the Cronbach's alpha and factor loading coefficients identified were relatively consistent with previous validations of the SCBS instrument in youth athletes (Bolter & Kipp, 2018; Bolter et al., 2018; Bolter & Weiss, 2013) and youth athlete parents (Beldon & Walker, 2020). Previous research has already validated the SCBS for usage with youth sport participants between the age of 8 and 17 (Bolter & Kipp, 2018), youth sport coaches and teachers (Bolter et al., 2018), and parents and legal guardians of youth athletes aged 23-75 (Beldon & Walker, 2020). Specifically, the results from this study further extends prior research by providing further reliability and validity for the scale within college student athletes. With college coaches identifying that sportsmanship is based on the surrounding environment (Beller & Stoll, 1993), the findings indicate that the presented reduced version of the SCBS, is acceptable and valid to measure the impact that coaching behaviors have on the development

of college student's character.

Although Bolter and colleagues found a better statistical model fit within their studies of youth athletes (Bolter & Kipp, 2018; Bolter & Weiss, 2013), the five-factor model identified in this study had better model-fit than the five-factor model originally evaluated for use in parents of youth athletes (Beldon & Walker, 2020). This indicates that although college student athletes are often recognized as young adults, they still perceive coaching behaviors similarly to youth athletes. The similarities in model fit and factor loading values between college athletes and youth athletes could be explained by the fact that they are directly involved with the coach on a day-to-day basis, whereas parents only view coaches' behaviors from far away when they attend practices and games. Despite the structural differences between youth sports and collegiate sports, where collegiate sports competitions are more focused on winning rather than development and fun, collegiate athletes still perceive their coaches' behaviors similarly to youth athletes. Future researchers should continue to use a further reduced version of the SCBS when evaluating college athletes and should continue to utilize the 15-item survey instrument.

Predicting Coaches Care of Sportsmanship Actions

When predicting student athletes' perceptions of whether their coach cares that they act in a sportsmanlike way, the regression model revealed a large effect size ($R^2 = .52$) that slightly dropped when correcting for a theoretical sampling error (Adj. $R^2 = .51$). Clearly the assessed coaching behaviors did an adequate job in explaining the athletes' perception that their coach cares that they demonstrate appropriate sportsmanship behaviors. The standardized weights and structure coefficients indicated that the coaching behaviors of *rewards*, *models*, and *instructs* explained the most variance for predicting the athletes'

perceptions that their coach cares that they act in a sportsmanlike way. While the standardized weight and structure coefficients for the coaching behaviors of *emphasizes* and *punishes* proved to be poor predictors of athletes' perceptions that their coach cares that they act in a sportsmanlike way.

Findings from this study reveals that when explaining athletes' perceptions of how much a coach cares that their athlete acts in a sportsmanlike way, the coaches' behavior of *instructing desired behaviors* play the largest roles in predicting the athletes' perceptions that their coaches' care that they act in a sportsmanlike way. Amorose and Horn (2000) found that coaches instructing behaviors related to higher levels of athletic competence, motivation, satisfaction, and overall performance. Furthermore, the behaviors of *instructing* being the most pertinent are not surprising, since coaches should teach their athletes their desired behaviors (Bolter & Weiss, 2012, 2013).

With college coaches identifying that sportsmanship is highly dependent on the surrounding environment (Beller & Stoll, 1993), it is not a surprise that the positive relationship between the *instructing* behavior and college athletes' perceptions of coaches' care of sportsmanship. Each coach may have their own preferred standard of sportsmanship behaviors that differs from the preferred sportsmanship behaviors that athletes had previously in youth and high school sports. For example, a college coach may prefer that their athletes bend the rules slightly to gain a competitive advantage, whereas a high school coach may have instilled strict rule adherence and bending the rules could lead to the athlete being punished. Therefore, it becomes imperative that collegiate coaches *instruct* their athletes how to behave according to their desired preferences for their athletes, to have the team follow a single established

standard of behavior (Bolter & Weiss, 2012).

It has been reported that coaches who are successful in developing athletes holistically, do so by *modeling* desired behaviors (Connolly, 2017). Bolter and Weiss (2012) identified modeling behaviors as a one of the most powerful mechanisms for athletes to learn about desired sportsmanship behaviors. Due to the amount of time that athletes spend with their coaches and the fact that coaches have a legitimate authority over their athletes and teams, coaches are some of the most significant models in the lives of their athletes (Yukhymenko-Lescroart et al., 2017). Connolly (2017) identified that observational learning is a vital learning technique for athletes to acquire the desired behaviors which is done through the *modeling* of appropriate behaviors by their coaches. Therefore, the behaviors that coach's *model* throughout practices and games will impact how their athletes behave, because they witness those behaviors regularly.

The fact that student athletes can recognize that their coaches care that they act in a sportsmanlike way, establishes the connection between the development of sportsmanship behaviors and different coaching behaviors. The establishment of this connection illustrates that athletes are aware that their coach is instilling sportsmanship behaviors, despite them not being a primary focus of the sports program. Through the recognition of the behaviors that coaches are using, athletes are recognizing their own development of sportsmanship within their team environment by being able to recognize when the coach is yearning for the desired behavior to be always prevalent. Bolter and Weiss (2012) found that athletes understood that when the coach taught them how to act and modeled appropriate behaviors, then the athletes would understand and act accordingly. Therefore, illustrating that athletes can connect

different coaching behaviors to the development of appropriate sportsmanship behaviors.

Results Connection to Theory

Despite being traditionally used to evaluate student retention, the results of this study indicate the modified version of Terenzini and Reason's (2005) college impact model is a valid conceptual model for evaluating various student development outcomes, such as the development of ethical behaviors in sports (sportsmanship). Similar to Foreman and Retallick's (2012) adaptation of Terenzini and Reason's (2005) college impact model, this study indicates that when looking at the cognitive and psychosocial development of student athletes, their experiences in out-of-classroom activities plays a major role in the development of ethical behaviors.

The results of the multiple regression analysis indicates that the out-of-classroom experiences of student athletes plays a vital role in their development. With higher education being dedicated to the moral development of students (Patton et al., 2016; Mayhew et al., 2016), for student-athletes their experiences and perceptions of coaches' behaviors are highly influential in their developmental journey. When looking at my conceptual model based on Foreman and Retallick's (2012) model, it is evident that the experiences of students outside of the classroom play a more significant role in the development of sportsmanship and ethical behaviors than their pre-college characteristics. This is exemplified by the large effect size produced in the regression analysis.

Looking back at the prior iterations of the conceptual model, researchers should extend this model to seek whether institutional policies, within Terenzini and Reason's (2005) college impact model impact the development of sportsmanship in student-athletes. Future

researchers should also seek to evaluate the individual student experiences within the classroom and its relationship with the development of sportsmanship and ethical behaviors in college student athletes. Furthermore, researchers should also seek to explore other student pre-college characteristics (i.e., parents sport experiences, parents educational background) to see what role those characteristics play in the developmental experience of student athletes.

Implications

Given that model fit was acceptable, and factor and reliability scores were considered reliable, this reduced version of the SCBS provides sports administrators a simpler and less invasive instrument to evaluate athletes' perceptions of coaching behaviors. The less invasive instrument allows for quicker and easier completion of the survey by student athletes, when asked to provide feedback on their coach. When selecting coaches, college sport administrators often search for a coach that will help develop the athletes holistically, therefore college sport administrators, can use this instrument to evaluate their coaches' behaviors to evaluate how their behaviors are developing ethical athletes. Along with sport administrator evaluations, coaching seminars can use the results to train coaches on the best behaviors to ensure their athletes develop ethical behaviors.

Sport and higher education researchers can use the reduced SCBS instrument to evaluate how coaching behaviors can impact student athletes' experiences outside of the sports environment. For example, researchers could use the reduced version of the SCBS to evaluate the impact that the behaviors have on student athlete's academic integrity and cheating behaviors. Furthermore, results of this study indicates that out-of-classroom experiences plays a large role in the development of appropriate ethical behaviors and

researchers should also seek to evaluate the relationship between classroom experiences and out-of-classroom experiences in the development of college athletes.

Additionally, this study shows that when instilling ethical behaviors in their athletes, the most important behaviors are *instructing*, *emphasizing*, and *modeling* the desired behaviors. Coaches that are dedicated to the holistic development of their athletes and care that their athletes act in a sportsmanlike way should focus on *instructing* their athletes and *modeling* the appropriate desired behaviors. Since sportsmanship is dependent on the culture of the team and the surrounding environment, coaches must *instruct* their athletes on how they want them to act. Moreover, coaches need to also model the desired behaviors for their athletes and not have a “do as I say, not as I do” mentality to ensure that their athletes fully understand their desired behaviors.

Contribution

Overall, this study assesses the extent that student athletes perceive their coach’s behaviors play in the development of their sportsmanship. Utilizing an adapted version of Terenzini and Reason’s (2005) college impact model, this study explored the impact that the individual characteristics and out-of-classroom experiences play in the development of sportsmanship in collegiate athletes. Coaches are recognized as having a direct influence on the psychosocial development of athletes (Horn, 2002; Vella et al., 2013). This study is necessary to further educate coaches about the impact that their behaviors have on the development of their student athletes. Despite this study being limited to only one institution that competes in the highest level of sports competition in both NIRSA and NCAA sports, the findings support the usage of the 15-item SCBS instrument and provides information for college coach training

seminars. Future researchers should pursue an expansion to this study to include multiple institutions across different competition levels. Furthermore, future research should also seek to explore the impact that teaching sportsmanship behaviors in college athletes has on student athletes' ethical and moral behaviors outside of sports.

Conclusion

The overall purpose of this study was to evaluate the relationship between college athletes' perceptions of coaching behaviors and the development of sportsmanship. Results of this study found the previously identified coaching behaviors from youth sports are still prevalent in the development of sportsmanship at the collegiate level, as perceived by the student-athletes. Furthermore, student athletes identify the coaching behaviors of *instructing*, and *modeling* as the most pertinent behaviors when predicting and explaining whether their coach cares that they act in a sportsmanlike way. Confirming the behaviors that athletes recognize that their coaches use and validating that they explain the athletes' perceptions that their coach does care that they act in a sportsman like way, further validates usage of the 15-item SCBS instrument in college students to continue to evaluate the development of ethical behaviors in student athletes. Future researchers should seek to extend the conceptual model used here to evaluate pre-college characteristics of student athletes, as well as their classroom experiences to further identify the development of ethical behaviors of student athletes. Future researchers should also seek to replicate this study across sport competition levels to confirm the results are translatable across all levels of collegiate sports competition.

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CHAPTER 3

EXAMINING DIFFERENCES BETWEEN VARSITY AND CLUB SPORTS IN STUDENT ATHLETE DEVELOPMENT: BASED ON COACHING BEHAVIORS AND SKILL DEVELOPMENT EXPERIENCES

Introduction

Participation in organized sports programs is one of the most popular sources of out-of-class experiences for college students. Of the roughly 20 million students enrolled in higher education this past year, approximately 2.5 million of them participated in some form of organized sports competition (Pennington, 2008; “Student-athletes, n.d.). Of the 2.5 million students that are estimated to participate in some form of intercollegiate sport, roughly 500,000 compete at the varsity intercollegiate level in National Collegiate Athletic Association (NCAA) sanctioned sports programs (“Student-Athletes”, n.d.). The remaining 2 million students participate in club sports programs that are sponsored through the National Intramural and Recreational Sports Association (NIRSA; Pennington, 2008).

Although both club (NIRSA-sponsored) and varsity (NCAA-sponsored) programs are designed to aid in the developmental journey of students, these programs are fundamentally structured differently. One of the largest differences amongst participation in club or varsity sports in college are the duties of the coaches (Ott & Bates, 2015; Schneider et al., 2008). For example, in varsity sports, coaches are hired by the institution and are responsible for recruiting athletes and motivating athletes to remain academically eligible (Ott & Bates, 2015). Whereas club sports utilize coaches that are unpaid volunteers using their time outside of their normal careers (Schneider et al., 2008). Depending on the coaching relationship with the institution, coaches may treat their athletes differently. For example, varsity coaches could be fired due to

their actions, and since club coaches are not employed by the institution, they may be able to get away with more dramatic behaviors. Regardless of the structural differences between both programs, coaches play a vital role in program delivery and experiences.

Both the NCAA (varsity) and NIRSA (club) governing bodies indicate that sportsmanship development of students is a key outcome of their programs (Bryant et al., 1996; Lumpkin, 2015). In fact, both the NCAA and NIRSA have set guidelines and rules for the standards of sportsmanship behaviors within the programs (Bryant et al., 1996). When coaches and athletes end up acting in an unsportsmanlike way in either sport program, the actions often go viral on the internet and become headlining stories on television news (Bonagura, 2020). Depending on the type of sport program (varsity or club), athletes that act in an unsportsmanlike way, may also face punishment from their team, officials, and/or league administrators. For example, in varsity sports competitions, an act of unsportsmanlike conduct may lead to the player being removed from the remainder of the game and possibly future games. Whereas in many club sport programs if athletes fail to meet sportsmanship standards, the entire team could be held accountable, depending on the severity of the actions. Nevertheless, whether students participate in club or varsity sports programs, sportsmanship behaviors have a vital impact on their experiences.

Even though coaches have been recognized as playing an important role in their sports program, there has been a lack of research that compares different types of college sport programs. Bradenburgh and Carr (2002) conducted one of the only studies comparing varsity and club level athletes, finding that regardless of the type of program, athletes reported similar benefits of enjoyment and satisfaction. However, Bradenburgh and Carr (2002) did not

compare the coaches' impact on either of the sports program. Typically, research evaluating the impact of coaching behaviors on the development of athletes in college is done within one type of program and does not compare athletes across program type. Therefore, the first purpose of this study is to address this lack of research in comparing coaches in different college sports programs, particularly in relation to the development of sportsmanship.

One of the most important aspects of coaching in sports is the delivery of the program. A key facet of the delivery of the sports program is matching the participants' expectation for skill development to the experience. Throughout the lifespan, people have different motivations to participate in sports programs. There are several common experiences within sports programs surrounding the development of various skills, including building/developing a new sport skill, making friends, being a part of a team, having fun, developing character, and experiencing sportsmanship in other participants (Schwab et al., 2010). These common experiences for skill development have already been recognized throughout life (Schwab et al., 2010). However, no research to date has compared these experiences based on different types of sports environments, particularly in college students. Thus, I seek to identify the differences between club and varsity sports in skill development experiences among college athletes.

When looking at how colleges affect student development and retention, Terenzini and Reason's (2005) model has been applied in the higher education literature. Terenzini and Reason's (2005) model depicts how students' pre-college characteristics and the student individual experiences in out-of-class activities affect their learning and development. Utilizing this model allows for a comparison of the relationship between the types of sport programs with the development of various skills in college student athletes.

Purpose and Research Question

The purpose of this study is to compare the experiences in coaching behaviors of sportsmanship and overall skill development between club and varsity sports. This study assesses the differences in athletes' perceptions of their coaches' behaviors based on their sports type, and the differences in their experiences of participation within different sports programs. The specific research questions that guide this study are:

- 1) What are the differences between athlete perceptions of coaching behaviors of sportsmanship in college athletes based on their sport type (club vs varsity)?
- 2) What are the differences in the skill development experiences based on the type of sports program (club vs. varsity)?

By answering these questions, college sports administrators can further delineate the differences in the coaching behaviors of sportsmanship and skill development experiences between sport types.

Significance

In this paper, I seek to enhance the existing literature on the experiences that student athletes encounter through competing in different college sports programs. By assessing the impact that coaches' behaviors have on the development of athletes both at the varsity and club levels, and identifying the different experiences athletes engage in, sport administrators will be able to further allocate resources needed for each program. Additionally, by identifying the differences between coaching behaviors at both levels, researchers will be able to clearly assess the relationship between these behaviors and different skill development experiences of those participating in the sport program. Furthermore, this study indicates the differences in the sporting experiences that college student athletes encounter. This study also indicates to

sport administrators' what behaviors are most pertinent to the development of sportsmanship behaviors in both club and varsity programs.

Literature Review

Students who participate in an organized form of intercollegiate sports have two main types of sports programs: club sports and varsity sports. Although these two programs are drastically different regarding their structures, the goals of both programs are to ensure that students are developing throughout their college experience. In this section, I review literature on addressing the differences between the two sport programs, in terms of coaching behaviors, and common experiences of participating in sports programs.

Two Types of College Sports

There are two different types of major sports programs for students to participate in during college: NCAA-sponsored (varsity) sports and recreational (club) intercollegiate sports. First, students who participate in NCAA-sponsored (varsity) competitions are often the most widely researched collegiate athletic body. The mission of NCAA-sponsored intercollegiate programming is "to field athletic teams and individuals who are highly competitive at the conference, state, regional, and/or national level as part of a well-balanced, broad based program reflective of the educational objectives of the college or university" (Bryant et al., 1996, p.2). Despite one of the core principles of the NCAA being to promote student-athlete welfare, the concept of sportsmanship is left out of the overall mission of the NCAA (Lumpkin, 2015). Subsequently, coaches involved with NCAA-sponsored teams are often evaluated solely on their win-loss record and on-field performance (Cunningham & Dixon, 2003; Ott & Bates,

2015). In fact, coaches who are involved with NCAA-sponsored teams are more likely to be relieved of their duties due to a lack of production on the field than any other aspect of their coaching duties, including athlete development (Ott & Bates, 2015). Finally, students who participate in a varsity sport, must have a high level of skill in that specific sport in order to participate (Bryant et al., 1996).

The other structured collegiate sports program is historically viewed as recreational (club) participation and is overseen by NIRSA. Overall, the mission for intercollegiate club sports is to “provide a broad program of sports and fitness activities for both men and women of *all* ability levels in order to enhance their academic productivity, personal effectiveness, and commitment to their quality of life in the campus community” (Bryant et al., 1996, p. 1). Unlike NCAA coaches who are paid by their institution, NIRSA coaches are volunteers who receive no tangible benefits from coaching. Recently, the students’ focus within club sports has shifted from participatory, developmental, and fun, to a focus on winning competitions (Ott & Bates, 2015). Unlike participation in varsity sports, a fundamental aspect of NIRSA based intercollegiate sports is that everyone can participate in the program regardless of their abilities and skill level (Bryant et al., 1996).

Ultimately, between the two types of sports programs, college students can compete in some form of organized intercollegiate sport program. Despite the differences in athlete’s skill abilities across the two sport environments, coaches of both club and varsity programs are often focused on leading the team to victory over developing skills.

Coaching Behaviors

Regardless of the student’s involvement in sports, students are expected to participate

in structured, organized practices for multiple hours every week, outside of their academic courses. Irrespective of the sports type, coaches acknowledge that they are responsible for the holistic development of their athletes (Cassidy, 2013). Through a holistic approach to coaching, coaches recognize that they play a role in not just the sports skill development, but also the psychosocial growth and development of athletes (Mallett & Rynne, 2010). Lyle (2002) identified a difference in the approach to holistic coaching based on the sports environment, with holistic coaching approaches being a standard for recreational styled sports, and holistic coaching being a comparison mechanism for coaches in competitive/performance-oriented sports.

A key aspect within college sports programs is the focus on athletes acting in an ethical way, commonly characterized as sportsmanship. Coaches are often held responsible for the actions of their athletes, as they are the ones who oversee the roster, game strategy, and playing time of athletes (Yukhymenko-Lescroart et al., 2007). Bolter and colleagues (Bolter & Kipp, 2018; Bolter & Weiss, 2012, 2013) originally identified six behaviors that coaches utilize to instill appropriate sportsmanship behaviors. The six original behaviors identified as contributing to the development of sportsmanship actions in athletes include *emphasizing*, *expecting*, *instructing*, *modeling*, *rewarding*, and *punishing*. However, due to multicollinearity issues within the model, the *expects* coaching behavior has been repeatedly eliminated from the model (Beldon, 2021; Beldon & Walker, 2020; Bolter & Kipp, 2018; Bolter et al., 2018), leaving five behaviors to be evaluated through the Sportsmanship Coaching Behaviors Scale (SCBS). The five remaining behaviors evaluated have been recognized as contributing to the development of pro- and anti-social behaviors between teammates and opponents (Bolter & Kipp, 2018; Bolter

et al., 2018; Bolter & Weiss, 2013).

The five coaching behaviors have previously been identified in youth sport athletes ranged in age from 8 through 16 (Bolter & Kipp, 2018; Bolter et al., 2018; Bolter & Weiss, 2013), as well as parents of youth athletes ages 8-15 (Beldon & Walker, 2020), and all college student-athletes (Beldon, 2021). The behaviors have also been identified in both grade school sports and physical education programs (Bolter et al., 2018) as well as competitive and recreational youth sports programs (Beldon & Walker, 2020; Bolter & Kipp, 2018; Bolter & Weiss, 2013). Despite validating that the five behaviors are prevalent in college sports, Beldon (2021) did not compare the five behaviors across different college sport types. Therefore, this study is important to recognize whether the behaviors are utilized similarly across sports program types.

Athlete Development in Sports

The expectation that athletes act in a sportsmanlike way is a common expectancy within all organized sports programs (Schwab et al., 2010). Although sportsmanship is an expectation within both sports programs, athletes may view the emphasis on sportsmanship at varying levels based on their sports background. Regardless of the sports environment, athletes also experience some form of teamwork development, being physically active, and development of various sport skills (Schwab et al., 2010). Although every athlete may have unique experiences of specific skill development, everyone experiences something in relation to being physically active, being a part of a team and developing sport skills (Schwab et al., 2010).

Sportsmanship

When sports first entered U.S. colleges and universities, they were introduced as student-run organizations that competed against their own university's students (Beyer & Hannah, 2000). By the late 1800's collegiate athletics transitioned to competitions with other institutions (Beyer & Hannah, 2000). Since the formation of intercollegiate athletics, there has been little research conducted on sportsmanship within the intercollegiate constraints (Beyer & Hannah, 2000).

In college athletic programs, sportsmanship is often assessed comparing student classification levels (i.e., freshman, sophomore, junior, senior). Preist et al. (1999) compared athletes who participated in varsity athletics and those who competed in NIRSA-sponsored intramural sports programs to evaluate the development of athletes' ethical values throughout their college experience. Athletes were provided a survey instrument after arriving on campus for the first time and then again near their time of graduation. Preist et al. (1999) found that there was a slight decrease in magnitude of the scores between freshman and senior year, and that students who participated in intramural sports had higher ethical values during both collection points. Furthermore, Priest et al. (1999) identified that varsity athletes who participated in team sports (i.e., basketball, football, etc.) had lower ethical ratings than athletes that participated in individual sports (tennis, golf, etc.).

Kampf (2006) evaluated NCAA referee/official's perspectives of varsity student-athletes, coaches, and spectators to identify any differences in behaviors between the regular season and post-season games. Kampf (2006) found that unsportsmanlike behaviors are more often exhibited during regular season competitions than during post-season games. Specifically,

Kampf (2006) identified significant differences in the behaviors of the players, coaches, and spectators when comparing the competition season.

Unlike assessing sportsmanship behaviors in varsity athletes, there has not been much research on sportsmanship behaviors within club sport athletes. In fact, when researching sportsmanship behaviors in college student-athletes, researchers have focused mostly on the recreational intramural programs but not club sports. Therefore, this study is one of the first studies to assess sportsmanship in collegiate club (recreational) sport student-athletes.

Skill Development in Sports

Youth that participate in sports during childhood and adolescence often encounter similar experiences, albeit at varying magnitudes (Schwab et al., 2010). Although specific experiences can vary from one person to another, specific experiences can be grouped into three overarching experiences including to be physically active, to be a part of a team, and to develop their skills (Schwab et al., 2010). When college students arrive on campus for the first time, they often arrive without a known peer group and must find a new group of peers to socialize with. Participation in a sports program can help foster this peer development through athletes' desires to be part of a team (Larson et al., 1997; Schwab et al., 2010).

Many college students also take the time in college to develop healthy life habits to either become or maintain a physically active lifestyle. Organized sports programs provide participants with structured activities to ensure that students are given the opportunity to be physically active (Schwab et al., 2010). Additionally, students that elect to participate in an organized sports program during college often do so to further develop their skillset. Generally, people do not participate in a sport that they already believe they lack the necessary skills

(Schwab et al., 2010). Having competence in their own skill set leads to an increase in motivation to continue participating in an activity (Biddle et al., 2003; Schwab et al., 2010; Wiersma, 2001). Overall, athletes develop skills based on their sports, but these developed skills can be summarized as athletes experiencing being a part of a team, being physically active, and developing sport skills.

Terenzini and Reason's College Impact Model

The framework of this study adapts Terenzini and Reason's (2005) college impact model to examine student athletes' development of sportsmanship behaviors and student athlete skill development through participation in college sports programs. Originally proposed to assess student retention and development, Terenzini and Reason's (2005) college impact model has also been adapted for use in evaluating other student outcome variables, including cognitive and psychosocial development (Reason et al., 2007). Using Terenzini and Reason's (2005) college impact model, I focused on the relationship between extracurricular experiences and outcomes as sportsmanship behaviors and athlete skill development, after controlling for pre-college characteristics. Pre-college characteristics in this study consist of the athletes' gender.

To answer both research questions, this study evaluates the out-of-classroom experiences within the Terenzini and Reason's (2005) college impact model. Participation in sports programs is one of the most common out-of-classroom activities for college students. Therefore, the individual student experiences were assessed through participant responses to the SCBS for research question one, and to common experiences within sports programs to answer research question two. Prior research shows that coaches and their behaviors play a key role in the development and experiences of their athletes (Caron et al., 2018; Connolly,

2017; Doherty & Johnson, 2001; Horn, 2002; Vella et al., 2003). Due to the high influence that coaches have over athlete development, their behaviors can dramatically impact the experiences of their athletes.

The conceptual model utilized in this study extends Terenzini and Reason's (2005) college impact model by further identifying how the sports environment type (club vs varsity) that students participate in, impacts students experiences with coaches and their sportsmanship development. Furthermore, despite Terenzini and Reason's (2005) college impact model depicting a broad developmental student outcome, this study demonstrates that the model is also sufficient in evaluating more specific developmental outcome variables. Additionally, by utilizing Terenzini and Reason's (2005) college impact model, I am able to evaluate the differences between two similar programs and the impact the programs have on the development and experiences of college students.

Methods

I collected 180 surveys during the beginning of 2020 from athletes that participate in both club (NIRSA-backed) sports and varsity (NCAA-backed) sports. The collected sample consisted of equivalent numbers of participants of club and varsity sports to allow for comparison between the two types of sports programs. The collected sample was from a large, public, flagship state institution that is recognized as minority serving, and competes at the highest competition levels in both varsity and club sports.

Sample

All participants in the study were enrolled at least half-time at the researched institution

and either self-identified as an athlete on a sports team or were identified through attendance at a sports practice session. Participants were either athletes of a varsity sport or a club-sport at the researched institution. The study site has a student population of over 38,000, and approximately 350 of the overall university population participates in a varsity sports program (Guess, A. personal communication, Spring 2021), and another 500 participate in club sport programs (Wells, H. personal communication, Spring 2021).

Overall, the sample consists of 180 participants, split 57-43%, with 104 participants in club sports programs and the other 76 participants identifying as varsity athletes. Participants ranged in age from 18 years old ($n= 30, 18\%$) to 23 years old or older ($n= 18, 11\%$), with a majority of participants identifying as either 20 or 21 ($n=78, 47.6\%$). The collected sample was mostly female ($n= 98$), compared to males ($n= 73$). Participants identified as predominantly white ($n= 73, 72.3\%$), followed by Native Hawaiian or Pacific Islander ($n= 13, 9.2\%$), Black or African American, ($n= 7, 5\%$), Asian ($n= 4, 2.8\%$), and other ($n= 12, 8.5\%$). Sports participation covered a wide range of sport offerings at the institution, with most of the participants playing volleyball ($n= 24, 13.3\%$), rock climbing ($n= 20, 11.1\%$), Basketball ($n= 18, 10\%$), Fencing ($n= 18, 10\%$), Rugby ($n= 16, 8.9\%$), Tennis ($n= 16, 8.9\%$), Swimming, ($n= 14, 2.3\%$), Equestrian ($n= 12, 6.7\%$), Football, ($n= 7, 3.9\%$), Soccer, ($n= 5, 2.8\%$), Softball ($n= 4, 2.3\%$), Track and Field ($n= 4, 2.3\%$), and Baseball ($n= 2, 1.1\%$). The remaining participants elected to not identify their specific sport in which they participate.

Data Collection

Once I received approval from the governing institution's Institutional Review Board to proceed with data collection, I collected data through the usage of both physical and electronic

versions of the survey instrument. Participants were recruited through flyers that were posted around the institution's campus, word of mouth, and in-person announcements made at practices. Flyers included a QR code that took participants directly to the study's informed consent document and after electronically consenting, participants were redirected to the instrument. More participants completed the survey through in-person announcements ($n=110$, 61%) than did through scanning the QR code on flyers. I employed numerous data collection techniques in order to obtain the largest possible sample for the study. In order to prevent participants from completing the survey several times, several safeguards were employed including, the posting of signs for a limited time on campus, then after removal of the flyers, in-person announcements were made to students during their sport practice sessions, with permission from the coach and team captain. All data collected throughout the study is kept confidential and anonymous, as the only identifying features include the participants sport environment, specific sport, length of participation with their coach, length of their participation in that specific sport, and participants race and gender.

Instrument

Participants completed a 30-question survey instrument which included a reduced version of the Sportsmanship Coaching Behaviors Scale (SCBS), along with questions that inquire about common sport experiences that athletes encounter, and demographic variables. The SCBS was originally developed as a 40-item scale which evaluated 12 different coaching behaviors that contribute to the development of sportsmanship in youth athletes (Bolter & Weiss, 2012). During scale validation studies (Bolter & Kipp, 2018; Bolter & Weiss, 2018), the survey was reduced from 40-items to 24-items due to coaching behaviors being redundant and

not being related to the development of sportsmanship. Furthermore, recent research has also indicated that the survey could be reduced further to evaluate five coaching behaviors due to multicollinearity across several of the coaching behaviors (Beldon, 2021; Beldon & Walker, 2019; Bolter & Kipp, 2018; Bolter et al., 2018).

This study utilizes a 15-item SCBS instrument to evaluate the five coaching behaviors that have been connected to the development of sportsmanship behaviors in athletes (Beldon, 2021). This reduced version of the SCBS has previously been validated for use within college students and includes three items that inquire about each individual coaching behavior (Beldon, 2021). Items that evaluate common sport experiences that athletes encounter were included (Schwab et al., 2010). Demographic variables that were collected include sports environment (club or varsity), sport identification, age, duration of participation with the coach, athlete's gender, and ethnicity. The entire instrument fits on one sheet of paper and covers the entire front and half of the back of the sheet of paper, to allow for quick participation in the study.

Data Analysis

The overall goal of the study is to identify the differences in coaching behaviors and skill development experiences of college student-athletes by different types of sports programs (varsity vs. club). I analyzed the data by using IBM SPSS 25.0 software. Prior to conducting analyses, I evaluated data normality. Data was univariately normal with skewness and kurtosis values each less than 3.00 (Kline, 2005).

Multiple Regression

To answer the first research question of the study, a multiple regression analysis was

conducted. Utilizing the prior methodology from previous SCBS studies, aggregate values of each coaching behavior were utilized in the regression analysis (Bolter & Kipp, 2018; Bolter et al., 2018; Walker & Beldon, 2019). The aggregate values were formed by summing the items that form each coaching behavior factor and then divided by the number of items in that factor.

To conduct the analysis, the entire sample was split by sport type (club or varsity), using the selection variable function in IBM SPSS. The dependent variable is the athletes' perception that their coach actually cares that they act in a sportsmanlike way. The independent variables were the five coaching behaviors that were measured through the SCBS. To control for the athletes' gender, gender was included in the analysis. Due to the coaching behavior factors being correlated with each other in prior studies, structure coefficients were calculated to address multicollinearity within the model (Yeatts et al., 2017). Structure coefficients were calculated by obtaining the Pearson correlation value between the factor and the predicted dependent variable. Squared structure coefficients distinguish each predictor's unique contribution to the formation of the predicted dependent variable and is calculated by squaring the structure coefficient (Yeatts et al., 2017). Therefore, both beta weights and squared structure coefficients were evaluated to identify the impact that the behaviors have on predicting whether the athlete perceives that their coach cares that they act as a good sport.

t-Test

To answer my second research question, an independent samples *t*-test was conducted. Utilizing the sport outcome experience variables from the survey the *t*-test evaluated the differences in the skill development experiences between clubs and varsity. Following the *t*-test analysis, Cohens D was calculated to identify effect size.

Limitations

This study is not without limitations. Particularly, this sample collected was from one institution, therefore, the study has limited generalizability to all other institutional types. Although the researched institution competes at the highest NCAA competition level, the results here are not generalizable to all institutions, particularly ones that do not compete at the NCAA Division I level. To address this limitation, future researchers should seek to replicate this study at institutions of other competitive levels. Accordingly, a delimitation of this study is that only one institution was involved in data collection. Another limitation of the study is the gender of the coach is not integrated into the analysis, due to male coaches being overwhelmingly dominate in college sports. Furthermore, data collection was cut short due to the coronavirus pandemic, resulting in a smaller sample size than desired, so generalizability could be hindered. Lastly, another limitation for this study was a lack of collecting data regarding familial backgrounds as part of evaluating student's pre-college characteristics. College student athletes come from various backgrounds and their experiences growing up in their families could impact their experiences in collegiate sports.

Results

Multiple Regression

To evaluate the differences in student athlete perceptions of their coaches' behaviors between participation in varsity or club sports programming (research question 1), two simultaneous regression analyses were conducted. Following the recommendation from Beldon (2021), only five of the coaching behaviors were evaluated due to multicollinearity in the SCBS model. Therefore, in each of the regression models, the aggregate scores of five of the assessed

coaching behaviors (*rewards, models, instructs, punishes, and emphasizes*) were simultaneously regressed towards the dependent variable that evaluates athlete’s perception that their coach cares that they act in a sportsmanlike way. To further control for multicollinearity within the model, beta weights and squared structure coefficients were evaluated to identify each behaviors’ unique contribution to the overall model (Yeatts et al., 2017).

The result of the simultaneous regression analysis for the varsity athletes was statistically significant at $\alpha=.05$, $F(6, 83) = 17.494$, $p<.001$, with a large effect size of $R^2=.577$ and an adjusted $R^2=.544$, indicating a slight reduction due to theoretical sampling error. Upon inspection of inter-item correlations amongst the predictor variables, three highly correlated relationships were identified (*rewards-instructs* $r=.733$, *rewards-models* $r=.652$, *instructs-models* $r=.757$).

Table 3.1

Regression Results for Predicting Coaches Care for Sportsmanship by Sport Type

Variable	B	SE B	β	R_s	R_s^2	R^2
Varsity Athletes						.577
Constant	1.038	.630				
Gender	.282	.208	.110			
Rewards	.017	.116	.018	.737	.543	
Emphasizes	-.159	.068	-.182*	-.268	.072	
Punishes	.127	.088	.133	.382	.156	
Instructs	.569	.127	.591*	.970	.941	
Models	.098	.143	.081	.824	.679	
Club Athletes						.340
Constant	.462	.713				
Gender	.344	.136	.238			

(table continues)

Variable	<i>B</i>	SE <i>B</i>	β	R_s	R_s^2	R^2
Rewards	.226	.106	.240*	.706	.498	
Emphasizes	.053	.067	.082	.099	.010	
Punishes	.051	.062	.090	.463	.214	
Instructs	.179	.123	.178	.778	.605	
Models	.352	.151	.262*	.640	.410	

Note. R_s = structure coefficients; R_s^2 = squared structure coefficients. * $p < .001$

Within the varsity sports sample, only the *emphasizes* and *instructs* behaviors contained statistically significant beta weights. When evaluating squared structure coefficients, the coaching behaviors of *rewards*, *instructs*, and *models*, all offered over 50% explanatory effect of the observed predictive effect by themselves. Specifically, the coaching behavior of *instructs* accounted for roughly 94% of the predictive effect and *models* accounted for roughly 68% of the predictive effect by themselves. Furthermore, the coaching behavior of *rewards* explained roughly 54% of the observed predictive effect. The coaching behavior of *punishes* athletes for displaying poor sportsmanship behaviors was a poor predictor, compared to other behaviors, of athletes' perception that their coach cared that they acted in a sportsmanlike way, within the varsity sample.

When evaluating club sport participants, the overall simultaneous regression analysis was statistically significant at $\alpha = .05$, $F(6, 86) = 6.845$, $p < .001$, with a moderate effect size of $R^2 = .339$, and adjusted $R^2 = .290$, indicating a slight reduction in effect size due to sampling errors. Within the club sample, only the coaching behaviors of *rewarding* for appropriate behaviors and *modeling* appropriate behaviors were statistically significant. When evaluating the squared structure coefficients, only the coaching behavior *instructs* explained greater than 50% of the observed predictive effect by itself. Specifically, the coaching behavior of *instructs* had a

statistically significant beta weight and explained roughly 61% of the observed effect within the analysis by itself. The coaching behavior of *modeling* appropriate behaviors explained less than 50% of the observed effect, explaining roughly 41% of the predictive effect. The coaching behavior of *rewarding* athletes for displaying good sportsmanship was the second most predictive variable within the club sports sample contributing roughly 50% of the overall effect by itself. The coaching behaviors of *emphasizes* and *punishes* were both non-significant and weaker predictors, compared to other predictors, of predicting athletes' perceptions of whether or not their coach cares about them acting in a sportsmanlike way.

t-Test

To evaluate whether club sport athletes and varsity sport athletes differ on their experiences in skill development (Research Question 2), a t-test was conducted across the different sport types. There were statistical differences across two of the skill development variables.

Table 3.2

Results of t-Test Analysis Examining the Differences between Sport Type and Developmental Outcomes

Parameter	Varsity (n= 85)		Club (n= 95)		t	p	Cohen's d
	M	SD	M	SD			
New skills	4.36	0.78	4.74	0.49	-3.85	.000	.54
Part of a team	4.54	0.78	4.64	0.72	-0.87	.386	.13
Physically active	4.61	0.67	4.84	0.42	-2.69	.008	.41

Varsity athletes reported lower scores of wanting to *develop a skill* than did club sport athletes, $t(111.866) = -3.995, p < .001, d = .629$. Similarly, varsity sport athletes reported lower than club

sport athletes about participating to *be physically active*, $t(114.929) = -2.571$, $p=.011$, $d=.397$. However, there were no statistically significant difference between club and varsity athletes when looking at athletes wanting to gain experience in *being a part of a team*, $t(177) = -0.633$, $p=.527$, $d=.098$.

Discussion and Implications

The overall purpose of this study was to compare the experiences in coaching behaviors of sportsmanship and overall skill development across different types of sport programs. To address the overall purpose of this study, two simultaneous multiple regression analyses and a t-test were conducted. The results indicated differences in perceived coaching behaviors as well as skill development experiences.

Coaches Care for Sportsmanship Behaviors

When predicting club sport student athletes' perceptions of whether their coach cares that they act in a sportsmanlike way, the regression model revealed a moderate effect size ($R^2=.339$, adj. $R^2= .290$). When looking at club sport athletes, the five evaluated coaching behaviors do an adequate job at explaining club athletes' perceptions that their coach cares that they act in a sportsmanlike way. However, the previously identified coaching behaviors provided a greater effect size when evaluating varsity athletes' perceptions that their coaches' care that they act in a sportsmanlike way, with a large effect size ($R^2=.577$, adj. $R^2= .544$). Therefore, it is evident that the five coaching behaviors evaluated explained more of athlete's perceptions of their coaches' behaviors in varsity athletes than in club athletes. In other words, the coaching behaviors may be more prevalent in varsity sports rather than in club sports.

Results show that the coaching behavior of *instructing* athletes to act in a sportsmanlike way, plays a significant role in predicting the athletes' perceptions that their coach cares that they act in a sportsmanlike way. Coaches have recognized that sportsmanship characteristics are contingent on the teams' culture and environment (Beller & Stoll, 1993), therefore, they are ultimately the ones responsible for *instructing* their athletes on the desired and accepted behaviors. The added responsibility of ensuring that their athletes are developing and acting appropriately while participating in the sports program, has brought the *instruction* of desired behaviors to the forefront when coaching college athletes. Since coaches are increasingly being scrutinized for both their own and their athletes' actions (Schultz, 2020), coaches must *instruct* the desired behaviors throughout the season, to ensure that athletes, regardless of competition type, are acting appropriately.

The *modeling* coaching behavior was identified as the second-most predictive behavior of the five behaviors evaluated. Accounting for 68% of the observed predictive effect in varsity athletes and 41% of the observed effect in club athletes. The *modelling* behavior of coaches has been recognized as being vital to coaches successfully developing athletes holistically (Connolly, 2017). Coaches *modeling* behaviors have been acknowledged as being one of the most powerful mechanisms to instill desired sportsmanship behaviors in athletes (Bolter & Weiss, 2012). For varsity athletes, coaches are one of the most influential figures during their time on campus due to the amount of time that they spend together outside of students' classroom (Gayles, 2015). Although club athletes may not spend as much time in structured and organized team activities, coaches are still recognized as having legitimate authority over their athletes and teams during competitions due to their control over athletes' playing time and in-game

decision making (Yukhymenko-Lescroart et al., 2007).

The biggest difference in the athletes' perceptions that their coach cares that they act in a sportsmanlike way between the two sport types was the *rewards* coaching behavior. In recreational sports programs, coaches often have more freedom to reward athletes for different actions and behaviors, because of the lack of focus on dominating their opponents that is commonly seen in varsity/competitive sports. Furthermore, Lyle (2002) found that coach's approach to holistic coaching was based on the type of sports environment (recreational vs competitive). Specifically, Lyle (2002) said that within recreational (club) sports programs holistic coaching was the standard and foundation of all coaching decisions and actions, whereas in competitive (varsity) sports holistic coaching is used when comparing different competitive/performance-oriented coaches.

Since collegiate club sports are open for any student to participate in during college, the enticement of being *rewarded* by a coach for acting in a positive sportsmanlike way, appears to go a long way in ensuring that athletes act appropriately. Bolter and Weiss (2012) identified coaches *rewarding* behaviors as positive reinforcement when athletes displayed appropriate sportsmanship behaviors. With club sports programs being recreational in nature, the verbal praise and rewarding behaviors of coaches is highly predictive of athletes' perceptions of whether their coach cares if they act in a sportsmanlike way. Furthermore, coaches of more competitive varsity sports, may feel as though they do not have the time to recognize and praise/reward every time an athlete acts in a desired way.

Skill Development Experiences

When comparing student athlete experiences across various athlete development

encounters in sports, it was evident that students who participate in club sports encounter several different experiences and behaviors more frequently than varsity student athletes. Specifically, student athletes who participated in club sport programs reported higher levels of wanting the skill developmental experiences of *developing a skill* and *wanting to be physically active*. Whereas athletes of club and varsity sport programs were statistically similar in their *desires to be a part of the team*.

Despite club and varsity sport programs providing opportunities for students to participate in structured collegiate sports competitions, there are significant differences between the two programs. To participate in a varsity sports program at an institution, students must demonstrate that they already have the necessary skills and abilities to compete at the highest level; unlike club sport programs, where participation is open to the entire student population regardless of skill level or ability (Bryant et al., 1996). These differences are exemplified in the results, as club sport student athletes were more likely to want to *develop a new skill* and be *physically active* than varsity athletes were, since they already believed they had the necessary skills and abilities and just needed to improve those skills.

Connection to Theory

Terenzini and Reason's (2005) college impact model has traditionally been utilized as a model to evaluate student retention, however this study indicates that my modified version of their college impact model is valid for evaluating other developmental outcomes that are specific to college sports. Similar to the modifications made by Foreman and Retallick (2012) to Terenzini and Reason's (2005) college impact model, this study illustrates that when evaluating the psychosocial development of student athletes, specific out-of-classroom experiences play a

vital role in the development of ethical behaviors.

When evaluating the impact that participation in different sports programs has on the development of student-athletes, it is apparent that the coaching behaviors evaluated by the SCBS instrument were more predictive of whether a coach cared that their athletes acted in a sportsmanlike way when looking at varsity athletes than at club athletes. Upon evaluation of my conceptual model, it became clear that student athletes' experiences in various collegiate sports programs provide different experiences that plays a role in the development of new skills both psychosocially and physically. The statistical differences and large effect sizes throughout the t-test analysis indicate that overall, athletes that participate in club sport programs recognize coaches as being more focused on the holistic development of students. Whereas varsity coaches are focusing more on winning than on the establishment of sportsmanship behaviors in athletes.

When comparing my conceptual model to previous iterations of Terenzini and Reason's (2005) college impact model, it is imperative that future researchers extend the model to evaluate the role that institutional policies regarding sports programs has on the sports program and the impact those policies have on the development of student athletes. For example, researchers should seek to examine the impact that conducting the study at an NCAA Division II or III institution to evaluate whether there are differences across different institutional policies related to varsity athletics and recreational sports. Furthermore, researchers should also evaluate other individual experiences in the classroom to evaluate whether classroom experiences relate to the development of sportsmanship in student athletes. Additionally, researchers should seek to evaluate the impact that peers' environments

have on the development of ethical behaviors, not just coaches.

Implications

The results of this study provide several implications for not just researchers but also sport administrators and coaches in higher education. Varsity sports programs across the nation are paying coaches thousands of dollars annually to lead their varsity sports programs and students, and not providing better developmental opportunities to their students. This study indicates that club sport programs can also offer opportunities for students to develop their skills and for coaches to help their athletes behave appropriately through club sports. Furthermore, when varsity sport administrators are making evaluations regarding staffing needs, I suggest that institutions hire coaches who recognize that developing sportsmanship character is as important as winning.

When looking at the sport skill development experience, athletes of club sport programs reported wanting a greater experience in being physically active and gaining/developing a new skill. This provides a key finding for the continuing support of campus recreational sports programs, as this study indicates that club athletes overwhelmingly rated higher levels in their want of various skill development. Therefore, institutions and campus recreation administrators should build and market that club sports programs better help students develop sportsmanship and other skills.

Overall, this study identifies the similarities and differences between major collegiate sports program types. Utilizing Terenzini and Reason's (2005) college impact model, this study identified the impact that the type of collegiate sports program has on the sports experience and development of student-athletes. Coaches have been recognized as having a direct impact

on the development and experiences of their athletes (Horn, 2002; Vella et al., 2013). This study identified the similarities and differences between student athletes of varsity and club sports. Despite this study collecting data from one institution, the findings indicate different experiences that athletes encounter due to their participation in either varsity or club sports.

Conclusion

The overall purpose of this study was to examine the differences between the type of sports programming (club vs varsity) and student-athlete experiences with coaching behaviors and sport skill development. Results of this study found that overall, the five identified coaching behaviors from the SCBS explained more variance within the varsity athletes than with the club athletes. Club athletes identified their desire to *learn/improve a new skill* and *being physically active* as greater than athletes of varsity athletics. These results indicate that institutions would be better off redistributing resources from competitive varsity sports programs into the recreational club sports system to better support athlete's development of skills. Future researchers should seek to evaluate different institutional policies and the impact the policies have on the development of student athlete's sportsmanship characteristics.

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CHAPTER 4

HOW DOES COLLEGIATE SPORTS PARTICIPATION RELATE TO INSTANCES OF ACADEMIC DISHONESTY IN COLLEGE STUDENTS?

Introduction

For the last several decades, instances of academic dishonesty and cheating have reportedly been widespread at higher education institutions (Anderman & Won, 2019; Chudzicka-Czupala et al., 2016; McCabe & Trevino, 1993, 1997). However, many higher education faculty members do not believe academic dishonesty is that prevalent, therefore they misjudge the extent that cheating occurs within their institution (Anderman & Won, 2019; Brimble & Stevenson-Clarke, 2005). The underestimation of the frequency of academic dishonesty leads to fewer faculty reports of suspected cheating and fewer actions based on the suspicion of academic dishonesty, therefore inadvertently allowing cheating to continue (Anderman & Won, 2019; Hard et al., 2006). College students have developed their character, ethical decisions and actions throughout their college experiences (Bratton & Strittmatter, 2013; Patton et al., 2016). Particularly in sports activities, students develop many skills, including ethical behaviors, which can be transferable to their behaviors in the non-sports spaces, like the classroom learning environment (Newman et al., 2020).

Sports participation has been recognized as an environment for participants to develop appropriate ethical behaviors (Horn, 2002). In fact, the development of ethical behaviors is a common desired outcome of sports participation (Schwab et al., 2010). To participate in any extracurricular activity, students must maintain an acceptable grade point average to remain enrolled at their institution and be eligible to participate in the program. McCabe and Trevino

(1997) argued that participation in extracurricular activities influences cheating behaviors, because of the amount of time students spend in those activities rather than preparing for class. Since students must maintain an active enrollment at the college to participate in any extracurricular program, student athletes face dual expectations to excel in both academia and sports (Gayles, 2015).

A person's character, in sports, is frequently tied to their actions during practice and games, and those actions are frequently assessed in real-time as either ethical (sportsmanship) or unethical (unsportsmanship). Sportsmanship has been defined in different ways but tends to revolve around a person's ethical behaviors and actions (Carr et al., 2012). In 2003, the National Collegiate Athletic Association (NCAA) defined sportsmanship as, "a set of behaviors to be exhibited by student-athletes, coaches, game officials, administrators, and fans in athletic competitions. These behaviors are based on values, including respect, civility, fairness, honesty and responsibility" (cited from Kampf, 2006; p. 20). Furthermore, sportsmanship actions are associated with following the rules of the game as written and not trying to bend the rules for their own benefit (Strand et al., 2018). With athletes recognizing that several life skills are developed through their participation in organized recreational sports programming (Newman et al., 2020), a student's level of sportsmanship displayed during sports participation should translate to appropriate ethical behaviors outside of the sport.

Academic dishonesty has been a major problem in the American educational system for decades, and has been widely associated with students' character, morals, and ethics (Anderman & Won, 2019; Chudzicka-Czupala et al., 2016; McCabe & Trevino, 1997). Sports are recognized as an environment for the development of a person's character. The ethical actions

that are emphasized through sports often appear outside of the sporting environment. Within sports, sportsmanship actions are acknowledged as a demonstration of an athlete's character and ethical behaviors. National Intramural and Recreational Sports Administration (NIRSA) programs highlight that collegiate recreational sports programs should emphasize student development, particularly character development, throughout programmatic offerings (Council for the Advancement, 2009). Since instances of academic dishonesty have been connected to student ethics, overall character, involvement in extracurricular activities, and peer associations, research is needed to evaluate the relationship between participation in sports programs and ethical behavior development outside of the sports environment.

Purpose and Research Question

The purpose of this study is to examine how students' participation in NIRSA-sponsored recreational sports programs relates to their academically dishonest behaviors. This study is guided by two research questions (RQ):

RQ1: Does students' participation in NIRSA-sponsored sports programs relate to self-reported instances of their academic dishonesty, after controlling for student characteristics?

RQ2: Do students' beliefs of cheating, perceptions of their peer's beliefs of cheating, and their observations of cheating at their institution relate to the instances of academic dishonesty, after control for students' participation in NIRSA-sponsored sports programs and other student characteristics?

By answering these research questions, higher education administrators can further identify specific factors and motivations behind academic dishonesty. Furthermore, recreational sports administrators will be able to identify how sports participation can shape students' academically dishonest behaviors.

Significance

This study elaborates on the current literature regarding academic dishonesty and student participation in recreational sports programs. Although research has been conducted on instances of academic dishonesty at higher education institutions, researchers have not looked specifically at how students' participation in recreational sports programs can be related to their academic dishonesty. By focusing on the development of sportsmanship in college athletes, this study helps coaches and administrators in collegiate sports programs identify the relationship between recreational sports participation and students' cheating behaviors outside of the sports environment. Therefore, by understanding the relationship between sports participation and the holistic development of students, higher education administrators, sport administrators, and instructors will be able to implement new policies around their programs to ensure that they are continuing to develop students.

Literature Review

Academic Dishonesty

Academic integrity violations are prevalent across the higher education industry globally (Anderman & Won, 2018; Beasley; 2016; Chudzicka-Czupala et al., 2016; McCabe, 1993; Nelson et al., 2017). Over the last several decades, researchers have continuously sought to identify environmental and motivational factors that affect academically dishonest actions (Anderman & Won, 2017; Beasley, 2014, 2016; Bratton & Strittmatter, 2013; McCabe & Trevino, 1993, 1997; Nelson et al., 2017; Pino & Smith, 2003; Popoola et al., 2017; Spear & Miller, 2012). It is paramount that higher education administrators and educators continue to gain an

understanding of the prevalence of academically dishonest actions in order to offer sufficient preventative programs.

With instances of academic dishonesty being prevalent across higher education, several researchers have sought to identify what factors influence cheating behaviors (Beasley, 2016; McCabe & Trevino, 1997; Pino & Smith, 2003). McCabe et al. (2012) conducted a systematic review to identify the prevalence and types of cheating behaviors in college students. McCabe et al. (2012) found that “more than two-thirds of college students are reporting that they have cheated at least once” (p. 71). Although most cheating goes undetected, McCabe et al. (2012) found that a majority of faculty (62%) claim that they have never observed cheating in their classes. Researchers often seek to evaluate individual student characteristics to explain which students are most likely to cheat, such as gender, age, or academic preparedness.

Academically dishonest behaviors seem to differ by student characteristics. Researchers have found that there are no gender differences in reported instances of cheating among college students (Beasley, 2016; McCabe et al., 2012). However, Beasley (2016) argued that men have been recognized as getting away with cheating, more frequently than women. Additionally, Beasley (2016) found that younger students and international students were more likely to cheat and be caught than older and domestic students. McCabe and Trevino (1997) also found that students with lower grade-point averages were more likely to cheat than students with high grade-point averages.

Along with individual characteristics of students’ age, gender, and grade-point average, students’ college experiences have also been evaluated for their impact on academically dishonest actions. Researchers have found that involvement in various student clubs,

particularly Greek organizations, can lead to an increase in the frequency of cheating behaviors (McCabe & Trevino, 1997; Pino & Smith, 2003). McCabe and Trevino (1997) suggested that students that are involved in student organizations have more time constraints to balance, which could lead to more instances of cheating. McCabe and Trevino (1997) identified that involvement in student organizations had a larger influence on cheating behaviors than individual characteristics, such as students' race, gender, age, and parental education level. Specifically, student's involvement with Greek life, their peer's behaviors, and their peer's perceptions of cheating lead to an increase in cheating behaviors (McCabe & Trevino, 1997). Pino and Smith (2003) validated this finding when they found that participation in any student club or group frequently increased a student's likelihood of cheating. Although researchers have commonly focused on extracurricular activities, such as peer influences and Greek life involvement, there appears to be a lack of research on how participation in recreational sports programs relates to the frequency of students cheating in college.

Students' own beliefs regarding the benefits versus detriments of cheating behaviors in college was not evaluated until Chudzicka-Czupala et al (2016). In their study, Chudzicka-Czupala et al. (2016) utilized Fishbein and Ajzen's (1975) theory of reasoned actions and Ajzen's (1991) theory of planned behavior to evaluate whether students' attitudes and beliefs towards cheating would influence cheating behaviors. Within their United States sample the students' beliefs and attitudes of cheating had the second highest beta weight after students' moral obligations. My study builds on this finding and evaluates how the students' attitudes and beliefs (Chudzicka-Czupala et al., 2016) relate to cheating behaviors.

NIRSA Programs and Student Development

Over the last several decades, there has been an emergence of recreational sports programs that have been proven to positively impact college students (Sturts & Ross, 2013). On average, recreational sports programs have an annual budget around \$1.72 million (NIRSA, 2007). As annual budgets continue to increase yearly, institutions are seeking to justify the annual increases to ensure that funding is going to support the institutional missions of student development and positive experiences. (Haines & Fortman, 2008). Furthermore, given that recreational sports programs are offered across various departments on campus (i.e., student affairs, student services, student life, etc.), higher education administrators have evaluated the links between recreational sports programs and various student development outcomes (Artinger et al., 2006).

The Council for the Advancement of Standards (CAS, 2009) states that “recreational sports programs are viewed as essential components of higher education, supplementing the educational process through enhancement of students’ physical, mental, and emotional development” (p. 330). Within higher education, outcomes are identified as the result, whether positive or negative, that can be related to students’ exposure, involvement, or participation in different programs or activities (Haines & Fortman, 2008). Traditionally, researchers examine learning outcomes as a part of academic success at the institution, as well as students grades in courses and the retention of students (Haines & Fortman, 2008). Scholars also emphasize learning outcomes outside of the exclusive domain of academic units, in favor of learning outcomes developed from co-curricular programs or outside of the classroom (Terenzini & Reason, 2005). Prior research has indicated that participation in recreational sports has been

associated with students' holistic wellness and development (Body, 1996; Gratton & Tice, 1989), stress reduction (Ragheb & McKinney, 1993; Kanters, 2000), self-esteem (Collins et al., 2001; Haines, 2001; Kanters & Forrester, 1997), enhanced GPA (Belch et al., 2001; Bryant & Bradley, 1993; Bryant et al., 1996), student development (Geller, 1980; Nesbitt, 1993, 1998; Todaro, 1993), and ease of social integration (Bryant et al., 1996; Christie & Dinham, 1991).

The development of student-athletes is one of the most under researched fields within higher education (Comeaux & Harrison, 2011; Hirko, 2008). Researchers that have sought to understand the development of student-athletes frequently do so as a comparison to the general student population at an institution (Gayles, 2015). Those studies have been highly dependent on their samples from both non-athletes and student-athletes and have yet to show consistent results regarding the experiences of athletes and non-athletes. Researchers that evaluate participation in sports programs and the impact the programs have on development, often examine participation in intramural competition. Intramural sports programming is offered at almost every college institution across the United States (Rothwell & Theodore, 2006). Within intramural sports programs, program administrators enforce standards of moral conduct (i.e., sportsmanship; Rothwell & Theodore, 2006). Prior to participating in intramural programming, students are required to agree to follow rules of acceptable sportsmanship behaviors or face harsh penalties (including game penalties or suspension from participation). Rothwell and Theodore (2006) found that participation in intramural sports programming is connected to the development of a person's values. Rothwell and Theodore (2006) explain the development of values through participating in intramurals through the enforcement of good sportsmanship behaviors throughout the program. Although there is a lot of research

evaluating the impact of intramural sports programming and student development, there is a lack of research focusing on club sport participants and moral development. Therefore, one aspect of this study seeks to identify the relationship between participation in recreational sport programs and academically dishonest actions.

Conceptual Framework

I adapted Terenzini and Reason's (2005) college impact model to assess how individual experiences within out-of-class activities (i.e., club sports or intramural programming) relate to student instances of academically dishonest behaviors after controlling for students' pre-college characteristics. Although traditionally utilized to evaluate student success and retention, Terenzini and Reason's (2005) model has also been utilized to identify any student outcome, including cognitive and psychosocial development and change (Reason et al., 2007). Foreman and Retallick adapted Terenzini and Reason's (2005) college impact model to specifically evaluate precollege characteristics and individual experiences to evaluate the development of different leadership skills. Foreman and Retallick's (2012) model specifically depicts that student's pre-college characteristics influences students' individual experiences within their peer environment and out-of-classroom activities, as well as the evaluated outcome variable. Prior research has already indicated that student's pre-college characteristics and on-campus experiences play a role in students self-reported cheating behaviors (McCabe & Trevino, 1993, 1997; Pino & Smith, 2003). This study builds on these findings to evaluate the specific impact that participation in recreational sports programs (out-of-classroom activities) has on students academically dishonest actions.

Participation in organized sports programs is one of the most common out-of-classroom

activities students participate in during college. Prior research indicates that the more involved students are in extracurricular activities, the more likely they are to engage in academically dishonest behaviors (McCabe & Trevino, 1997; Pino & Smith, 2003). Furthermore, participation in organized college sports programs include several hours of practice every week outside of mandatory academic requirements. To assess the relationship that experiences in sports plays on academic dishonesty, the first research question of the study looks at participants self-selected participation in recreational club sport or recreational intramural sport programming and the relationship between sports participation and cheating.

I also examine how college students' beliefs of cheating, their observations of cheating on campus, and their perceptions of peer's beliefs about cheating relate to their self-reported cheating behaviors in the classroom. The students' perceptions of their peers' behaviors and their beliefs and observations of cheating reflect students' experiences in the classroom within the model. Students' belief's regarding cheating stems from their experiences with cheating throughout their educational journey. For example, a student who has previously been suspected of cheating in a course may have made adjustments to their beliefs and perceptions based on their experiences in the classroom.

The self-reported instances of academic dishonesty are the outcome of this study. Students' reported instances of cheating in their classes is an example of their morality and ethics. The development of student's morals throughout their college experience, has been a central concern for higher education administrators for decades (Patton et al., 2016; Mayhew et al., 2016). Furthermore, the development of student's morals and ethics is an example of their psychosocial development, therefore fitting Reason et al.'s (2007) expansion of Terenzini

and Reason's (2005) college impact model. The adaptation of Foreman and Retallick's (2012) version of the model further validates the usage of Terenzini and Reason's original college impact model to evaluate various student outcomes, in this case, students' academically dishonest behaviors.

Methods

Data collection occurred during the spring 2021 academic semester. In total, the dataset consisted of 241 participants from the researched institution. Participants included students that were involved in NIRSA-sponsored club sports programs, NIRSA-sponsored intramural sports programs, and non-sports participants. The purpose of this study is to identify the relationship between participation in recreational sports programs, their beliefs about cheating, their observations of cheating, their perceptions of their peers' beliefs about cheating, and students' self-reported academically dishonest behaviors.

Sample

Purposive sampling methods were used for data collection to ensure students from across the researched institution were invited to participate. All participants were enrolled in at least one course at the researched institution. The researched institution consists of roughly 38,000 students with roughly 500 students participating in NIRSA-sponsored club sport competitions this year (Wells, H., personal communication, Spring 2021). The institution selected to research is recognized as a Tier-1 research-focused minority serving institution that is located in the southwestern United States and in an urban-rural community. Overall, the undergraduate student population consists of 45.8% white students, 23.4% Hispanic/Latino

students, 12.6% Black/African American, and 6.4% Asian students. The institution consists mostly of female students (52%), with an average age of 22. The mission of the institution is to inspire students to flourish in a rapidly changing world.

Overall, the entire collected sample consisted of 262 participants. However, 25 responses were mostly incomplete and were subsequently thrown out, reducing the overall sample size to 241 participants. Of the remaining sample 178 (73.9%) participants identified as not participating in any sports program, 36 (14.9%) identified as participating in intramural sports programs, and 24 (9.9%) reported participating in club sport programs. Therefore, due to the small group sizes, participation in NIRSA programs were combined into one dichotomous variable, *NIRSA Participation*, where non-participants were coded “0” and participants were coded “1.”

Table 4.1

Descriptive Statistics

Characteristic		Non-Athlete		Athlete	
		n	%	n	%
Gender	Male	62	35.2	36	61
	Female	107	60	23	39
Age	18 or less	9	5.1	0	0
	19	16	9	5	8.5
	20	32	18.1	13	22.0
	21	26	14.7	9	15.3
	22	23	12	4	6.8
	23 or older	71	40.1	28	47.5
Academic Standing	1 st year	17	9.6	0	0
	2 nd year	26	14.7	3	5.1

(table continues)

Characteristic	Non-Athlete		Athlete		
	n	%	n	%	
3 rd year	70	39.5	18	30.5	
4 th year or more	58	32.8	27	45.8	
Graduate Student	6	3.4	11	18.6	
GPA Range	1.50-1.99	1	0.6	1	1.7
	2.00-2.49	12	6.8	2	3.4
	2.50-2.99	34	19.2	9	15.3
	3.00-3.49	55	31.1	21	35.6
	3.50-4.00	75	42.4	26	44.1
Parents Education	Less than high school	19	10.7	1	1.7
	High School graduate	25	14.1	10	16.9
	Some college	38	21.5	7	11.9
	2-year college degree	15	8.5	7	11.9
	4-year college degree	54	30.5	18	30.5
	Professional degree	22	12.4	13	22.0
	Doctorate	4	2.3	3	5.1
Race/ Ethnicity	White	93	52.5	40	67.8
	Black or African American	26	14.7	9	15.3
	American Indian or Alaska Native	4	2.3	1	1.7
	Asian	17	9.6	5	8.5
	Native Hawaiian or Pacific Islander	2	1.1	0	0
	Other	23	13	4	6.8

Overall, the sample had a low self-reported average for cheating behaviors (avg= 1.22, SD= .30) with NIRSA participants self-reported cheating behaviors being 1.32 (SD=0.39) and non-NIRSA participants self-reported cheating behaviors averaged 1.19 (SD= 0.26). The largest group of participants identified as being 23 years or older ($n= 99$, 41.9%), with 20-year old's being the second most identified age ($n=45$, 19.1%), and a majority of participants being in at least their third year in college studies ($n= 173$, 73.3%). The sample consisted mostly of female

participants ($n= 130$, 53.9%) compared to male participants ($n= 98$, 40.6%). More specific descriptive statistics are in presented in table 4.1.

Data Collection

Data collection occurred through classroom announcements to numerous ($n= 30$) courses across the institution that covered approximately 850 unique students in total. After the first announcement, I received 130 surveys back. Follow up announcements were made approximately 1 week and 3 weeks after the original announcement to all of the original courses where announcements were made. After the follow up announcements were made, a total of 262 surveys were returned for an overall return rate of approximately 30%. Students that participated and completed the survey instrument were entered into a raffle for one of five online gift cards.

Instrument

The survey utilized for this study includes 50 items. The survey instrument inquired about students' involvement in campus activities, perceptions of coaching behaviors (Beldon, 2021; Bolter & Kipp, 2018; Bolter et al., 2018), general beliefs about cheating (Chudzicka-Czupala et al., 2016), self-reporting of cheating behaviors (McCabe & Trevino, 1993), observations of cheating occurrences at the institution (McCabe & Trevino, 1993, 1997) and perceptions of peers' attitudes towards cheating (McCabe & Trevino, 1997).

Items that inquired about general beliefs about cheating were adapted from Chudzicka-Czupala et al. (2016) and included a lead-in statement of "I believe cheating is...". The participants were then asked about their beliefs of cheating being *very bad* (1) – *very good* (5),

not useful (1) – *very useful* (4), *not appropriate* (1) – *very appropriate* (4), and *not effective* (1) – *very effective* (4). The items were previously found to be reliable with a Cronbach alpha ranging from .7-.8 (Anderman & Won, 2019; Chudzicka-Czupala et al., 2016). Within my sample, the beliefs items had a Cronbach Alpha coefficient value of .82.

Participants were then asked to self-report how often they cheated using various tactics (McCabe & Trevino, 1993, 1997). Students were asked to identify how frequently from a range of never (1) to often (4) they participated in the following cheating behaviors: used crib notes on a test, copied from another student during a test, used unfair methods to learn what was on a test previously, copied from another student during a test without their knowledge, helped someone else cheat on a test, cheated on a test in any other way, copied material and turned it in as their own, fabricated or falsified a bibliography, turned in work by someone else, received substantial unpermitted help, collaborated on an assignment when not allowed, and copied a few sentences without footnoting it. Overall, this scale was also found to be reliable with a Cronbach alpha of .79 (McCabe & Trevino, 1993). Within the sample, the subscale was highly reliable with a Cronbach Alpha coefficient of .83. Responses to the scale were aggregated together to achieve a total self-reported score of cheating behavior, that ranged from 1 (*never cheated*) to 4 (*cheated very often*).

Questions were then posed asking about students' observations of cheating occurrence at the institution and perceptions of friends' attitudes towards cheating (McCabe & Trevino, 1993, 1997). The questions that inquired about observations of cheating at the institution were responded on a 1-5 scale with anchors of low/never (1) and high/always (5). These items were previously found to be reliable with a Cronbach Alpha value of .72 (McCabe & Trevino, 1993,

1997). Within my sample, students' observations of cheating behaviors had a Cronbach Alpha of .67. Participants were then asked about their friends and classmates' perceptions of cheating and were responded to on a scale of 1-4 with anchors of not at all (1) and strongly care (4). Participant's perceptions of friends' attitudes towards cheating had a Cronbach Alpha of .69 (McCabe & Trevino, 1993, 1997). My sample proved to be more reliable with a Cronbach Alpha coefficient of .83. The survey concludes with questions about the participants demographics including participants age, academic level, grade-point average, gender, race/ethnicity, employment, and parental education background.

Variables

To answer the first research question a hierarchical regression analysis was conducted. For the hierarchical regression analysis, the predictor variables were participants' age, gender, race/ethnicity, parents' education level, academic standing, GPA, and whether they participated in any NIRSA-sponsored programming. The dependent variable was the self-reported aggregated average scores of cheating behaviors, that identified the average response of self-reported cheating behaviors. Since the regression analyses were conducted to see the relationship between the participation in sports and self-reported cheating behaviors, the pre-college characteristics of participants age, gender, parents' educational level, GPA, academic standing, and race/ethnicity were used as control variables. Students experiences in out-of-classroom activities was evaluated through participants identifying that they participated in an organized recreational sport program offering.

To answer the second research question, another hierarchical regression analysis was conducted. Similar to the first analysis the predictor variables include participants, age, race,

gender, parental education background, academic level, GPA served as pre-college characteristics, participation in sports status served as out-of-classroom experiences, and added aggregate predictors of students' beliefs about cheating, their observations on cheating at the institution, perceptions of their peers' beliefs about cheating served as classroom experiences. The control variables for this analysis will be students characteristics of age, race, gender, parents' educational level, GPA, and participation in NIRSA programming.

Data Analysis

The first goal of the study is to identify the relationship between participation in organized sports programs and the frequency of cheating. The second goal of the study is to examine to what extent students' perception of cheating, their peers' attitudes on cheating, and their observations of cheating at institutions relate to the frequency of cheating. The data was analyzed using IBM SPSS 25.0. Before analyzing data to answer the research questions, data was assessed for normality. Once data normality was achieved, multiple hierarchical regressions were conducted to answer the research questions.

Prior to running any analysis, the data was evaluated for data completion and data normality. Preliminary data analysis revealed *a small amount of missing data (less than 5%)*. Since there was no recognizable pattern of the absent values, the missing values were deemed missing completely at random and to minimize the impact on the items mean and standard deviation, item mode values were input (Downey & King, 1998; Tabachnick & Fidell, 2019). To assess data normality, descriptive statistics of skewness (< 12.001) and kurtosis (<13.001) were evaluated, indicating normal fitting data.

Regression

To answer the two research questions, two hierarchical regression analyses were conducted. Following similar methodologies evaluating cheating behaviors in college students (McCabe & Trevino, 1993, 1997) a hierarchical regression analysis was selected to allow for groups of predictors to be evaluated for unique contributions to the model.

Similar to the procedure from McCabe & Trevino (1993, 1997) the first step of the hierarchical regression analysis included the precollege and individual characteristic predictor variables of age, race, gender, parents educational background, and academic achievement variables of grade-point average and academic year. To answer the first research question, the second level of the hierarchical regression included the variable of interest that identified participation in NIRSA-sponsored sports programs. These two levels were regressed into the aggregate value of students self-reported cheating behaviors. The aggregate score was created by summing all 12 of the self-reported cheating behaviors and then dividing that value by 12.

To answer the second research question, a third level was added to the hierarchical regression analysis. Utilizing the same model structures from the prior analysis, the third level added the items that evaluate the students' academic perspective and environment (their beliefs about cheating, observations of cheating at the school, and perception of peers' beliefs about cheating). All three levels were hierarchically regressed to the dependent aggregate variable of self-reported cheating behaviors.

Since the predictor variables are conceptually related to each other, structure coefficients were evaluated in combination with the beta weights, to address each factors' individual contribution to predict the dependent variable (Yeatts et al., 2017). Structure

coefficients were calculated as the Pearson's correlation between each predictor variable and the predicted dependent variable (Yeatts et al., 2017). Squared structure coefficients identify each items unique contribution to the overall effect observed in the regression analysis and is calculated by squaring the structure coefficient.

Limitations

This study is not without limitations. Most notably, since I collected the data during the coronavirus pandemic, a lot of recreational sports programs have been paused, therefore the sample size was hindered due to students graduating and the lack of in-person sports offerings over the last year and a half. While I intended to study how different sport program types relates to students' cheating behaviors, I was not able to analyze differences across sport programs. Therefore, I addressed the limitations as how future researchers should approach this concept. Additionally, instances of cheating behaviors were self-reported, and many participants may have refrained from being completely honest about their cheating behaviors. Furthermore, the data were collected from only one institution, which will limit the generalizability of the findings to every institution across the nation. Moreover, despite the researched institution being recognized as a minority serving institution, the sample collected is not representative of being a minority serving institution, with roughly 55% of the overall collected sample self-reporting as "White." Although the researched institution tracks overall usage of the recreation facility by race and ethnicity, the sport programs do not track participation by those demographics. I also suggest future research ideas how different organizational context, such as Predominately White Institutions or Hispanic Serving Institutions shape students' academic integrity by different racial groups.

Results

Multiple Regression

To examine the unique contributions that participation in recreational (NIRSA) sports programs have on cheating behaviors (RQ1), a hierarchical multiple regression analysis was performed. Following similar methodology by McCabe and Trevino (1993, 1997) and Chudzicka-Czupala et al (2019) and to identify the impact that NIRSA participation has on academic integrity, a hierarchical multiple regression analysis was recognized as the best analysis for the study. The results of the hierarchical multiple regression analysis conducted to answer the first research question was statistically significant, with an increase in explained variance above precollege characteristics ($\Delta R^2 = .020$, $F(6, 234) = 2.478$, $p < .05$), with an overall small affect size of $R^2 = .081$, and an adjusted R^2 of $.052$, indicating a slight shrinkage for sampling error.

Table 4.2

Regression Analysis Predicting Cheating with Participation and Coaching Behaviors (Values on Original Step) (n=233)

Variable	B	SE B	β	R_s	R_s^2	R^2	ΔR^2
Step 1						.061	
Age	-.039	.017	-.205	-.401	.161		
Parents Ed	-.019	.012	-.102	-.127	.016		
Gender	-.065	.033	-.130	-.512	.262		
Race/Ethnicity	-.001	.010	-.004	-.103	.011		
Academic Standing	.031	.027	.103	.067	.004		
GPA Range	.013	.021	.040	.161	.026		
Step 2						.081	.020
NIRSA Participation	.109	.050	.158*	.687	.472		

Note: * significant at $p < .05$ level

Furthermore, participation in NIRSA programming was a statistically significant predictor of cheating behaviors and had a moderate positive predictive effect of predicting cheating behaviors. This indicated that students who participate in NIRSA programs are more likely to cheat than their peers who do not participate in sports. Overall, squared structure coefficients illustrated that student's participation in sports explained roughly 47% of the observed effect by itself.

To examine how students' beliefs of cheating, perceptions of peers' beliefs of cheating, and observations on cheating at the institution relate to their cheating behaviors (RQ2), another hierarchical regression analysis was conducted. Building on the model from the first research question, this analysis included the student's beliefs of cheating, observation of cheating, and students' perceptions of their peers' beliefs, all being placed in the third level of the analysis. The addition of these variables into the regression model significantly increased explained variance of cheating ($\Delta R^2 = .226$, $F(10, 232) = 9.879$, $p < .05$), with an overall moderate effect size of $R^2 = .308$, and an adjusted $R^2 = .277$, illustrating a minor shrinkage due to theoretical sampling error. Evaluation of item beta weights indicated the items of *beliefs about cheating* and *observations of cheating at school* were both statistically significant predictors of cheating behaviors. However, based on squared structure coefficients, the *beliefs aggregate* item was the only predictor of the entire model to explain greater than 15% of the observed effect by itself. Of note, by adding these three variables as a group, these factor items were the biggest predictors of cheating behaviors compared to the personal characteristics and sports participation variables.

Table 4.3

Regression Analysis Predicting Cheating with Participation and Coaching Behaviors (Values on Original Step) (n=233)

Variable	B	SE B	β	R _s	R _s ²	R ²	ΔR^2
Step 1						.062	
Age	-.018	.015	-.093	-.205	.042		
Parents Ed	-.014	.011	-.077	-.067	.004		
Gender	-.061	.030	-.122	-.261	.068		
Race/Ethnicity	.002	.009	.013	-.056	.003		
Academic Standing	.006	.024	.020	.039	.002		
GPA Range	.005	.019	.016	.077	.006		
Step 2						.082	.020
NIRSA Participation	.078	.045	.113	.354	.125		
Step 3						.308	.226
Students Beliefs	.223	.031	.437*	.882	.778		
Observation at School	.106	.041	.193*	-.242	.059		
Perceptions of Peer's Beliefs	-.026	.025	-.080	.274	.075		

Note: * significant at $p < .05$ level

Discussion

Overall, the purpose of my study is to examine how participation in organized recreational sports programs and students own beliefs about cheating relate to their self-reported instances of cheating in the classroom. Although the sample's self-reported instances of cheating behaviors were low across the entire sample, my results indicate a relationship amongst students' beliefs about cheating, their observations of cheating at school, their participation in out-of-classroom activities, and self-reported cheating behaviors.

Predicting Cheating Behaviors Through Sports Participation

Participation in organized sports programs during college is one of the most popular out-of-classroom activities in college. When predicting cheating behaviors using personal characteristics and student's participation in recreational sports the hierarchical regression model was statistically significant and revealed a small effect size ($R^2 = .081$, adjusted $R^2 = .052$). Indicating that students' participation in recreational sports programs is related to students cheating behaviors in their classes.

Specifically, I found that participation in recreational sports programs provided roughly 47% of the total observed effect by itself. Unlike the findings portrayed by McCabe and Trevino (1997), where no significant relationship was found between participation in recreational sports and cheating, the results shown here indicate a significant relationship of whether or not students' cheat. The findings between McCabe and Trevino (1997) and this study may differ because of the growing recreational sports industry and growing emphasis on winning competitions (Ott & Bates, 2015).

NIRSA-sponsored sports programs are recognized for their focus on the holistic development of student athletes through open participation and their emphasis on sportsmanship and ethical behaviors. Rothwell and Theodore (2006) identified that participation in intramural sports programs was related to the development of participants ethical and moral values. However, this study indicates a positive relationship between participation in recreational sports programs and cheating. Therefore, demonstrating that the enforcement of ethical standards in sports may not be translating directly to students' ethical academic behaviors in the classroom.

Cheating through Beliefs and Perceptions

When predicting students cheating behaviors through personal characteristics, involvement in recreational sports programs and student perceptions, the hierarchical regression analysis was found to be statistically significant with a moderate effect size ($R^2 = .308$, adjusted $R^2 = .226$). As a group, the student perception variables explained more variance within the entire model than both the personal characteristics and participation in NIRSA programming. Upon inspection of the entire analysis only two predictor variables provided statistically significant predictive effects of cheating behaviors, *beliefs about cheating* and *observations of cheating at school*.

The largest predictor within the overall model was the students' *beliefs* about cheating. The *beliefs* items asked students about how they believed cheating was beneficial to their academic work. Specifically, these items inquired about how students viewed the effectiveness of cheating, appropriateness of cheating, usefulness of cheating, and whether cheating was good or bad (Chudzicka-Czupala et al., 2016). Chudzicka-Czupala et al. (2016) found that students beliefs regarding cheating were one of the most important factors in predicting cheating behaviors across the globe. The theory of reasoned action (Fishbein & Ajzen, 1975) argues that a person's actions stem from their attitudes/beliefs regarding that action. Therefore, students that cheat in college have previously decided that the benefits to cheating outweigh any possible harm.

Students' observations of cheating across the institution was the only other statistically significant predictor variable. These items asked participants to identify how frequently they believe cheating has occurred at the institution and how frequently they have actually

witnessed cheating at the institution. Reconfirming that students' perceptions of cheating at the institution is statistically significant (McCabe & Trevino, 1997), illustrates that students continue to act in accordance with how they perceive their classmates and what students' peers deem acceptable behaviors.

Implications for Future Research

When evaluating the relationship that participation in recreational sports programs has on cheating behaviors, results indicate that simply participating in these programs is related to self-reported instances of cheating. Despite NIRSA sports programs being supplemental to the educational process within colleges (CAS, 2009), results here indicate that simply participating in recreational sports programs is related to self-reported instances of cheating. Although, previous researchers have argued that it is not that students are participating in a specific extracurricular activity, rather it is the participation in any form of extracurricular activity that leads to the increase in cheating behaviors (McCabe and Trevino, 1997; Pino & Smith, 2004). Future researchers should explore specific experiences that student athletes have throughout their participation in NIRSA programs to understand whether the predictive effect is from just participating in the program, or if it is due to a specific experience within the program (i.e., coaches and leaders are focused solely on winning and not character development). Researchers should examine cheating behaviors across different sports programs (e.g., varsity vs club vs intramural programs). Additionally, researchers should compare cheating behaviors of student athletes of revenue-generating sports (e.g., basketball and football) and Olympic sports (e.g., track and field and swimming).

When evaluating the student perception variables within the study, it became apparent

that most of the relationship came from students' own unique beliefs and perceptions of their peers cheating behaviors. These variables are reflective of students' classroom experiences and indicate that when students perceive that cheating is more useful than it is hurtful, and that many of their peers are cheating, then they are more likely to cheat themselves. This finding illustrates that when predicting cheating behaviors, the most important relationship comes from experiences within the classroom. Future researchers should continue to look into the contexts of cheating within the classroom, particularly as it relates to the students views of their instructors and cheating behaviors. For example, one instructor may not deem using notes on an online exam as cheating and not report the student for cheating, whereas another faculty member may do so.

When comparing the conceptual model used here to the original Terenzini and Reason's (2005) college impact model, it is vital that future researchers extend the model to assess the role that institutional policies play in cheating behaviors. Future researchers should seek to explore the institutions response to cheating behaviors and whether that deters students from cheating. Furthermore, researchers should also expand to look at the relationship between participation in sports programs and cheating behaviors. More specifically, researchers should evaluate the relationship participation in sports has on students' beliefs about cheating to see if sports participation is moderating the relationship between beliefs and perceptions of cheating behaviors and self-reported instances of cheating.

Implications for Practices

The results of this study provide several implications for higher education administrators, sports administrators, and faculty. Most notably, higher education

administrators need to make sure that through the offerings of extracurricular activities, they are not taking time away from students' academic focus. Recreational sports programs are designed to be taken in addition to students' academic work, therefore sport administrators and higher education administrators need to reconsider time restraints for participation in organized sports competitions. For example, club sport programs should not schedule competitions that cause athletes to miss courses while they are traveling. Higher education administrators should minimize funding opportunities for traveling to competitions that compete with the students' courses. Furthermore, intramural sport programs should look into scheduling competitions that do not compete with students' courses. For example, sports administrators should look into scheduling more intramural competitions on the weekends (particularly Sunday afternoons and evenings) and less during the week.

When looking at the impact that students' beliefs, and their perceptions of peers' beliefs and behaviors, it is apparent that faculty should play a larger role in limiting cheating behaviors within college students. Many faculty members do not believe that cheating is a pervasive problem within higher education (Anderman & Won, 2018; Brimble & Stevenson-Clarke, 2005), therefore faculty need to be trained on how to identify cheating behaviors within their classes. Higher education administrators should develop academic integrity workshops for faculty to attend at the start of every year to remind and teach faculty what to look out for in cheating behaviors. The fact that student's beliefs is the most significant predictor of cheating instances indicates that faculty and higher education administrators are not deterring cheating behaviors in students by showing them the negative impact of cheating. Faculty should clearly discuss the harm that cheating has on their students' academic journey from failing the course, to not

understanding course material later on, to possibly being expelled from the institution.

Contribution

Overall, this study identifies the impact that participation in organized sports programs and students' contextual perceptions of cheating has on the frequency of academic dishonesty. Utilizing Foreman and Retallick's (2012) adaptation of Terenzini and Reason's (2005) college impact model, this study identifies the relationship that participation in organized sports programs and students' beliefs and perceptions of academic dishonesty has on the frequency of self-reported instances of cheating behaviors. This study is necessary to identify whether participation in sports programs, students' beliefs about cheating and their perceptions of cheating influence their ethical behaviors in the classroom, as demonstrated through cheating. Despite data only being collected from one institution, the findings are similar to previous studies in showing that participation in extracurricular activities and students' beliefs and their observations of cheating at the institution impact students' self-reported instances of cheating.

Conclusion

The purpose of this study was to examine the relationship amongst student's participation in organized recreational sports programs and their self-reported instances of cheating. I also examined whether student perceptions of cheating, their peers' attitudes on cheating, and observations of cheating occurrence at the institution are related to their cheating behaviors. Results of this study found that overall, students' beliefs about cheating are the most predictive of self-reported cheating behaviors, with students' perceptions of cheating occurrences at the institution also being statistically significant. These results indicate that

students cheating behaviors are mostly influenced by weighing the benefits vs detriments and by their observations of how their peers act and their beliefs regarding cheating behaviors. Furthermore, when evaluating just students' participation in recreational sports programs, participation had a significant relationship with self-reported instances of cheating. Indicating, that participation in the program itself may directly lead to more instances of cheating. Future researchers should seek to explore the possible moderation effect that participating in sports programs has on students' self-reported instances of cheating behaviors and evaluate the impact that students' perceptions of institutional policy impact their cheating behaviors.

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CHAPTER 5

CONTRIBUTIONS

Overall, my dissertation evaluates the impact that sports participation has on the development of ethical behaviors. The results shown throughout this document have indicated that student-athletes mainly identify five coaching behaviors that are directly related to their perceptions that their coach cares that they are acting appropriately. Furthermore, I found that although the coaching behaviors explained more variance within varsity athletes than within club athletes, club athletes rated other sport skill development experiences higher than varsity athletes. Lastly, I found that although participation in recreational sports programs is related to instances of self-reported cheating, students' beliefs about cheating and their observations of cheating at the institution are more related to cheating behaviors than to participation in sports.

In chapter 2 I identified the extent that student athletes perceive their coaches' behaviors play in the development of their sportsmanship. This study was necessary to further educate coaches about how their behaviors directly impact the development of their athletes. Despite this study being limited to only one highly competitive institution, the results support the further usage of a 15-items SCBS instrument to assess the development of sportsmanship in college sports programs. This study also illustrates that the adaptation of Terenzini and Reason's college impact model, can be used to evaluate various cognitive and psychosocial developmental concepts (i.e., sportsmanship; Terenzini & Reason, 2005).

In Chapter 3 I show the differences in sport experiences between varsity and club sport student athletes. This study was necessary to identify the differences in programmatic

experiences within organized college sports programs, to assess how each sports program aides in the development of student's morality and ethics. I found that that overall athletes in club sports programs wanted to participate in the program to *develop a new skill* and *to be physically active* more than athletes of varsity sports. Therefore, indicating that despite the increase in focus on winning within club collegiate sports, club participants are still focusing on more holistic development (i.e., skill development and being physically active) than varsity athletics. This study indicates that the adapted college impact model (Terenzini & Reason, 2005) is a valid measurement tool to evaluate how different sports programs impact the psychosocial and cognitive development of student-athletes. The results of this study also add to the literature comparing varsity and club sport programs (Bradenburgh & Carr, 2002), to evaluate the differences in coaches' behaviors and overall developmental experiences.

In Chapter 4 I identify the impact that participation in organized sports programs and students' contributing factors regarding cheating has on the frequency of academic dishonesty. This study is necessary to see the role that participation in NIRSA-sponsored programming has on students' ethical behaviors in the classroom. NIRSA programs focus on students acting ethically and respectfully throughout competition, so it was believed that participation in NIRSA-sponsored programming would mitigate students self-reported instances of cheating. However, my results indicated that participation in NIRSA-sponsored programs was related to students self-reported instances of cheating behaviors. Furthermore, my results indicate that students' beliefs and observations of cheating at the institution are more predictive of students self-reported cheating behaviors. This finding contributes to the existing literature on cheating behaviors, by reconfirming the fact that students' beliefs about cheating has a direct

relationship with an increase in students reported cheating behaviors. Furthermore, the identification that participation in sports programs is also related to self-reported instances of cheating needs to be researched further to evaluate whether it is the program itself that is related or if it is the participation in the extracurricular activities (Pino & Smith, 2004).

My dissertation demonstrates that participation in organized sports programs does influence students' character as shown by actions within the sport program and in the classroom. The results from chapters two and three indicate that student athletes' experiences with different coaching behaviors do relate to their own character development and chapter four shows that participation in sports programs does have an impact on students' moral behaviors in the classroom. Therefore, several implications can be drawn from my dissertation, particularly relating to higher education policy and practices and future research.

Implications for Future Research

Overall, my dissertation introduces a new literature stream that should be investigated in the near future. Most notably, future researchers should seek to evaluate the role that coaches themselves perceive that they play in this development within college student athletes. Specifically, future researchers should seek an understanding of how the organizational context (e.g., culture of the sports program and coaches work within the program) impacts the development of the student athletes. Furthermore, researchers should seek to understand student athletes' beliefs and opinions regarding how the concept and teaching of sportsmanship in athletics relates to their understanding and actions regarding ethical behaviors in the classroom. Researchers should also seek to further evaluate the differences in coaches and athlete experiences based on the type of sports program (e.g., varsity vs club,

NCAA Division I vs Division II vs Division III, NAIA vs NCAA, etc.). Additionally, researchers should seek out to understand the role that different coaching behaviors have on students cheating behaviors. Researchers should also expand to evaluate the influences that participation in various extra-curricular programming has on students' character development. Future research should also evaluate institutional contexts to assess whether different types of institutions impact my findings. Furthermore, research should include a racially diverse sample of college student athletes to reconfirm the findings across races.

Although the samples were collected from a minority serving institution, the collected samples throughout my dissertation consisted mostly of White students, therefore not reflecting the racial diversity amongst students at the minority serving institution. The lack of having a sample that is racially/ethnically representative of the overall student population does impact the generalizability of the results to all institutions. Accordingly, although the results do reveal that experiences within organized sports programs are related to character development, the results are limited to their generalizability to all minority serving institutions due to a lack of minorities participating in each study. Therefore, future researchers should further validate the results using racially diverse samples to identify whether my results are generalizable across gender.

Implications for Policies and Practices

My dissertation also provides several implications for sport management policies and practices. Most importantly, researchers have discovered that it may not be that students are participating in a specific activity that leads to more cheating, rather it could be that students are participating in any extracurricular activity (Pino & Smith, 2004). Therefore, sport

administrators should try to restructure the scheduling of activities to occur well beyond the traditional academic day. For example, intramural sports programming can be scheduled to occur starting in the early evening hours on Sundays and schedule weekday games after 8:00 PM when most college courses are done meeting. This would be most impactful during the end-of-season tournaments, where sport administrators are often trying to rush through the tournament to conclude the season in less than one week.

Another implication for sport administrators would be to utilize the reduced SCBS instrument to evaluate their coach's effectiveness in the holistic development of student athletes. Sport administrators often judge a coach based on their success in competition due to a lack of evaluating the impact coaches have on their athlete's life. However, by confirming and validating the reduced SCBS instrument for evaluation of college coaches, sport administrators can now adopt the reduced scale to evaluate the impact the coach has on their athletes beyond just leading them to victory. Sport administrators that state that they want a coach to develop athletes of good character, can use this instrument annually to evaluate coaches beyond wins and losses.

This dissertation does not only help sport administrators, but also assist coaches. This dissertation reveals that the behaviors of coaches throughout competition does impact the development of student athletes. Coaches should not utilize the mantra of "Do as I say, not as I do," because the behaviors coaches' model were found to be one of the most important behaviors that coaches have to instill sportsmanship behaviors in their athletes. Coaches that are focused on the holistic development of their athletes should recognize that they must *instruct, reward, and model* the desired behaviors of their athletes.

Additionally, I provide several implications to higher education administrators and faculty. Most importantly, since participation in organized recreational sports programs is associated with more holistic development of students, higher education administrators should increase their support of recreational sports to further promote and develop these programs. For example, higher education administrators should increase the institutional funding allocated to recreational sports programs to minimize their reliance on student fees and increase programmatic offerings.

Lastly, I also offer an implication for higher education administrators and faculty in relation to academic integrity. This study indicates that students' beliefs regarding cheating behaviors and their observations of cheating occurring at the institution are significantly related to self-reported instances of cheating behaviors. Therefore, faculty and administrators are not doing a sufficient job at deterring cheating behaviors in the classroom. Accordingly, higher education administrators should send out reminders to students annually about the consequences if they are caught cheating in their courses and faculty should begin the semester by reminding students about those penalties if they are caught cheating.

In conclusion, my dissertation shows that college student athletes recognize that collegiate coaches are contributing to their ethical development in sports. I explore this relationship between the development of ethical behaviors through sports participation and the implementation of ethical behaviors outside of the sports world. Based on the findings, coaches of collegiate sports utilize the same five coaching behaviors that youth sport coaches employ to instill ethical (sportsmanship) behaviors in their athletes. Findings also indicate that when looking at other skill developments in sports, students that wish to gain or develop a new

skill and have a desire to be physically active select to participate in recreational (club) sports programs over varsity programs. Lastly, results show that simply participating in a recreational sports program is related to an increase in students self-reported cheating behaviors.

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