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Examining the Influence of Ethical and Authentic Leadership Behaviors of NCAA Division-I Athletic Directors

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Leadership is one of the primary critical attributes of any enterprise. Leaders within and outside of sport establish a guiding vision that communicates the organization's purpose, culture, structures, systems, and goals to organizational members in ways that motivate them to work on its behalf. The current study sought to determine the role of athletic director (AD) leadership on the performance of NCAA Division I FBS athletic departments. A sample of 363 staff members across 55 institutions provided information related to the ethical and authentic leadership practices of their athletic directors, the presence of high-performance work systems (HPWS) within their departments, their positive organizational behavior (POB) at work, and their level of value congruence with their ADs. These variables, along with three department-level variables (athletic revenue, athletic prestige, and academic reputation) were entered into a multi-level model of athletic and academic performance in athletic departments. Findings demonstrated connections between both forms of leadership on the POB of athletics staff, though staff members’ POB could not be tied to department performance. Additionally, HPWS mediated the connections between AD leadership behaviors and staff members POB. Furthermore, athletic revenue was found to be connected to the athletic performance of athletic departments, while the academic reputation of their universities was linked with their academic performance. Implications of these discoveries and of the research design employed in this study are discussed.
Examining the Influence of Ethical and Authentic Leadership Behaviors of NCAA Division-I Athletic Directors

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Examining the Influence of Ethical and Authentic Leadership Behaviors of NCAA Division-I Athletic Directors

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ACREP: Academic Reputation
AD: Athletic Director
AAD: Associate Athletic Director
AL: Authentic Leadership
ALQ: Authentic Leadership Questionnaire
APR: Academic Progress Rate
ATHPRES: Athletic Prestige
ATHREV: Athletic Revenue
CFA: Confirmatory Factor Analysis
CFI: Comparative Fit Index
DCP: National Association of Directors of College Athletics / Learfield Director’s Cup Points
EL: Ethical Leadership
ELQ: Ethical Leadership Questionnaire
ESPN: Entertainment and Sports Programming Network
FBS: Football Bowl Subdivision
HLM: Hierarchical Linear Modeling
HRM: Human Resource Management
HPWS: High-Performance Work Systems
ICC: Intraclass Correlation
IRB: Institutional Review Board
LMX: Leader-Member Exchange
NACDA: National Association of Collegiate Directors of Athletics
NCAA: National Collegiate Athletic Association
OCB: Organizational Citizenship Behavior
PAF: Principal Axis Factoring
POB: Positive Organizational Behavior
RBV: Resource-Based View
RMSEA: Root-Mean Square Error of Approximation
SRMR: Standardized Root Mean Square Residual
TLI: Tucker-Lewis Index
UET: Upper Echelons Theory
VC: Value Congruence with Leadership
CHAPTER 1: Introduction

Leadership is one of the primary critical attributes of any enterprise (Hambrick, 2007). Leadership sets the direction for organizations that allows them to successfully achieve goals, providing them with the opportunity to grow via increased productivity, to gain advantages over their competitors, and to remain sustainable in uncertain times. Leaders provide a guiding vision that communicates the organization's purpose, culture, structures, systems, and goals to the collection of organizational members in ways that motivate managers and subordinates to work toward achieving the organization's goals (Zaccaro & Klimoski, 2002). Leaders also manage their organizations' human, physical, and economic resources, and develop strategies to maximize the output of individual members in ways that will propel their organizations forward.

Organizational leaders often possess considerable experience that enables them to pilot their organizations through periods of uncertainty or adversity. Regardless of their size or type, organizations rarely maintain linearly increasing productivity, because they are continually affected by adverse events and evolving pressures that force them to adapt to these changing conditions to maintain a productive path. During these periods of flux, leaders are responsible for developing new or adjusted strategies to minimize the impact of changing conditions on organizational performance (Gill, 2002). As a result, leaders are perhaps more essential to their organizations during uncertain
times than during more predictable ones. Leaders’ expertise, ability to craft alternate strategies in response to challenging events, and influence in motivating organizational members to pursue an alternate set of goals allows well-led organizations to traverse turbulent circumstances with minimal disruption to their activities. While organizations with effective leaders stand a better chance of succeeding through periods of uncertainty or adversity (Gill, 2002), organizations with inconsistent leadership may fail to recognize changing factors within their operating environments or may neglect to address these conditions effectively. This substandard leadership may lead to inhibited organizational performance and a relative competitive disadvantage versus other firms under stronger leadership. Consequently, given the constantly changing nature of the modern business environment, the importance of effective leadership has never been a more critical resource for organizations than it is today.

Similar to organizations within the traditional business environment, effective leadership is also an essential element of sport organizations (Doherty, 1997). In fact, leadership may be more consequential in a sport context because of the unique pressures faced by sport entities. Although sport organizations are likewise responsible for profitability, sustainability, and growth along with their traditional business counterparts, sport organizations must also produce continual athletic success in order to meet the needs of stakeholders. Maintaining athletic performance requires decidedly different strategies than does maintaining financial performance, yet leaders of sport organizations are responsible for balancing both goals simultaneously. In addition, sport organizations face pressures from similar stakeholder groups as traditional business organizations, such as shareholders, employees, benefactors, regulatory agencies, and
customers, yet additional groups are influenced by the activities of sport organizations, such as fans. Consequently, managing sport organizations involves a level of complexity above and beyond what is typically required for a traditional business. Thus effective and appropriate leadership appears to be a more pivotal attribute for sport organizations to possess.

The plurality of sport organizations, such as professional sports franchises, intercollegiate and interscholastic athletics organizations, sport equipment vendors, and community sport organizations begs for strong and effective leadership in this highly competitive context. Intercollegiate athletics, in particular, embodies the additional responsibilities that many sport organizations face compared with those in the traditional business realm. For example, athletic department leaders are charged with developing organizational strategy in response to pressures from government agencies, regulatory (NCAA/conference) agencies, as well as from entities within the university community (fans / boosters / administrators / trustees) in order to be successful. In addition, the need to develop both the athletic and academic performance of student-athletes in order to foster and maintain organizational success differentiates athletic departments from other businesses or sport organizations. As such, this particular study will evaluate the contributions of leadership within intercollegiate athletic departments. Furthermore, given that the degree to which athletic leaders affect the performance of their departments has yet to be examined in the sport management literature, developing a greater understanding of this phenomenon is another goal of the current study.

Like other organizations, athletic departments are responsible for developing and maintaining profits, if possible, for their universities. However, they also must
demonstrate consistent athletic success in a wide variety of sports, requiring them to recruit coaches and student-athletes and develop their athletic skills over a period of several years in order to maintain or improve their reputation and standing among their competition. Furthermore, in accomplishing these two primary goals, intercollegiate athletic departments must assist their athletes in maintaining their academic development in order for them to remain eligible for athletic competitions. They also must abide by a litany of other regulations passed down by governing entities such as the NCAA, else they will lose the opportunity to compete for their primary goals of financial and athletic success.

Intercollegiate athletic departments also must consider the needs of student-athletes as perhaps their most essential stakeholder group, since this group comprises the "fundamental unit of the athletic department." (Harrison, 2004). Student-athletes are pivotal to the department’s existence and ability to function, since they compose the athletic teams upon which athletic departments are based. Student-athletes also constitute the face of the department and the university in many instances, especially for institutions with high-profile athletics programs such as those found in NCAA Division I. More importantly, student-athletes also have unique needs compared with other college athletics’ stakeholder groups. These student-athletes, must indeed, balance their athletic and academic endeavors in order to remain eligible for their respective teams, and hence maintain the ability to positively impact their athletic department’s performance. University and athletics leaders must, therefore, create support structures that provide student-athletes with the ability to balance the needs to
meet their various athletic and academic performance standards, allowing them to continue to be effective contributors to their teams.

University leaders, such as presidents, are responsible for establishing the mission and values of universities, and specifically bear some responsibility for communicating the importance of students' commitment to academics, regardless of their participation in athletics or other extracurricular activities. Meanwhile, athletics' leaders, namely coaches and athletic directors, are often viewed as solely responsible for motivating and supporting individuals' athletic development. Student-athlete athletic development allows for sport teams to garner more success, which translates to additional financial and reputation benefits for the department and university.

However, athletics leaders are also responsible for developing student-athletes in their academic pursuits. As such, athletics leaders must recognize their responsibility to guide student-athletes' development in the classroom as well as on the playing field. That is, to provide resources that help student-athletes maintain necessary individual and team academic performance by meeting established academic performance standards for eligibility. Failure by administrators in these fiduciary duties may be compounded if their lack of effective leadership result in players and/or teams within the department to lose eligibility for either conference, regional, or national competitions. These outcomes may be further exacerbated if the sanctions negatively influence the reputation of the department or the university given the considerable amount of time and effort that will be needed to counteract the negative publicity that may ensued. Thus, focusing solely on athletic performance when guiding student-athletes would risk
increasing the challenge of an already difficult task faced by athletic departments seeking to succeed both athletically and financially to sustain their operations.

In addition to the responsibility of maintaining student-athlete eligibility for athletic competition, athletics leaders are also responsible for enabling student-athletes to achieve academically since, along with other members of the university community, they are tasked with assisting student-athletes in preparation for their careers after graduation. Maintaining acceptable academic performance is necessary for each individual to be prepared for professional life after college as an alternative, should any of these students fail to become professional athletes in their various sports. Student-athletes often face more academic challenges than traditional university students, due to the fact that they dedicate numerous hours each week to their athletic development, compete in athletic events, and to travel for athletic competitions. Yet, despite these challenges, NCAA student-athletes have been found to graduate at higher rates when compared with their non-athlete counterparts in the student body (Hosick, 2013).

Therefore, while the responsibility of academic performance ultimately lies with the student-athletes themselves and, to a certain degree, with faculty and the university community at-large to support the efforts of these students, athletics leaders also bear a responsibility for helping student-athletes to manage high-demand schedules. Additionally, athletic leaders must provide student-athletes with necessary skills and practices that would allow them to succeed academically and athletically. This dual purpose of intercollegiate athletic departments provides a key distinction of these organizations compared with those in business or other areas of the sport industry. As such, this study will examine the effects of leadership on performance within an
intercollegiate athletics context. Toward that end, two particular forms of leadership, ethical leadership and authentic leadership, will constitute the focus of this research. Amidst other more actively examined forms of managerial leadership (what are they, provide example – e.g., transactional or charismatic), research has cited ethical and authentic leadership as positively influencing the attitudes and behaviors of followers. While similar to other more extensively examined forms of leadership, ethical and authentic leadership are important in intercollegiate athletics’ contexts because of the applicability of its inherent attributes such as role modeling, ability to communicate organizational values and a display of acceptable behavior to followers.

1.1. Problem Statement and Research Purpose

Understanding the important dual role that athletics leaders assume when leading athletic departments, this research will seek to address the following problems for sport management research and practice. First, to this point, little is known about the degree to which athletic leaders affect the performance of their departments as determined by established athletic and academic performance measures such as Academic Progress Rate (APR) and Director’s Cup Points (DCP). Second, though leadership studies within a sport context are plentiful, a gap exists within the sport management literature pertaining to the impact of ethical / authentic leadership although their roles have been extensively examined in a traditional management context. Finally, this current research takes a multilevel perspective by examining leadership effects in combination with other organizational factors within sport organizations, and hence addresses the dearth of studies in this area of the sport literature. This multi level approach will allow for consideration of additional factors, all of which should provide a
broader and more accurate understanding of the effects of athletic directors’ leadership on athletic department performance.

Consequently, the purpose of this research is to examine the extent to which (1) ethical and authentic leadership behaviors exhibited by athletics leaders, specifically by the athletic director, influence the athletic and academic performance of an institution’s athletic programs, and (2) the effects of factors such as academic reputation, athletic prestige, and athletic revenue on the overall academic and athletic performance of intercollegiate athletic departments. Examining the influences of all of these drivers of athletic department performance in combination will permit the true influence of leadership on intercollegiate athletic department performance to be uncovered, which will contribute to the understanding of just how influential athletics leaders are in the success of their departments.
CHAPTER 2: Literature Review

In order to understand how organizations work and what factors most significantly drive their effectiveness, it is necessary to study their leaders, who have the most substantial and far-reaching impact on how organizations function (Hambrick, 2007). Since leaders set the tone for any organization, the ability for organizational members to be effective in working toward established goals stems directly from the leadership provided at the highest levels. Thus, understanding the activities of leaders and the motivations behind the strategy and structures created by leaders can allow researchers to discover how certain leadership approaches create cascading effects throughout organizations.

2.1. Upper Echelons Theory

Upper echelons theory (Hambrick & Mason, 1984), or UET, is an organizational framework that may help to explain the pivotal role that leaders assume in determining the eventual success and failure of the entities they lead. The primary tenet of UET states that organizational leaders are the most powerful influences within any organization, thus the best way to evaluate potential causes for organizational outcomes is to examine the experiences, values, and attributes of these leaders (Hambrick & Mason, 1984). This causal relationship is operationalized through leaders' personalized interpretations of decisions which have effects on the choices they make (Hambrick, 2007). In other words, UET postulates that leaders' experiences, values, and personal attributes profoundly affect how they analyze problems and develop solutions to address them (Hambrick, 2007).
Thus, according to UET, an organization's leaders are supremely important to the formulation of its strategy (Hambrick & Mason, 1984), since the internal characteristics of leaders will influence how they interpret the environment surrounding a particular decision and will affect their according reaction when making decisions (Esteve, Boyne, Sierra, & Ysa, 2013). Often, in complex organizations, the environment affecting an organization or a particular decision is similarly complex, forcing leaders to access their values and prior experiences through introspection to reach conclusions about which courses of action to take (Hambrick & Mason, 1984). Consequently, the UET view of decision-making is not objective, since an organizational leader's experiences, values, and personal experiences come into play and profoundly influence the decisions they make (Esteve, et al., 2013).

An upper echelons approach, according to Hambrick and Mason (1984), has two interrelated components. First, leaders tend to make decisions based upon their own personal cognitive and deductive processes related to the problem at hand. Secondly, this decision-making process comes about as a function of their prior experiences, values, and personalities. Hambrick and Mason (1984) detailed that leaders establish organizational values and culture in a manner that is congruent with their personal values, which provides a direct influence on the performance of the organization. Additionally, the cognitive abilities of leaders drive their decision-making processes and, through these choices, organizational strategy is developed that ultimately affects performance.

UET's contention that leadership is the most considerable force affecting organizations stands in contrast with institutional theory (DiMaggio & Powell, 1983),
which states that organizations are subjected to external forces which exert influences upon them and guide their strategy. So while institutional theory UET dictates that the direction that organizations take is primarily determined by its leadership. Hambrick and Finkelstein (1987) argued that both of these perspectives are accurate, but the degree to which organizations take the form of leadership’s values, or are modeled by external influences, is a function of managerial discretion, otherwise known as the latitude leaders are permitted to make decisions (Hambrick & Finkelstein, 1987). More often, in cases when there is a lack of clarity regarding the best course of several available options, leaders are more free to employ their discretion in taking action and will make decisions based upon their personal values and characteristics. Therefore, UET purports that leaders’ personal characteristics can affect performance through the decisions that they make that influence the organization.

Another aspect investigated in conjunction with upper echelons research involves the job demands of organizational leaders. Hambrick, Finkelstein, and Mooney (2005) established that the pressures involved with an organizational leadership position may vary considerably depending upon the context. These pressures faced by leadership may moderate the cascading effect of leader characteristics throughout their organizations, which is a primary tenet of UET. Leaders who are continually subject to intense job-related pressures, according to Hambrick, et al. (2005), may make less calculated and hastier decisions that will be more of a reflection of their embedded personal characteristics than the result of those made through logical deduction. They also claim the reverse to be true, that leaders with minimal work demands have the time and flexibility to analyze decision parameters. As a result, they will be more likely to
select the appropriate course of action based upon a consideration of a wide variety of factors contributing to the decision.

In other words, the more intensive the demands on a particular organizational leader, the more likely that the personal characteristics of that leader will present themselves in the decisions they make and, ultimately, the strategy that the organization employs (Hambrick, et al., 2005). Using an upper echelons perspective can be valuable in determining if organizational leaders possess the necessary characteristics to achieve desired organizational outcomes, and can be especially useful when introducing a leadership change. An upper echelons approach enables the selection of leaders based upon a series of attributes that correspond to certain leadership behaviors that have yielded positive or desired outcomes in research findings (Hambrick, 2007).

In particular, UET is a valuable framework for examining particular forms of leadership that stem from the personal characteristics of leaders. Bass and Avolio (1994) asserted that an organization’s success depends, in part, on the personal values of the leader which aid in the formation of organizational culture. Ethical and authentic leadership constitute two leadership styles that are direct derivations from leaders' values and personal attributes. For instance, ethical leadership is composed of the personal values of honesty, fairness, value communication, role modeling and accountability, while authentic leadership is referred to as a combination of role modeling, self-awareness, relational transparency, and a moral perspective. Since each of these forms of leadership relies heavily upon the personal values of the leader and subsequently how well the leader's values are communicated to the organizational
collective, ethical and authentic leadership are good candidates for further examination using an upper echelons lens.

2.2. Organizational Leadership

2.2.1. Overview of Leadership

Leadership in an organizational context has been studied extensively in prior research, leading to the discovery of myriad forms of leadership that influence organizational outcomes. As researchers developed an understanding of the critical importance of leadership in determining the effectiveness of an organization, it became necessary to identify if certain types of leadership would influence organizational performance differently. Furthermore, researchers have wondered if different styles of leadership drive other internal attributes within an organization, such as organizational culture, organizational commitment, job satisfaction, or collective efficacy, already discovered to contribute to its performance. While many styles of leadership have been identified and reviewed throughout the span of organizational research, such as autocratic leadership, laissez-faire leadership, and participatory leadership (Lewin, Lippitt, & White, 1939), directive, supportive, and achievement-oriented leadership (House, 1971; 1996), charismatic leadership (House, 1977), and people- and task-oriented leadership (Tracy, 1987), in recent years, some of the most examined forms of organizational leadership have been transactional leadership, servant leadership (Greenleaf, 1970), and transformational leadership (Burns, 1978; Bass, 1985).

Transactional leadership involves motivating organization members through extrinsic rewards (Bass, 1985; Parent, Olver, & Seguin, 2009). Leaders who wish to motivate employees to adapt their behavior according to a particular agenda do so by
offering something of value in return (Kuhnert, 1994). Unlike transformational leaders, transactional leaders are typically concerned only with organization-level performance and tend to ignore individual employees’ needs and development. Transactional leaders establish required performance goals and provide rewards to those who achieve these goals and negative feedback to those who do not (Hater & Bass, 1988). Thus, there is some debate over whether transactional leadership offers any benefit to individual workers. Bass (1985) argued that the clear goals established by transactional leaders help individuals develop and perform well, and the recognition for goal achievement provides effective motivation and satisfaction to workers. In fact, some have found that transactional leadership has been connected to employees’ commitment, satisfaction, and performance (Bycio, Hackett, & Allen, 1995).

While a transactional approach works for some organizations, others benefit from a servant leadership approach. Greenleaf (1977) contended that servant leaders are those who prioritize other people’s needs, aspirations, and interests above their own (Sendjaya & Sarros, 2002). The servant leader purposely chooses to serve the members of an organization rather than deliberately providing leadership to affect organizational outcomes (Greenleaf, 1977), and thus they have an individual rather than broad-level focus. Servant leaders are committed to the needs of organizational members rather than their own or those of the organization itself (Graham, 1991). According to Levering and Moskowitz (2000), six key indicators identify organizations based upon servant leadership at the highest levels of the organizational structure: openness and fairness in decision-making and feedback, camaraderie and friendliness between leaders and subordinates, opportunities for development and advancement,
members' pride in their work and in the organization, competitive pay/benefits, and employee job security.

Research in both the business and sport management literatures have lauded the value that transformational leadership methods provide to organizations. In contrast with transactional leadership, transformational leadership involves "the process of influencing major changes in the attitudes and assumptions of organizational members and building commitment for the organization's mission, objectives, and strategies" (Yukl, 1989, p. 271). As Parent, et al. (2009) note, transformational leaders possess the charisma and ability to inspire individuals to adopt a certain vision toward achievement of their individual and organizational goals. A key difference between transformational and servant leadership involves the servant leader's focus on the individual, while transformational leaders seek to affect organization-level outcomes (Stone, Russell, & Patterson, 2004). Thus, the purpose of transformational leadership is to motivate organizational members to extend effort working toward organizational goals. Transformational leaders have been found to affect several beneficial outcomes for organizations. Researchers contend that transformational leaders enhance the performance capacity of their followers by setting higher expectations, generating a greater willingness to address more difficult challenges (Avolio, 1999; Bass, 1998). Transformational leaders also are known for developing a strong emotional attachment to followers, and lead followers to achieve goals through crafting and communicating a compelling vision (Kim, 2009).

Transformational leadership has also demonstrated a positive influence on individual performance (Jung, 2001), affective commitment and job satisfaction (Liao &
Chuang, 2007), as well as organizational outcomes such as organizational culture (Liao & Chuang, 2007) and organizational effectiveness (Peterson, Walumbwa, Byron, & Myrowitz, 2008) to which individual organization members provide essential contributions. As Freeman (1984) notes in his stakeholder theory, an organization's ability to succeed is dependent upon fulfillment of the needs, goals, and motivations of the parties with whom the organization interacts. Consequently, the parties most closely linked to an organization are the individuals who comprise it, its members or employees. These organization members provide key contributions in the form of the knowledge, motivation, creativity, and energy needed to complete tasks toward organizational goals (Frohman, 1997). However, one must also recognize the contribution of leaders in fostering these individual outcomes that help to generate success for the organization.

In addition to motivating individual development and performance, effective leadership has also been found to positively influence work team performance (Howell & Avolio, 1993), demonstrating leadership's ability to affect multiple levels within an organization simultaneously. As such, recent investigators have come to understand that organizational performance is dependent upon a multitude of factors beyond organization-level strategy, since organizations are not simple single-level entities, but are complex systems of individuals and groups (Kozlowski & Klein, 2000). As a result, the ability of leadership to influence multiple entities at several levels within an organization demands for the connection between leadership and performance to be analyzed using more advanced methods than those that have been utilized previously. Therefore, the multitude of leadership effects within modern organizations should be
studied using a complex analytical perspective, such as the multi-level framework presented here, in order to be understood with sufficient accuracy.

2.2.2. Leadership in Sport

Sport has provided a fertile ground for the study of leadership and its effects for many years. The concerted effort needed from multiple outlets to achieve goals through sport has warranted investigations into the predictors, components, and effects of leader behaviors. Historically, leadership studies in a sport context had focused on the effect of leadership provided by players and coaches on sport performance on the playing field. More recently, however, a litany of research has examined leader behavior and leadership effects from an organizational perspective. For instance, Wallace and Weese (1995) investigated transformational leadership in the fitness industry by studying the linkages between this form of leader behavior, organizational culture, and staff members job satisfaction. They found that organizations with transformational leaders were more prone to exhibiting a positive organizational culture and high levels of job satisfaction, while also spurring more customer-focused activities that would extend satisfaction beyond employees to patrons of the organization. Weese (1995) also studied how transformational leadership related to the development and acceptance of organizational culture within the college recreation programs. This study concluded that campus recreation programs administered by transformational leaders possessed significantly stronger, positive cultures than the campus recreation programs administered by leaders with few transformational qualities.

Weese (1996) continued this work, finding that transformational leadership led to the establishment of stronger cultures, which were correlated with organizational
effectiveness. Kent and Chelladurai (2003) examined the presence and effects of transformational leadership within a State Parks and Recreation Department, and discovered that transformational leadership behaviors demonstrated a positive association with LMX, organizational commitment, organizational citizenship behaviors (OCBs), and psychological empowerment among employees. More recently, Andrew, Kim, Stoll, & Todd (2008) confirmed the relationship between transformational leadership and employees' organizational commitment to sport organizations. In addition, O'Brien and Slack's (2003) study of rugby clubs discovered that sport organizations that most successfully integrated change were those in which leaders established clear objectives for the change initiative and worked continually to generate support for the initiative from stakeholders within and outside their organization, an approach that has been held by many as being transformational in nature.

Studying leadership from an upper echelons perspective, which has not previously been undertaken in a sport context, can prove to be valuable for sport organizations and could add considerable value to the existing leadership literature in sport. For instance, Hoeber and Hoeber's (2012) recent study of change within community sport organizations found that change implementation was dependent upon leadership's commitment to change and their favorable personal characteristics that lend to their support for change, supporting previous work (Damanpour & Schneider, 2006, 2009; Jaskyte, 2004). These personal characteristics, such as risk taking, a forward thinking mentality, and a propensity to challenge the status quo (Jaskyte, 2004) can significantly influence leaders' choices, especially during the initiation and adoption decision stages of implementing change (Hoeber & Hoeber, 2012).
2.2.3. Leadership in Intercollegiate Athletics

As part of the movement toward the examination of leadership in a sport organization context, there has been a determined focus among sport management researchers to investigate leadership within intercollegiate athletics, as practiced by athletic directors (ADs) in particular. Interestingly, Branch (1990) discovered that staff members' perceptions of leader behavior were not associated with their perceptions of the effectiveness of their athletic departments, leading to the interpretation that other organizational factors beyond AD leadership are perhaps more directly connected to overall athletic department performance. Doherty and Danylchuk (1996) showed that ADs' transformational leadership, more so than their transactional leadership behaviors, was positively related with coaches' satisfaction with leadership, perceived leader effectiveness, and with their propensity to exert additional effort on behalf of their departments. However, this form of leadership did not enhance coaches' commitment to their athletic departments, revealing that each group of employees within athletic departments may interpret each form of leadership in a different manner.

Continuing this research, Doherty (1997) found that transformational leadership behaviors are more likely among younger athletics leaders (assistant and associate athletic directors) and are also more likely from female rather than male leaders, although transactional and laissez-faire leader behaviors were also practiced to some extent. Kent and Chelladurai (2001) investigated transformational leadership behaviors of the AD in a large NCAA Division I university, finding a positive association between transformational leadership and followers' organizational commitment, as well as a perceived LMX quality between middle-level administrators (Associate / Assistant ADs /
department leaders) and their subordinates. More recently, Welty Peachey, Bruening, & Burton (2011) concluded that transformational leadership prevented ambivalence and resistance behaviors from developing, when in the presence of a visionary, relational, and forward-thinking organizational culture in which members were free to contribute and provide feedback. Along those lines, Welty Peachey, Bruening, & Burton (2011) discovered that transformational leadership behaviors of athletic directors in particular, along with a focus on interpersonal relationships and communication exchanges with employees, helped to reduce resistance during periods of change within athletic departments.

Kihl, Leberman, and Schull (2010) also investigated stakeholders’ constructions of leadership within the context of an intercollegiate athletic department during a recent time of organizational change. This research showed that stakeholders’ perceptions of leadership traverse a multitude of different meanings, which is not surprising considering the complexity of athletic departments and the diversity of their stakeholders, which include athletic administrators, coaches, athletes, alumni and boosters. Thus, stakeholder interpretations of leadership practices and effectiveness can depend on a variety of factors, including the type of stakeholder making the interpretation, and the context in which this perspective develops. Thus, interpretations of leader effectiveness are dependent upon contexts which "are socially constructed by organizational stakeholders through their interpretations of a situation, individual experiences and their roles and responsibilities" (Kihl, et al., 2010, p. 271). This and similar findings suggest that the nature of intercollegiate athletics leadership is rather complex. The link between leadership and department effectiveness (or perceived
effectiveness by employees or other stakeholders) is only partially within leaders’ control and that perceptions of leader effectiveness may be the result of other more subjective factors by those evaluating these leaders.

2.2.4. Ethical Leadership

Although many forms of leadership and their associated effects on organizational welfare are worthy of investigation, the complexity of operating in the modern business environment demands that leaders practice ethical behavior in order to satisfy stakeholders and minimize risk to their organizations (Messick & Bazerman, 1996). As the nature of business is becoming increasingly global, and modern communication methods have the ability to spread news across the globe within a matter of seconds, the opportunity for business organizations to exert an effect on an ever-increasing group of stakeholders is also increasing at a high rate. As a result, leaders must exhibit increased attention to the activities of their organizations and their methods of leadership that guide these activities, to ensure that their organizations are meeting a widening range of expectations for their conduct. Leaders not only set the tone and develop the mission and strategy for organizations that ultimately result in their practices, they also are responsible for communicating acceptable conduct to subordinates, who often carry out activities that affect stakeholders and can influence the reputation of their organizations in both positive and negative ways.

The study of ethical leadership is a developing area of research. Although there is a common understanding among researchers about the qualities of ethical leaders, the specific elements comprising ethical leadership are somewhat debated. Brown, Trevino, and Harrison (2005) have described ethical leadership as "the demonstration of
normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making” (p. 120), while Yukl, Mahsud, Hassan, and Prussia (2013) describe the ethical leadership construct as consisting of "altruism, compassion, honesty, fairness, and justice... (and the) behaviors reflecting these values” (p. 38).

Ethical leaders are driven by values first and foremost, and serve as role models for the behavior they wish to see enacted throughout the organization. Ethical leaders prioritize accountability and hold executives and staff to equally high standards of conduct, yet they also provide guidance to organizational members in this area by demonstrating model behavior based upon the organization's values (Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009). Ethical leaders are also entrusted to be pragmatic and to refrain from making decisions that could be potentially harmful to the organization, its members, or its stakeholders (Trevino, Brown, & Hartman, 2003). Thus, ethical leaders also have low tolerance for impropriety and for actions that contradict or counteract the values accepted by the organization. As Trevino, et al. (2003) mention, ethical leaders are focused on overall performance of their organizations, but care just as much about the means as they do the ends.

Ethical leadership behaviors have been found to stem directly from the leader's personal attributes and characteristics. Brown and Trevino (2006) identify some of these characteristics, such as honesty, integrity, trustworthiness, fairness, and respect for others. They are expected to be honest, open communicators and, at the same time, be willing to listen to ideas, feedback and criticism from underlings (De Hoogh & Den
In addition, two of the renowned Big Five personality characteristics, namely, agreeableness and conscientiousness, are also believed to be prominent qualities of ethical leaders. Brown and Trevino (2006) regard agreeableness as being the most significant driver of an individual's propensity toward ethical leadership practices, since this trait describes a level of concern for others that is integral in ethical leadership (Brown & Trevino, 2006). Conscientiousness refers to the responsibility and dependability exhibited by ethical leaders that fuel their trustworthiness in the eyes of followers, which is an essential quality of ethical leadership.

Finally, ethical leaders are believed to possess a high level of moral perspective or moral judgment. Leaders with high levels of moral judgment have the ability to discern what is right through a variety of reasoning processes. However, this moral judgment must be put into practice so that "observers can see this moral reasoning put into action and learn from it" (Brown & Trevino, 2006, p. 605). This alludes to Brown, et al.'s (2005) two-pronged description of ethical leaders as being a moral person and a moral manager, describing leaders who not only have the ability to decide between right and wrong courses of action, but also those who put that distinction into practice by deciding to implement morally correct choices when developing strategy for their organizations. The key tenets of ethical leadership, therefore, focus on leaders' fair and moral conduct, both in general and toward subordinates (De Hoogh & Den Hartog, 2008).

Ciulla (2004) describes ethical leadership involves leading with concern for the rights and dignity of others, which encompasses the notion that ethical leaders are primarily concerned with the welfare of a variety of individuals. Ethical leaders are
people-oriented and seek to develop the capabilities of those around them (Brown, et al., 2005). In short, ethical leaders work to create a benefit for others while simultaneously abstaining from activities that may cause harm (Kanungo, 2001). While this is a commonly accepted description of the ethical leader, De Hoogh and Den Hartog (2008) extend this concept of ethical leaders’ exhibition of concern for others, especially followers or subordinates. Ethical leaders are transparent and communicate openly with subordinates so that they are informed about organizational factors affecting them. In addition, ethical leaders are those who express expectations with followers and clarify their roles and responsibilities as well as those who empower followers to contribute ideas, criticisms, and even to make decisions (De Hoogh & Den Hartog, 2008). This is a notable element of ethical leadership, as it involves both an outward and an inward focus.

Ethical leadership has been found to result in a variety of positive effects for organizations. This practice, according to Piccolo, Greenbaum, Den Hartog, and Folger (2010), allows ethical leaders to bolster the autonomy and, consequently, the level of productivity of employees. By giving followers responsibility, autonomy, and a voice in organizational decision making, ethical leaders inspire increased commitment (Zhu, May, & Avolio, 2004) which translates to increased effort on behalf of the organization that positively influences overall performance (Yukl, 2009; Piccolo, et al., 2010). Also, ethical leadership has been known to be associated with positive leader-member exchanges (Yukl, et al., 2013), and trust in leadership (Zhu, et al., 2004), which have each independently served as indicators of both leader and follower effectiveness.
Furthermore, ethical leaders provide models of ethical behavior for subordinates within organizations, which motivate corresponding conduct on the part of everyone in the organization (Brown, et al., 2005). Through the use of specific practices such as standard setting, performance appraisals, and systems of rewards and punishments, ethical leaders can effectively promote corresponding ethical behavior by subordinates and reduce unethical behaviors by those in their charge (Brown, et al., 2005). Research has also shown that ethical leadership behavior is not only an effective practice for limiting workplace deviance, but also may assist with the development of pro-social activity in organizations by promoting organizational citizenship behaviors (OCBs) among subordinates (Avey, Palanski, & Walumbwa, 2010). Ethical leadership is strongly associated with a subordinate's satisfaction with his/her leaders, with his/her exerting extra effort, and with his/her willingness to report problems (Brown, et al., 2005; Kim & Brymer, 2011). Additionally, just as ethical leaders provide role modeling influences for subordinates, Trevino, Hartman, and Brown (2000) discovered that the essential attributes possessed by ethical leaders result from being influenced by ethical role models themselves, thus extending the beneficial effect fostered by adopting an ethical leadership approach to future organizations as a result of the influence these approaches have on those exposed to them.

2.2.5. Ethical Leadership and Sport

Despite the fact that sport continually provides a ripe environment for the debate over the ethical and unethical practices of sport organizations and their members, the formal study of ethical leadership in a sport context has been quite limited. The seemingly increasing occurrence of various controversies and ethical issues in the
world of sport has sparked a variety of discussions concerning how sport organizations are governed. For instance, controversies such as the use of performance-enhancing substances in Major League Baseball, cycling, and Olympic sport, the practice of purposefully losing games to secure better positioning in subsequent player drafts, and the use of racially-charged language and trademarks in sport are just a small handful of the ethical debates currently taking place in discourse surrounding professional sport in the 21st century.

Intercollegiate athletics is also well-known for the multitude of ethical issues that surrounds it. For example, the disparity between the revenue generated by intercollegiate athletics and the benefits that participating student-athletes receive for fueling the enterprise is a hotly debated ethical issue in today’s sport world. Additionally, relationships between student-athletes and player agents, gender and racial inequities, and inappropriate behavior by intercollegiate sport coaches and administrators also frequent the sport news cycle (Hums, Barr, & Gullion, 1999). As these sport ethics debates increase in concert with the increasing popularity of sport in society and cultures around the world (Sherry, Shilbury, & Wood, 2007), the more attention is being paid to how sport organizations are managed and how representatives from these organizations conduct themselves.

Leaders in sport organizations are often confronted with complex ethical decisions that affect their stakeholders in vastly different ways (Sherry, et al., 2007). Since the activities of sport organizations often affect a multitude of stakeholders, including athletes, fans, the community, business partners, and media entities, the interests of these stakeholder groups are not often aligned, which creates different
interpretations of the organization’s activities and complicates strategy formulations for leaders. These competing influences may create an ethical dilemma for sport leaders, who may understand that aspects of their decisions may benefit certain groups but harm others. These conflicts of interest faced by sport leaders are becoming increasingly significant because of the higher expectations and values placed on sport and sporting organizations in modern society (Sherry, et al., 2007). Thus, leadership and management of sport organizations involves navigating a difficult balancing act between the roles of sport as a business and sport organizations’ obligations to stakeholders, and sport as an integral aspect of culture that demands ethical and moral behavior (Sherry, et al., 2007). The commercialization of sport has also provided a breeding ground for ethical issues, as sport managers are faced with ethical decision-making each day they are on the job (Branvold, 1994; DeSensi and Rosenberg, 1996).

Sport managers are responsible for addressing ethical questions on a daily basis, such as those pertaining to professionalism, equity, legal management, personnel issues, team ownership, responsibilities of professional team franchises, and social justice associated with all levels of sport (DeSensi and Rosenberg, 1996). Yet, an analysis of ethical leadership, from the characteristics of ethical leaders to the effects of their leadership behaviors, is lacking within the sport management literature. Research in sport ethics has traditionally focused on the ethical dimensions of a particular sport or its athletes (Hums, et al., 1999; Sherry, et al., 2007). Unfortunately, as Jordan, Greenwell, Geist, Pastore, and Mahony (2004) recognize, unethical behavior on the part of all involved with sport, from coaches and student-athletes to fans, is increasing in frequency over time. However, the increasing exposure of sport in the media and the
public's increased understanding of the business of sport have shifted the focus of sport ethics discussions toward sport administration and governance (DeSensi & Rosenberg, 2003), escalating the need for investigation into the leadership practices of sport administrators using an ethical lens.

2.2.6. Authentic Leadership

The study of authentic leadership has gained considerable traction in recent years, as it has become a construct with similar, yet distinguishable and complementary elements with ethical and transformational leadership (Avolio, Gardner, Walumbwa, Luthans, & May, 2004; Gardner, Avolio, Luthans, May, & Walumbwa, 2005; George, 2003; Ilies, Morgeson, & Nahrgang, 2005). Walumbwa, et al. (2008) describe authentic leadership as “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers, fostering positive self-development” (p. 94). Thus, authentic leadership describes the manner in which organizational leaders are aware of their own personal attributes and demonstrate openness and clarity toward others within their organizations (Walumbwa, et al., 2010). Luthans and Avolio (2003) alternately describe authentic leadership as "a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development" (p. 243). As such, authentic leadership is highly related to other forms of leadership, even
sharing some common aspects of other forms of leadership such as transformational or servant leadership (Avolio & Gardner, 2005).

Authentic leaders demonstrate a willingness to share information with other organizational members that empower them to make decisions, to accept feedback and input from others, and to share their values and beliefs guiding their own decision-making processes with others (Walumbwa, et al., 2010). They express openness and demonstrate to others that understanding their own attributes and capabilities is necessary for them to develop into more effective leaders (George, 2003). Drawing from their personal values, authentic leaders build trust and credibility among their subordinates through expressions of genuine behavior, that which coincides with their commonly understood values (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008). While authentic leaders are deeply concerned with being true to their personal values, they also exhibit care for how their authenticity appears to followers, since the ultimate goal of this form of positive leadership is to influence other organizational members to adopt the same practices and work toward established organizational goals (Clapp-Smith, Vogelgesang, & Avey, 2009).

Researchers have established four types of behaviors practiced by authentic leaders, consisting of balanced processing, internalization of a moral perspective, relational transparency, and self-awareness (Gardner et al., 2005; Ilies et al., 2005). Balanced processing is described as the practice of engaging in objective analysis of all information relevant to a problem before ultimately making a decision (Walumbwa, et al., 2010). Organizational members who see their leaders as demonstrating balanced processing techniques perceive that their leaders welcome their views during the
decision-making process, even when those views may constitute a challenge to the position of the leader (Gardner, et al., 2005). An internalized moral perspective describes leadership behaviors that are derived from the leader's internal moral standards and values, instead of from pressures from other organizational, industry, or societal influences (Gardner et al., 2005). This results in authentic leaders acting in ways that are reflections or demonstrations of their personal morals and values, which allows them to resolve ethical dilemmas and to influence others within their organizations to act in a consistently authentic and moral manner (May, Hodges, & Avolio, 2003; Avolio & Gardner, 2005). Relational transparency describes the manner in which leaders openly share information, are honest with other organizational members, and express their genuine thoughts and feelings as opposed to presenting a disingenuous self to others (Walumbwa, et al., 2008). Relational transparency behaviors, therefore, help leaders to develop trust throughout their organizations by communicating with subordinates and letting others into their thought process, while at the same time, refraining from demonstrations of inappropriate thoughts or emotions (Kernis, 2003) that could negatively influence followers' trust in their abilities.

The final component of authentic leadership, self-awareness, describes the level to which leaders are cognizant of their own strengths, weaknesses, and attributes, such as their knowledge, experience, and abilities (George, 2003; Walumbwa, et al., 2008). Self-awareness also involves an understanding of how other organizational members view leaders and their abilities (Walumbwa, et al., 2008). This self-awareness allows leaders to ameliorate their ability to lead by understanding how they reach the decisions they make and by working to improve strengths and alleviate weaknesses. Self-
awareness describes leaders who are knowledgeable about their own emotions, values, and beliefs and can perform accurate self-assessments with regard to these personal attributes (Gardner & Schermerhorn, 2004). Therefore, self-awareness is less of a concrete attribute and more of a developing process by which leaders engage in self-development to grow into better leaders as they gain increasing understanding about themselves (Walumbwa, et al., 2008). In understanding more about themselves, leaders are also able to comprehend more about how their behavior affects others within and external to their organizations (Kernis, 2003).

Therefore, although it is frequently associated with other forms of leadership such as transformational and ethical leadership, authentic leadership is regarded as the process of exerting greater self-awareness and self-regulated positive behaviors to foster positive self-development among followers (Luthans & Avolio, 2003). In addition to their ability to develop the skills of subordinates and others around them, authentic leaders are also focused on continual self-evaluation and self-improvement, and they encourage those around them to adopt the same approach, either directly or indirectly through subordinate modeling of leader behavior. In this manner, authentic leaders are not only able to increase their own self-efficacy, but that of other organizational members as well. Authentic leadership requires that leaders stay true to their own core beliefs and values and act upon these beliefs when making decisions, thus inspiring followers to exhibit value-based behavior resulting in positive self-development (Gardner, et al., 2005).

Despite parallels with elements of transformational leadership, there are differentiating factors between authentic and transformational leadership. For instance,
while transformational leaders are recognized as being charismatic (Bass, 1985), authentic leadership does not necessarily require that leaders be charismatic, despite involving value-based leadership and relationship-building with followers (George, 2003). Additionally, though these two forms of leadership are highly related, both Burns (1978) and Bass (1985; 1998) describe authenticity as a precursor to transformational leadership. In other words, authenticity on the part of leaders is an essential attribute of transformational leaders. However, authentic leaders are not necessarily transformational, since authentic leaders may not necessarily work actively to develop followers into leaders, even though they exhibit an indirect influence on followers' leadership ability through role modeling (Avolio & Gardner, 2005). The primary differentiating factor between authentic and transformational leaders is that authentic leaders' practices are primarily determined by their strong sense of their own values and beliefs, providing them with the ability to adhere to their decisions (Avolio & Gardner, 2005). Additionally, authentic leaders are able to express to other organizational members what they stand for, based upon their awareness of their own strong principles and values that drive their decision-making processes (Avolio & Gardner, 2005).

Commonalities also exist between authentic leadership and ethical leadership, though there are differentiating factors between these two approaches as well (Brown et al., 2005; Brown & Trevino, 2006). For example, authentic leadership shares common ground with ethical leadership since both are used to refer to leaders "who exhibit honesty, integrity, and openness and a desire to do the right thing" (Walumbwa, et al., 2008, p. 103), and both constructs involve follower role modeling of ethical behavior of
leaders who possess highly moral characteristics (Gardner, et al., 2005). However, despite the common presence of a moral perspective, the other elements of authentic leadership, namely self-awareness, relational transparency, and balanced processing, are not specifically discussed as components of ethical leadership. Consequently, Walumbwa, et al. (2008) demonstrate the distinction between authentic and ethical leadership, and surmise that although ethical behavior stemming from an internalized moral perspective is a requirement for leaders to be classified as authentic, there are other behaviors practiced by authentic leaders that separate these leaders from those that are simply ethical.

Though authenticity is generally a prized attribute of effective leaders, there are few studies that connect authentic leadership to organizational performance (Clapp-Smith, et al., 2009), though authentic leadership methods have been tied to a multitude of follower benefits, including self-development, and positive organizational outcomes (George, Sims, McLean, & Mayer, 2007; George, 2003). For instance, followers of authentic leaders have shown to experience higher levels of self-esteem, improved psychological well-being, enhanced feelings of friendliness, and improved individual performance (Grandey, Fiske, Mattila, Jansen, & Sideman, 2005). Consequently, authentic leadership has the ability to improve the overall psychological status of those subjected to it, and this increased well-being has a tendency to contribute to increased performance on the part of these followers (Ryan & Deci, 2001), which can compile to create positive organizational outcomes.

Authentic leaders, understandably, also are able to develop authentic relationships with followers (Gardner, et al., 2005). Authentic leader-follower
relationships have been found to demonstrate transparency, openness, and trust, guidance toward worthy objectives, and a focus on increasing the efficacy of the follower (Gardner, et al., 2005). These authentic relationships can have a significant effect on the attitudes and behaviors of followers, such as work engagement, organizational citizenship behavior (OCB), and organizational performance (Avolio et al., 2004; Gardner et al., 2005; George, 2003; Ilies et al., 2005). Followers of authentic leaders tend to be more satisfied with their roles and exhibit behaviors geared toward self-development and positive organizational outcomes (Yammarino, Dionne, Schriesheim, & Dansereau, 2008). Ilies et al. (2005), in particular, contend that authentic leadership positively affects followers because followers feel that support exists for them to determine their own paths within organizations. Followers who work for authentic leaders also have a better understanding of their expectations and of organizational goals (Clapp-Smith, et al., 2009).

Authentic leaders have been shown to foster a more fair and open work environment, which sparks employees to engage in positive organizational behaviors (POB) (Yammarino, et al., 2008) in support of the organization’s goals (Avolio & Gardner, 2005; Brown, et al., 2005). However, a critical element in achieving these effects involves not only authentic behavior on the part of leaders, but also the perception of followers, in that followers must also believe leaders to be authentic for these outcomes to come to fruition (Clapp-Smith, et al., 2009). Conversely, Peterson, Walumbwa, Avolio, & Hannah (2012) discovered that leaders who exhibit inappropriate, inauthentic, or manipulative behavior caused followers to develop negative impressions and affect toward both the leader and the employing organization, which can lead to
less desirable organizational outcomes as a result.

2.3. High-performance work systems (HPWS)

In addition to the pronounced positive effect that ethical and authentic leadership can have on followers’ POB, several management studies have identified certain human resource management (HRM) practices as providing the support for organization members to act in a positive manner on behalf of their employers. HRM is a critical strategic collection of practices designed to maximize the productivity of organizational members and, in turn, that of the organization in general. This principal goal of HRM stems from the understanding that individual efforts and productivity contribute to the whole and thus, by developing practices that allow employees to optimize their efforts, better overall organizational performance may be realized (Becker & Huselid, 1998). HRM scholars attest that this resource-based view (Barney, 1991; Short, Palmer, & Ketchen, 2003), in which organizational leaders recognize the contributions that employees provide to an organization, is essential for achieving sustainable competitive advantage (Barney, 2001) through workforce optimization.

As an established component of HRM, high performance work systems (HPWS) are popular among management researchers who have established relationships between HPWS implementation and organizational performance (Arthur, 1994; Huselid, 1995; MacDuffie, 1995). HPWS consist of a group of various interrelated HRM practices (Way, 2002) used in organizations seeking to employ a "distinctive managerial approach that enables high performance through people" (Tomer, 2001, p.2). Therefore, HPWS implementation endeavors to affect organizational performance through strategies created to optimize the selection, development, retention, and motivation of
employees (Way, 2002). As with other HRM strategies, the adoption of an RBV is integral to the successful implementation of HPWS within an organization (Iverson, Zatzick, & McCrae, 2008). HPWS implementation entails a significant investment in human capital (Guthrie, 2001), and such substantial investments, understandably, are only justified if the organization's performance experiences a sufficient return (MacDuffie, 1995) as a result.

Pfeffer (1998) has identified seven essential components that comprise HPWS. These components are designed to maximize the work conditions, and thus, the work outputs of employees. Although the elements that make up HPWS have been somewhat debated (Iverson, et al., 2008), (1) ensuring the employment security of workers, (2) being selective for the right fit when hiring, (3) decentralizing decision-making and creating autonomous workgroups, (4) providing competitive performance-based compensation, (5) providing extensive training opportunities, (6) reducing social and structural barriers between organizational levels, and (7) providing continual feedback related to the organization's performance (Pfeffer, 1998; Way, 2002) are practices that are recognized to comprise HPWS. The implementation of such systemic procedures within an organization must be carefully conducted by organizational leaders in order to be effective. These practices are also interdependent, such that the inclusion of one practice often necessitates the inclusion of others (Becker & Huselid, 1998; Pfeffer, 1998).

Organizations using HPWS make a significant investment in their pool of human capital so that employees are well trained, skilled, and empowered to conduct their jobs (Becker & Huselid, 1998). Despite this substantial investment, an increasing number of
studies are demonstrating connections between the presence of HPWS and goal achievement, leading to a positive effect on organizational performance (Becker & Huselid 2006; Boxall & Macky 2007). HPWS also have been known to contribute positively to several employee benefits within organizations, including employee retention (Arthur, 1994; Huselid, 1995), employee skill development, motivation, information, and empowerment (Lawler, 1992; Pfeffer, 1998; Guthrie, 2001). Evans and Davis (2005) suggest that studying the linkages between HPWS implementation and organizational-level outcomes is warranted because of the effects that HPWS have on the internal social structure within organizations.

Because of their ability to foster both individual skill development and a positive social environment, HPWS are gaining increased examination by management researchers as a potential source of competitive advantage for organizations (Becker & Huselid, 1998). When organizational members possess unique attributes, add unique value to an organization, and are difficult to substitute with comparable replacements, these individuals themselves can serve as a source of competitive advantage for their employing organizations (Delery & Shaw, 2001; Huselid, 1995). Thus, the high-quality human resources possessed by an organization can provide a differentiating factor for successful organizations, justifying significant investment on the part of the organization to develop these resources in a manner comparable with the benefits they provide (Huselid, 1995). As with other HRM practices, Boxall and Macky (2007) surmise that organizational performance can be achieved through the implementation of HPWS, since HPWS can spark a series of events in which perceptions of these organizational elements generate employee reactions that contribute to organizational performance.
These HPWS practices, which involve a number of human resource development features such as employee training, recruiting for person-organization fit, and allowing for input from organizational members in decision-making and performance evaluations, can incite positive effects on individual attitudes, individual performance, and consequently, on collective performance within organizations that can set them apart from their competitors (Takeuchi, Chen, & Lepak, 2009).

Apart from the general benefits created by the implementation of HPWS, these practices can also affect more detailed aspects of employee attitudes and behaviors. For example, providing employees with access to leaders and the ability to provide input with regard to decision-making contributes to organizational commitment as a result of increased trust in management (Appelbaum, et al., 2000). Understandably, in a similar fashion, HPWS also has been found to be associated with minimized voluntary employee turnover, organizational commitment (Wright, Gardner, & Moynihan, 2003), and a positive return on the investment in these HPWS practices (Vandenberg, Richardson, & Eastman, 1999). This effect is operationalized when employees believe that organizational leaders demonstrate support and commitment to their well-being and development, thus creating an atmosphere that promotes trust in leadership and overall organizational commitment (Whitener, 2001). HPWS have also been known to produce higher perceptions of procedural justice and a greater level of trust (Konovsky & Pugh, 1994), related to the specific HPWS practices of balanced performance evaluations (Bartol, Durgam, & Poon, 2001), internal rewards, and hiring practices that focus on the most qualified and best fitting additions to the organization (Gilliland, 1993). In addition, the HPWS practice of providing employees with opportunities to engage leadership in
open discussions about decision-making also contributes to improved perceptions of procedural justice (Bowen & Ostroff, 2004). By allowing employees an opportunity to express their ideas and contribute substantively to organizational decisions, higher levels of trust and perceived procedural justice are able to take shape (Konovsky & Pugh, 1994).

Research has also demonstrated a connection between HPWS implementation and job satisfaction as a result of these effects. Employees who detect the presence of HPWS within their organizations have reported experiencing higher levels of satisfaction with their organizations (Guest, 1999). As Garcia-Chas, Neira-Fontela, and Castro-Casal (2013) surmise, HPWS provides employees with evidence that the organization for which they work has interest in their long-term growth, thus providing them with an improved perception of the organization and a greater satisfaction with their roles within it. Additionally, HPWS provides employees with opportunities for self-development, which provides them with a sense of control over their career paths (Garcia-Chas, et al., 2013). This is confirmed by other studies that have discovered links between HPWS and job satisfaction (Takeuchi, et al., 2009; Mendelson, Turner, & Barling, 2011; Zatzick & Iverson, 2011). More recently, as discovered by Ang, Bartram, McNeil, Leggatt, and Stanton (2013), HPWS results in a multitude of benefits when the implemented HR practices coincide with employee expectations, including job satisfaction, engagement in organizational activities, affective commitment with the organization, and a reduced intention to quit.

HPWS practices not only allow employees to develop their knowledge, skills, and abilities, but they also allow for the development of positive social environments within
organizations and contribute to positive employee interactions (Evans & Davis, 2005). Many researchers believe that employee interactions resulting from HPWS that have an effect on organizational performance may involve a specific set of activities known as organizational citizenship behaviors (OCBs). OCBs consist of employee behaviors that positively influence “the maintenance and enhancement of the social and psychological context that supports task performance” (Organ, 1997, p.91), and these behaviors can combine to positively affect the performance of organizations as a whole (Evans & Davis, 2005). OCBs consist of seven specific behaviors as classified by Podsakoff, et al. (2000): (a) helping behavior, (b) sportsmanship, (c) organizational loyalty, (d) organizational compliance, (e) individual initiative, (f) civic virtue, and (g) self-development, and these behaviors positively influence organizations by creating positive social interactions and atmospheres within them that allows employees to collaborate and contribute collectively to goal achievement (Evans & Davis, 2005).

Elements of HPWS have shown to create organizational structures that contribute to the establishment of OCBs among employees, including lower task routinization, higher cohesiveness, perceived organizational support (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), and perceptions of procedural justice (Konovsky, 2000).

The study of HPWS and their associated outcomes is important for organizations, given the connections between HPWS and these employee effects as well as between HPWS and organizational performance (Arthur, 1994; Huselid, 1995; MacDuffie, 1995), which are associations that have generally been positive in nature (Harley, Allen, & Sargent, 2010). Various aspects of HPWS have produced considerably positive effects within organizations such as improved skill development (Way, 2002),
employee cohesion (Seers, Petty, & Cashman, 1995), and procedural justice.

Participation in decision-making processes offers employees the opportunity to share their voice and is positively related to perceptions of procedural justice (Kovovsky & Pugh, 1994), and OCBs (Evans & Davis, 2005).

Therefore, connections between HPWS and organizational performance, though not extensively established in empirical research, can result by increasing the aptitude, attitudes, and productivity of employees (Macky & Boxall, 2007). HPWS practices that develop and support the valuable human resources within organizations exert positive effects on employee affect, their job satisfaction, levels of organizational trust and trust in leadership, reduced voluntary turnover, and a greater sense of commitment to their organizations (Macky & Boxall, 2007). As a result, the study of HPWS within a framework of organizational leadership can help researchers to understand specifically which types of leaders are more likely to implement HPWS and which specific HPWS elements are most likely to contribute effectively to individual and collective organizational performance.

2.4. Value Congruence with Leadership

An important consideration that may provide an influence on the link between certain leadership activities and the behaviors and effectiveness of subordinates is the followers' value congruence with leadership. Individuals refer to their values and general beliefs about acceptable behavior to guide their decisions and actions, while "organizational value systems provide norms that specify how organizational members should behave and how organizational resources should be allocated" (Edwards & Cable, 2009, p.655). Value congruence occurs when a similarity or overlap exists
between the values of the individual and those of the organization (Kristof, 1996), or those expressed or exhibited by the leader (Hoffman, Bynum, Piccolo, & Sutton, 2011). A sharing of common or similar values with leaders allows for subordinates to adopt leaders' vision and goals, and to develop a better understanding of the motivations behind their actions (Hoffman, et al., 2011; Bono & Judge, 2003). This strengthened connection with leaders may inspire subordinates to engage in positive behaviors in support of the organization. However, those who perceive a lack of common values with the leader may question his or her decision-making process and may ultimately engage in negative behaviors in response.

Ilies et al. (2005) provided a mechanism that connects authentic leadership, specifically, to value congruence. When authentic leaders execute their traits of balanced processing, relational transparency, and self-awareness, productive, trusting, and positive leader-follower relationships are likely to result (Ilies, et al., 2005). These positive and close working relationships allow for employees to exhibit role modeling behaviors, permitting existing value congruence between leaders and followers to grow stronger (Avolio & Gardner, 2005). This accentuated value congruence, itself, can produce continued benefits such as improved employee attitudes, job satisfaction, and organizational commitment (Meglino, Ravlin, & Adkins, 1989) that creates a positive mentality toward work. This phenomenon results in employees becoming more productive workers on behalf of their organizations.

While the organizational benefits stemming from a commonality of values between organizational leaders and followers is apparent, there exists a dearth of research connecting value congruence to other leadership and organizational
constructs such as ethical leadership, as well as with the presence of HPWS within organizations. This study, in particular, will, in part, address this gap by evaluating if a congruity of values between leaders and followers provides a moderating influence on internal processes stemming from leadership behaviors leading to positive activities by employees and, in turn, the overall performance of their organizations.

2.5. Positive Organizational Behavior

The common thread between the previously detailed constructs of ethical leadership, authentic leadership, HPWS, and value congruence is that the presence of these organizational attributes, either independently or in combination, positively affects employees within an organization and provides an environment in which they can develop and maximize their capabilities. One way that employees respond to these organizational attributes is by exercising OCBs that boost the social and collaborative atmosphere within organizations.

Another way that employees can respond to these organizational constructs is by engaging in what is referred to as positive organizational behavior, or POB. Luthans (2002) defines POB “as the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace” (p. 59). POB is specified to be a measurable construct that contributes substantively to an improvement in organizational performance (Luthans, 2002). Thus, POB distinguishes itself from other forms of positive influences within organizations in that POB practiced by organizational members yields a performance impact on their workplaces (Luthans & Avolio, 2009). Another key aspect of POB is that is must be state-like, or open to
development and change, as opposed to more fixed “trait-like” qualities (Luthans & Avolio, 2009). As a result, organizational structures and culture can be managed and manipulated in ways that can optimize followers’ POB within an organization to produce a scenario that maximizes organizational improvement.

POB is a similar construct to OCB, which is the voluntary behavior of employees that combine to promote improved organizational performance (Organ, 1997). The state-like nature of POB suggests that these behaviors are such that they can be transmitted to others, thus establishing their utility for developing group and organizational productivity and effectiveness (Luthans, 2002; Luthans & Avolio, 2003). Recent studies have established the critical nature of employees’ positive organizational behavior in reducing interpersonal conflict and contributing to the effectiveness of the groups and organizations in which they work (Avolio & Gardner, 2005; De Dreu, Harinck, & Van Vianen, 1999). Through a continual engagement in behaviors that support organizational goals and demonstrate consideration for the contributions of other organizational members, these positive attitudes toward work and conflict minimization associated with POB have been found to promote organizational efficacy (Tjosvold, Hui, Ding, & Hu, 2003).

The preceding literature has detailed the various organizational constructs that are integrated within this study and their connections to outcomes such as performance. As the following sections will demonstrate, considering this variety of organizational factors simultaneously in an evaluation of complex organizations such as those found in high-level intercollegiate athletics is a substantial endeavor. As such, the theoretical frame to follow will elaborate on the connections between these leadership and
organizational variables already established in previous research. This particular study involves the examination of these constructs simultaneously within a multi-level framework of athletic department performance, with the goal of determining the degree to which each predicts effectiveness for this particular type of sport organization.
CHAPTER 3: Theoretical Model

3.1. Introduction

As Hackman (2003) points out, "one of the joys of science is that we get to explain how things work" (p.905). Accordingly, a primary principle behind academic inquiry involves working toward increasing our collective understanding of phenomena occurring within our world. Since the advent of social science research, investigators have been working to develop models that explain human behavior and, as an extension, the behavior of individuals within organizations and that of organizations themselves. These models can allow practitioners to identify and to occasionally manipulate the conditions needed to produce certain desired outcomes. So while a given theoretical model development contributes to the collective understanding of researchers as well as to the management literature, the development of theoretical models including the strengthening of existing organizational theory is ultimately valuable in practical environments as well.

Organization managers, in particular, have been able to extract benefits from understanding how certain phenomena come about as a result of these models. Being armed with a clear understanding of how organizations are affected by a variety of attributes allows organizational leaders to devise work structures, teams, and activities designed to incite specific responses that produce beneficial effects. Thus, models derived from research findings can provide organizations with the blueprint needed to optimize their resources and internal processes, provided that there is a measure of generalizability of the models across a variety of organization types. Consequently, the need for research designs that simulate real-world organizations and their operating
environments is essential for organizations to be able to employ these theoretical models, which will allow for further collaboration between researchers and practitioners that will begin to bridge the gap between them.

However, though it is always a challenge for researchers to distinguish between effective and less effective predictive models, and to employ suitable analytical tools for testing them (Hackman, 2003), recent analyses that bridge multiple levels affecting organizations now provide an additional approach for investigators to consider. For many years, research efforts have focused primarily on a single level of analysis (Mathieu & Chen, 2011). In other words, the majority of studies explored either how individual factors contribute to individual behaviors or how organization-level traits helped to determine organizational outcomes. Despite this history, a movement in recent years toward the adoption of multi-level frameworks for explaining organizational phenomena has taken root (Chen, Mathieu, & Bliese, 2003). This movement has surfaced as a result of the recognition that a misalignment between organization research and practice exists and is widening over time, as organizations face problems that often result from a combination of influences at multiple levels, yet most research continued to focus on single levels of analysis (Hitt, Beamish, Jackson, & Mathieu, 2007). If research primarily exists to provide a diagnostic and prescriptive role toward real-world problems, then this continuing misalignment constitutes a serious threat to the integrity of organizational research.

3.2. Review of Multi-level Analysis

In addressing this growing problem, researchers have come to recognize that organizations are not simple single-level entities, rather they are comprised of a
complex systems of individuals nested within groups (Kozlowski & Klein, 2000), and that
the organizations themselves are nested within larger sociocultural frameworks. This
nested nature of organizations (individuals as members of teams, which are contained
within organizations, which themselves are contained within industry and sociocultural
environments), (Hackman, 2003; Mathieu & Taylor, 2007). Thus, exploration into
phenomena occurring within these complex systems requires that researchers utilize a
wider multi-level lens (Hitt, et al., 2007) instead of focusing exclusively on micro or
macro level influences.

Proponents of multi-level exploration contend that traditional macro-level
approaches for studying organization behavior have failed to consider the internal
processes that influence strategy development, while micro-level studies have
neglected sociocultural factors that affect organizational outcomes (Hitt, et al., 2007).
The "meso paradigm" (House, Rousseau, & Thomas-Hunt, 1995) created to address
these shortcomings detailed that any studied outcome will be affected by influences at a
level above and below the level of the outcome, an analytical perspective known as
bracketing (Hackman, 2003; Mathieu & Taylor, 2007). This new approach takes into
account the complexity of organizations, as the foundational aspect of the meso
paradigm is to study the effects of both micro and macro-level influences in combination
(Mathieu & Chen, 2011).

As a result of taking this more detailed view of organizations, the implementation
of multi-level research designs can help to identify the organizational attributes, as well
as the attitudes, perceptions, and behaviors of organizational members, that combine to
create key organizational effects. Multi-level models also offer the added contribution of
evaluating these factors in the context in which behavior occurs and can allow researchers to determine whether these attributes and behaviors traverse levels (Hitt, et al., 2007). By analyzing the full complement of influences on an outcome regardless of the level at which they reside, investigators can more easily identify the causes of problem behavior within organizations and advise strategies to overcome them.

In addition to the prescriptive value that these models can provide for organizations, there is also an inherent strengthening of the management literature resulting from adopting a multi-level research focus. Multi-level models can test existing frameworks for homology, or the consistency between the presence of linkages among variables at a single level and comparable relationships at one or more other levels within the model (Chen, Bliese, & Mathieu, 2005). Multi-level research allows investigators to identify earlier research findings that utilized single-level approaches and test these models within complex multi-level frameworks. In addition, multilevel theories have been shown to foster synthesis between varied organizational disciplines, as multi-level models are able to accommodate numerous constructs within the organizational sciences that had previously not been studied together. This can also spark continued collaboration between researchers in different fields.

However, despite these numerous benefits, barriers to the universal adoption of multilevel theories also exist. Advocates of the meso paradigm continue to work to overcome these obstacles and increase the acceptance of multi-level theories. Modern organizations are complex nested systems of individuals, structures, and processes that are all interdependent (Kozlowski & Klein, 2000). Multilevel analyses, therefore, are ideal for conducting research that considers this growing complexity of modern
organizations, as they allow researchers to combine multiple organizational constructs within a single model just as they truly exist in the real world (Hitt, et al., 2007). By taking this more comprehensive approach, multilevel research designs can help to identify the organizational attributes that combine to create key organizational effects, allowing investigators to more easily identify the causes of problems within organizations and advise change strategies to overcome them (Hitt, et al., 2007).

Since organizational leadership provides an influence on both the individual members of the organization as well as the structures and procedures that apply to the entire collective, a multilevel analysis designed to investigate the complex effects of certain forms of leadership is warranted. As Graen and Uhl-Bien (1995) have discussed, leadership research would particularly benefit from multilevel examinations, since single-level investigations of leadership have failed to establish a clear understanding of leadership behavior and how it fully affects organizations. Furthermore, understanding the role of leadership, especially during times when organizations are in flux, is important to sport management inquiry.

The development of a model that connects leadership to intercollegiate athletic performance integrating multiple levels of analysis will have dichotomous benefits. First, it will help to strengthen researchers' collective understanding of how leaders' attributes and behaviors translate to the efficacy of athletics' staff as well as to the performance of the department's athletics programs. Secondly, institutional leaders may better understand the leadership strategies necessary to pilot their athletic departments through periods of adversity as a result of a better understanding of how these strategies influence internal processes.
3.3. Review of Multi-level Analysis in Sport Management Research

Previous sport management research has also been restricted for many years by an unwillingness to explore phenomena beyond single-level frameworks. As a result, theory development within the sport management discipline, for many years, has failed to take this basic nature of organizations into account. Given sport management's position as a relatively nascent research discipline in comparison to other social sciences, researchers bear the responsibility for theory development to enable the field to solidify and distinguish itself amidst other more established fields (Chalip, 2006).

Since the intent of research is not only to develop an increased understanding of our world but also to provide diagnostic and prescriptive services to address real-world problems, research that has used simple models to explain complex organizational behavior has continually fallen short of these goals. Multilevel research, on the other hand, was developed in response to this need. However, while multilevel theories are increasingly developed in traditional management research, sport management research has been slow to adopt this practice. If sport management researchers acknowledge that, to be regarded as a unique discipline rather than an offshoot of other more established areas of inquiry, the advancement of new theories that are unique to sport is paramount (Chalip, 2006). Therefore, by using advanced methods such as multilevel analyses to serve this end, the overall strength of sport management research may be positively affected.

While the utilization of multilevel frameworks is largely underexplored within the sport management literature, recent studies have emerged that have integrated a meso perspective. For example, Dixon and Cunningham (2006) tested a multilevel model of
human resource practices within intercollegiate athletic departments and argued in favor of growing the exploration of multilevel research within sport. Cunningham and Sagas (2008) shed light on the need for equality and social change within sport organizations by identifying the macro-, meso- and micro-level forces that reinforce traditional ideologies, while Cunningham (2008) advanced a multilevel framework of gender equality culture within sport organizations. Cunningham (2010) also developed a multilevel model for studying the contributors to the under-representation of African American coaches within intercollegiate athletics.

In a manner similar to Cunningham (2010), Walker (2011) used a multilevel perspective to determine the potential causes of the underrepresentation of female coaches within the male sport context, in contrast with the abundance of male coaches in women’s sports such as college basketball. In addition, Myers, Beauchamp, & Chase (2011) established a multilevel model demonstrating that team-level coaching competency influences both athlete satisfaction at the individual level as well as overall team satisfaction, while Wicker, Hallmann, & Breuer (2013) measured various individual and societal-level variables influencing individuals’ sport participation and involvement in sport clubs.

Todd, Crook, and Barilla (2005) outline several opportunities for sport management researchers to adopt multi-level frameworks for a variety of investigative purposes. For example, Todd, et al. (2005) suggest that researchers interested in studying strategy within a sport context could examine how certain human resources drive team performance, while an alternate model could explain how certain micro-level attributes such as fan identification, along with macro-level variables such as the type of
sport, could affect team attendance. Dithurbide, Chow, and Sullivan (2008) analyzed the relationship between players causal attributions toward teams and the team's collective efficacy, finding that team members who attributed their team's performance to uncontrollable factors possessed stronger confidence in their team's collective efficacy than those who attributed their team's effectiveness to internal causes. Additionally, Myers, et al. (2011) established a multi-level model to show that team-level coaching competency influences both athlete satisfaction at the individual level as well as overall team satisfaction.

These studies demonstrate the increasing value that multilevel frameworks can provide to research in sport environments. Sport organizations, like their business counterparts, are complex, multidimensional systems that require comparable analysis techniques to uncover the multitude of influences affecting their behavior. Understanding the dynamic relationship between factors affecting sport organizations at various levels can help researchers to improve our collective understanding of organizational behavior and allow sport managers to develop strategies that foster beneficial outcomes for their organizations (Klein, Tosi, & Cannella, 1999).

3.4. Description of Theoretical Model

The use of a multi-level framework in this particular study is advantageous for a variety of reasons. Multi-level models allow for research to consider the collective influence of a number of precedent factors on organizational outcomes, regardless of the level at which they reside, all within the same conceptual framework. Previously, numerous studies within the management literature have investigated single-level contributors to organizational performance. Additionally, investigations into athletic
department performance are plentiful within the sport management literature, yet only recently has research begun to consider the influence of individual, dyadic, group/team, organizational, industry, and/or sociocultural factors on department outcomes within the same theoretical model.

In this particular case, a multi-level framework possesses the power to help explain how individual leadership behaviors can translate to department-level effectiveness through various mechanisms, while considering parallel department-level influences. The ability of multi-level frameworks to consider multiple organizational influences at several levels affecting the organization at the same time provides a much more accurate reflection of real-world phenomena resulting from organizational structures, systems, members, and processes. Thus, multi-level research is better able to satisfy the goal of increasing our collective understanding of the operations of intercollegiate athletic departments and how they function in response to athletic leadership.

Given the importance of leadership to organizational outcomes, and the utility of multilevel frameworks for analyzing organizational phenomena, a potential multilevel theoretical framework of leadership within intercollegiate athletics is advanced and shown in Figure 1 in Appendix C. The following model is designed to exemplify the role of leadership in predicting athletic department effectiveness in both athletic and academic environments, as both factor into the overall performance of a university’s athletic programs and into the institution’s overall reputation. Using an upper echelons theory perspective, the following model depicts the relationships between certain leadership behaviors provided by athletic directors and the associated impact on their
departments while simultaneously considering other pertinent performance drivers affecting these outcomes.

In this two-level model, shown in Figure 1, ethical and authentic leadership practiced by athletic directors influences both the POB of their employees and the presence of HPWS within their departments. In addition, HPWS also affects staff members' POB, demonstrating the potential mediating influence that these systems provide that connects the leadership behaviors of ADs and follower behavior. Also, staff members' POB resulting from the ethical and authentic leadership practices of ADs is expected to be moderated by staff members level of value congruence with their athletic directors. The POB of athletics staff is expected to produce an effect on departments' overall athletic and academic performance, showing that employee POB mediates AD leadership and HPWS' connections to performance. Finally, the three department-level variables of athletic revenue, athletic prestige, and academic reputation are each expected to exert an affect on both forms of athletic department performance, as shown in the hypothesized model.

In this hypothesized model of athletic departments' athletic and academic performance, ethical and authentic leadership are evaluated at the department level, due to the fact that AD leadership governs the department as a whole and, theoretically, all members of an athletic department are comparably affected by this departmental influence. Since these variables are analyzed at the department level from data obtained from groups of individuals, aggregation procedures are needed to operationalize these constructs at the appropriate level of analysis. EL and AL are direct consensus variables, a type of composition variable, in that each department staff's
aggregated perception of leadership within their departments combine to form a unified, collective perception of the leadership practices of their ADs. Composition variables utilize the within-unit mean to create a team-level construct from individual scores, which is an approach used when the construct at the lower level is akin to that at the higher level and when individuals contribute equally to indexing the higher-level construct (Mathieu & Chen, 2011).

Similarly, HPWS is also a direct consensus department-level variable, which must be aggregated from individual responses to reflect collective perceptions of the presence of HPWS practices within each athletic department. The remaining variables in the model will not require aggregation prior to analysis. VC and POB will both be measured and analyzed at the individual level, while ATHREV, ATHPRS, APR, and DCP are department-level variables. Finally, ACAREP, which involves the academic ranking of each university as a whole with respect to other universities participating in this study, is an institutional level variable, but will be analyzed at the department level since there are an equal number of units at the departmental and institutional levels (one athletic department per institution). The list of each of the study constructs, how they will be measured, and the levels of measurement and analysis for each variable is shown in Appendix B, Table 1.

### 3.5. Presentation of Study Hypotheses

The primary factor theorized to contribute to the athletic and academic performance of intercollegiate athletic departments in this model is institutional leadership. Student-athletes are subject to influences imparted by a variety of institutional leaders within a university, however, the leadership provided by athletic
directors, in particular, serves to create and reinforce the culture and expectations of all those involved with university athletic programs. Thus, the leadership behaviors of ADs, specifically their propensity to exhibit authentic and/or ethical leadership behaviors, will be analyzed in this research.

Given the established benefits of ethical and authentic leadership approaches discussed above, it is hypothesized that ethical leadership practiced by major college athletic directors (NCAA Division I FBS) will exert a positive effect on the performance of the departments they lead. For example, Yukl, et al. (2013) discussed how ethical leadership consists of behaviors that are expressions of the values of altruism, compassion, honesty, fairness, and justice. Ethical leaders work decidedly to benefit those around them and to refrain from behavior that could potentially cause harm (Kanungo, 2001). They exhibit integrity, adhere to certain accepted ethical standards, demonstrate fairness and concern to those in their charge (Brown, et al., 2005), and generally can be trusted to "do the right thing." Research by Brown et al. (2005) and Mayer, et al. (2009) revealed the presence of a significant connection between ethical leadership behaviors practiced by a leader and positive behaviors on the part of subordinates in response, demonstrating the positive influence that ethical leadership can produce within a given organization.

Ethical leaders' concern for others is hypothesized to contribute to followers' POB in intercollegiate athletics as well. Similar to the findings of Doherty and Danylchuk (1996) in their investigation of transformational leadership in intercollegiate athletics, positive leadership behaviors in a sport context is believed to result in follower satisfaction with leadership and commitment to their organizations, thus producing a
willingness to engage in positive activities for their athletic departments. As stated above, ethical leadership, in particular, has been found to result in a variety of positive effects for organizations, including employee productivity (Piccolo, et al., 2010), increased commitment (Zhu, et al., 2004) increased effort (Yukl, 2009; Piccolo, et al., 2010), positive LMX (Walumbwa, et al., 2011; Yukl, et al., 2013), and trust in leadership (Zhu, et al., 2004). Furthermore, ethical leaders provide model behavior for employees to follow (Brown, et al., 2005), promote OCB among subordinates (Avey, et al., 2010), and induce extra effort and a willingness to report problems (Brown, et al., 2005; Kim & Brymer, 2011) that can all be classified as POB in support of the organization.

\[ H_{1a}: \text{Ethical Leadership (EL) exhibited by university athletic directors will positively influence athletic staff members' Positive Organizational Behaviors (POB).} \]

Walumbwa, et al. (2010) proposed that organizational leaders who demonstrate authenticity spark positive behaviors among employees as a result of the information sharing and transparency that they foster within their organizations. Additionally, the presence of honest exchanges between authentic leaders and subordinates allows trust to develop, which motivates employees to engage in behaviors in support of the organization (Mayer & Gavin, 2005; Organ, Podsakoff, & MacKenzie, 2006). Applying the concept of authentic leadership to an intercollegiate athletics context, this project will seek to determine the extent to which an athletic director’s authentic leadership behaviors affect his/her department’s overall academic and athletic performance. This effect is proposed to occur, in part, as a result of the influence of authentic leadership on followers’ POB:
$H_{1b}$: Authentic Leadership (AL) exhibited by university athletic directors will positively influence athletic staff members' Positive Organizational Behaviors (POB).

Although management researchers have yet to investigate the connections between leadership and the presence of HPWS within organizations, it is hypothesized here that HPWS will exist in organizations directed by ethical and authentic leaders. Leaders who exhibit authenticity and ethical behavior are concerned with the welfare of employees beyond the organization's performance (Brown, et al., 2005; Luthans & Avolio, 2003), thus the employee-focused structures and practices associated with HPWS may be the result of behaviors exhibited by ethical and authentic leaders. However, employees' POB is hypothesized to result from being exposed to ethical and authentic leadership as well as by the presence of HPWS within organizations. Furthermore, HPWS is hypothesized to at least partially mediate the link between each form of AD leadership and staff members POB.

$H_{1c}$: HPWS within athletic departments will positively influence athletic staff members' Positive Organizational Behaviors (POB).

$H_{2a}$: Ethical Leadership behaviors practiced by the athletic director will positively affect athletic departments' implementation of High-Performance Work Systems (HPWS).

$H_{2b}$: Authentic Leadership behaviors practiced by the athletic director will positively affect athletic departments' implementation of High-Performance Work Systems (HPWS).

$H_{3a}$: High-performance work systems (HPWS) will at least partially mediate the
relationship between ethical leadership practiced by the athletic director and athletics staff members' Positive Organizational Behaviors (POB).

$H_{3b}$: High-performance work systems (HPWS) will at least partially mediate the relationship between authentic leadership practiced by the athletic director and athletics staff members' Positive Organizational Behaviors (POB).

Additionally, staff members' perceptions of value congruence with their athletic director are expected to exert a moderating influence on the model. Perceiving a commonality of values with the athletic director may inspire subordinates to engage in positive behaviors in response to the ADs authentic and/or ethical leadership practices. Meglino, et al. (1989) discovered that employees' level of satisfaction and commitment increased with higher levels of value congruence with leaders. Value congruence has also been found to motivate employees to demonstrate behavior that is reflective of the shared set of values between the two (Avolio & Gardner, 2005). However, those who perceive a lack of common values with the leader may question his or her decision-making process and may ultimately engage in negative behaviors in response. As a result of the potential influence value congruence with leadership can have on the effectiveness of leader behaviors, the following additional hypotheses are proposed:

$H_{4a}$: Athletics staff members' Value Congruence (VC) with their athletic director will moderate the link between athletic director ethical leadership behaviors and staff members' positive organizational behaviors (POB).

$H_{4b}$: Athletics staff members' Value Congruence (VC) with their athletic director will moderate the link between athletic director authentic leadership behaviors and staff members' positive organizational behaviors (POB).
As such, the following hypothesized outcomes will also be tested:

\( H_{5a} \): Staff members’ POB will positively influence the athletic performance of NCAA Division I FBS athletic departments.

\( H_{5b} \): Staff members’ POB will positively influence the academic performance of NCAA Division I FBS athletic departments.

Since staff members' POB resulting from ethical leadership, authentic leadership, or HPWS is hypothesized to lead to athletic and academic performance, POB is believed to provide a mediating influence on the links between these three predictors and the athletic and academic performance of athletic departments. Consequently, the mediating effect of POB on the hypothesized model will also be tested:

\( H_{6a} \): Staff members’ POB will partially mediate the relationship between ethical leadership practiced by the athletic director and department performance.

\( H_{6b} \): Staff members’ POB will partially mediate the relationship between authentic leadership practiced by the athletic director and department performance.

\( H_{6c} \): Staff members’ POB will partially mediate the relationship between HPWS present within athletic departments and department performance.

In addition, there are also significant department-level influences on department performance that are worthy of examination. For instance, it is clear that an institution’s athletics revenue will provide the organization with the resources needed to support the efforts of student-athletes both on the field and in the classroom, which should translate to the achievement of the department’s academic and athletic performance goals. Although there exists a lack of research measuring the connection between athletic
revenue and the level of success of athletic programs at the university level, there is a widespread assumption that institutions that generate higher levels of revenue via sources such as alumni and external donations and media contracts tend to exhibit increased athletic success in comparison with their counterparts that have difficulty reaching comparable revenue levels. This study will test that assumption.

\[ H_a: \text{A university's athletic revenue will positively affect the overall athletic performance of its teams.} \]

Furthermore, if any connection exists between athletic revenue and academic performance of a university's athletic teams, because of a possible greater access to support structures enabling better academic development than those institutions with lower levels of athletic revenue, this research will seek to uncover this connection as well.

\[ H_{\alpha}: \text{A university's athletic revenue will positively affect the overall academic performance of its teams.} \]

Additionally, an athletic department's athletic prestige is hypothesized to help it to achieve these goals. Athletic prestige enables universities to leverage their athletic reputation to attract top-quality student-athletes and coaches, which directly contributes to their on-field or on-court performances. Furthermore, elevated athletic prestige in comparison with their competition allows high-level athletic departments to garner necessary support from external constituencies (e.g., boosters) and the like to support athletes’ endeavors on the field and in the classroom. The combination of both of these pivotal effects from high levels of athletic prestige should enable both departmental athletic and academic performance, and leads to the following additional hypotheses:
$H_{8a}$: A university’s athletic prestige will positively affect the overall athletic performance of its teams.

$H_{8b}$: A university’s athletic prestige will positively affect the overall academic performance of its teams.

Similarly, the institution's academic reputation will allow the university to recruit athletes with both athletic and academic skill sets that are hypothesized to contribute favorably to overall athletic department performance. Possessing a high quality academic reputation makes universities attractive to those with both and short-term educational and career goals. Spies (1978) found that academic reputation was an important consideration for those selecting their higher education institutions, and this phenomenon is hypothesized to extend to student-athletes' college choices as well. Therefore, academic reputation is believed to assist universities with attracting student-athletes, especially those who have high levels of focus on both their athletic and academic pursuits. These individuals may be high-caliber athletes but may not have designs on pursuing athletics at the professional level. Thus, a top-notch academic reputation should contribute to the attraction of these high-performing and well-rounded student-athletes to the institution, which should translate not only to the academic performance of a university's athletic department, but potentially to their athletic performance as well.

$H_{9a}$: A university’s academic reputation will positively affect the overall athletic performance of its teams.

$H_{9b}$: A university’s academic reputation will positively affect the overall academic performance of its teams.
CHAPTER 4: Method

4.1. Sample

Since the research design involved testing theoretical constructs at two levels of analysis, it was critical to devise sampling strategies to obtain a sufficient number of cases at each level for the study results to have sufficient statistical power. Although reports have shown that research is continually plagued by studies lacking in statistical power, these studies continue to be produced by researchers in management disciplines (Maxwell, 2004). Power constitutes the level of ability of a measure to detect an effect of a certain magnitude with a certain degree of confidence (Aguinis, 2004). Statistical power is higher in studies with larger sample sizes since larger samples allow for greater degrees of freedom when testing the linkages between variables (Aguinis, 2004). In addition, acquiring a sufficient number of cases at each level helps to ensure that sufficient within- and between-group variability is present relative to the model constructs (Raudenbush & Bryk, 2002).

In order to determine the appropriate sample size at both the individual level and the department level of analysis for this study, a power analysis was conducted a priori using the program Optimal Design (Raudenbush, et al., 2011), which is able to assess the degree of predictability of a research design by manipulating several design factors including level of significance, effect size, number of groups, and group size. Since this research involved the use of data from individuals within multiple groups, the following Optimal Design procedures were used to determine power: First, person-randomized, multi-site trials was selected to reflect the research design in which random individuals within multiple athletic departments were to participate in the study. Second, the goal of
using Optimal Design was to determine the appropriate sample size at each level of analysis, thus the next step was to determine the number of individuals and number of athletic departments needed for sufficient power. Thus, both power vs. number of sites (Figure 2) and power vs. site size (Figure 3) were selected in separate analyses to determine the appropriate sample size at both the individual and department levels. In each analysis, the confidence level was set to 95% (alpha = .05) and effect sizes were set to .10 (low), .30 (medium), and .50 (high). Using these parameters, it was determined that approximately 50 groups with an average group size of six participants per group was needed to reach the accepted 80% power. The results of this are shown in detail in Figures 2 and 3.

In order to conform with the power requirement, the research sample for this study consisted of athletic department staff (administrators) from 55 NCAA D-I institutions (FBS). Participating institutions were identified from all FBS universities using purposeful random selection. Selection was conducted in a manner that ensured representation from each FBS conference and from nearly every state within the U.S. Institutions were listed by number within each conference, and selections from each conference were made using a random number generator. One school from each conference was selected before moving on to the next conference. During this process, when multiple universities from a particular state were selected, a university was returned to the pool until every state hosting an NCAA D-I FBS institution was represented by at least one university. This process was repeated until 60 schools were selected.
Following the identification of the pool of institutions, IRB approval was secured from 58 of the 60 institutions independently to obtain clearance to recruit participants from staff members at each university athletic department. Upon receipt of this IRB approval, each university’s athletic director was contacted to inform him or her of the upcoming data collection and to provide them with an opportunity to consent (either actively or passively), or to reject participation in the study. Once athletic director consent was received, staff members at each athletic department were contacted individually via email from addresses published in athletic staff directories and were invited to participate.

Initial invitations were sent to 3,281 athletics staff members across 58 NCAA Division I FBS institutions. Staff members who were contacted to participate encompassed a variety of administrative roles within their departments, including but not limited to ticket sales, compliance, athletic communications, academic services, marketing, and development. Individuals within athletic teams (coaches and team staff), athletic training, sports medicine, and facility operations were not contacted to isolate responses to those with strictly administrative roles in athletics. Additionally, executive-level staff (Associate AD and higher) were also not contacted, due to the potential risk of their proximity to the athletic director creating a participant bias toward the subjects of this research (athletic directors). Although Associate ADs have often been used as proxies in studies of AD leadership behavior, in this study, it was essential to allow the view of the cascading effects of AD leadership on athletics staff to emerge, since their resulting POB is being evaluated as a predictor of department performance. Lower-level staff members also operate on the "front lines" of the athletic department and have high
levels of interaction with student-athletes, compared with administrators at higher levels of the department hierarchy. As such, it was deemed necessary to focus on lower-level staff members and to exclude those organizational members (executive-level staff) with close working relationships with the AD. Once the final group of contacts was obtained from staff directory websites, initial invitations sent to athletics staff described the nature and goals of the research, the risks and inconveniences involved with participation, and included a link to the first part of the online survey.

A total of 308 individual staff members and representatives from three athletic departments either expressed their desire not to participate or were no longer working at their departments (emails deactivated). After seven days, an official invitation was sent to the remaining 2,973 athletic department staff members containing a link to part 1 of the survey. After another seven day period to allow staff members the time to provide their responses, a final reminder was sent to the list of athletics staff containing links to both part 1 and part 2 of the survey, providing potential participants with an additional week to complete the survey in its entirety. At the completion of these data collection procedures, participation was obtained from 363 individuals within 55 NCAA Division I FBS athletic departments (average group size = 6.6). Therefore, this sample size should be large enough to detect the effects of the studied constructs with sufficient statistical power.

Though no identifying information, other than the participants' employing institutions, was obtained, it can be assumed from the list of those invited to participate that respondents encompass a variety of demographics, backgrounds, and job roles. The participant profile for the study sample is displayed in the appendix (Appendix B,
Table 2). The sample consisted of 51.1% males, 48.9% females, with an average career length of nearly a decade (9.9 years). Participants had spent an average of 7.8 years of that time working in their current athletic departments, and an average of 4.8 years working under their current athletic director. Over 90% of those who responded to the survey (94.2%) were full-time employees at their respective universities. These 363 individuals' survey responses provided information regarding their perceptions of the leadership characteristics and behaviors of their athletic directors, as well as their personal organizational behaviors and their perceptions of the presence of HPWS within their departments, as detailed below.

4.2. Measures

The two-part instrument utilized for this study, shown in Appendix A, was created as a composite of the following scales: Ethical Leadership, "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making" (Brown, et al., 2005, p. 120), was measured using the 15-item Ethical Leadership Questionnaire (ELQ) (Yukl, 2010). Sample items from this scale included “Our athletic director communicates clear ethical standards for members." and "Our athletic director is fair and objective when evaluating member performance and providing rewards."

Authentic Leadership, “a pattern of leader behavior that draws upon and promotes both positive psychological capacities and a positive ethical climate, to foster greater self-awareness, an internalized moral perspective, balanced processing of information, and relational transparency on the part of leaders working with followers,"
fostering positive self-development” (Walumbwa, et al., 2008, p. 94) was measured using the 13-item Authentic Leadership Questionnaire (ALQ), which evaluates leaders' authentic leadership practices by measuring followers' perceptions of the athletic director's self-awareness, moral perspective, balanced processing, and relational transparency (Avolio, Gardner, & Walumbwa, 2007). Self-awareness refers to the degree to which an organizational leader is aware of his or her strengths and limitations, in addition to how well he or she is aware of how others see him or her and of how he or she affects others in their charge. Moral perspective describes the degree to which the leader sets high standards within his/her organization for moral and ethical conduct. Balanced processing details the degree to which a leader welcomes the opinions and viewpoints of other organizational members as part of his/her decision-making processes. Finally, relational transparency indicates the degree to which a leader is open with other organizational members about his/her views and decisions and permits others to provide their input (Avolio, et al., 2007). Sample items from this scale included "Our athletic director openly shares his/her feelings with others" and "Our athletic director does not allow group pressure to control him/her."

HPWS, a group of various interrelated HRM practices (Way, 2002) used in organizations seeking to employ a "distinctive managerial approach that enables high performance through people" (Tomer, 2001, p.2), was measured using a modified 22-item version of Chuang and Liao’s (2010) HPWS questionnaire, which measures the degree to which employee needs, personal empowerment, and skill development are operationalized by organizational leaders. Sample items from this scale included "The
department invests considerable time and money in training," and "If a decision made might affect employees, the department asks them for opinions in advance."

POB, “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002, p. 59), was measured using the 12-item Positive Organizational Behavior questionnaire (Luthans, Youssef, & Avolio, 2007). This scale gauges employees’ self-evaluation of their positive behaviors in the workplace. Sample items from this scale included "I feel confident contributing to discussions about the company's strategy," and "I can think of many ways to reach my current work goals." It was hypothesized that POB will be a primary direct contributor to the athletic and academic performance of athletic departments, since the positive behavior of athletics staff, through a cumulative effect on the entire department, is believed to bear a significant influence on how well each athletic department meets its specified goals.

The moderating variable, value congruence, known as the extent to which an individual’s values are consistent with those expressed or exhibited by the leader (Hoffman, et al., 2011), was also measured using a pre-existing scale. For this effort, the four-item value congruence with a leader questionnaire (Becker, Billings, Eveleth, & Gilbert, 1996) was used, which estimates employees' perceptions that their values coincide with those of leadership. Sample items from this scale included "If the values of our athletic director were different, I would not be as attached to our athletic department," and "The reason I prefer our athletic director is because of what he/she
stands for." Altogether, the final instrument contained 70 items, which was administered to the study sample as detailed in Chapter 4, section 3.

In order to measure the effects of leadership and on athletic department performance, established metrics were used to quantify departments' academic performance and athletic achievement. As discussed above, in developing a multilevel theoretical model, it is critical to ensure an alignment between levels of theory, measurement, and analysis, in order to establish the model's predictive validity (Mathieu & Chen, 2011). In this case, the outcomes of interest, academic and athletic performance, are both Level 2 (department-level) constructs. For academic performance, a commonly used quantitative measure, Academic Progress Rate, or APR (NCAA.org), was used. APR is a four-year rolling average statistic that provides a measurement of the academic performance of all of an institution's sport teams based upon student-athletes' progress toward fulfilling degree requirements. This measure was selected to represent academic performance because it is a standard indicator of academic performance in intercollegiate athletics, with each NCAA institution being required to report the APR of each of its athletic teams to comply with NCAA regulations. At the present time, teams are required to maintain a four-year average score of 900 on a 1,000 point scale, approximately equivalent to a 50% graduation rate, although this threshold will increase to 930 in the year 2014.

A team's failure to reach this minimum APR score may be subjected to NCAA sanctions and other penalties such as the loss of scholarships for the deficient team. In this manner, insufficient academic performance on the part of any particular college athletic team can adversely affect their athletic performance as well, since affected
teams may need to compete without their full complement of personnel, which can affect the overall performance of the athletic department. However, since APR is a team-level and not a department-level statistic, the APR of all of an institution’s athletic teams were averaged to provide an overall indicator of academic achievement of the institution’s student-athletes as a combined group. Thus, in this study, the Academic Progress Rate of each institution's athletic teams was averaged on a yearly basis to represent an overall APR score for each institution for each year (2010-2012) in the analysis.

Departments’ athletic performance was measured using the Learfield Directors’ Cup Points (NACDA.com) for the same time period (2010-2012). The Learfield Directors’ Cup is an award sponsored by the National Association of Collegiate Directors of Athletics (NACDA) that recognizes the overall athletic success of an institution’s athletic teams. In NCAA Division I, ten men's and ten women's athletic teams' seasons for each university are assigned point values based upon each team's finish in the national NCAA championships for that particular sport. These 20 points values are combined to create an institution's overall DCP score that allows for comparison to other universities within the same level of NCAA competition each academic year. Therefore, DCP is a good proxy for athletic performance in this hypothesized model, in that it encompasses a multitude of athletic programs within an institution’s ranking and is an industry-accepted metric that allows for substantive comparison of the athletic performance of NCAA Division I athletic departments. The use of the DCP and APR statistics to represent athletic and academic performance,
respectively, created the ability to determine, using statistical methods, what effects that athletics’ personnel can produce on the overall performance of their departments.

In addition to the outcome variables DCP and APR, the department-level predictors (athletic revenue, athletic prestige, and academic reputation) were evaluated using publicly available statistics in a similar manner to the outcome variables. Athletic revenue was derived from available revenue reports obtained from the NCAA Equity in Athletics database for the time period 2010-2012 to correspond to the three-year timeframe used for other model variables. While these NCAA reports divide athletic department revenue both by sport and by gender, the total combined revenue for all sports within each department was used to align the athletic revenue variable firmly at the department level of analysis.

Athletic prestige also was measured and analyzed at the department level, and was determined by calculating the frequency with which each institution's athletic events are broadcast live on the ESPN family of networks during the three-year period between January 1, 2010 and December 31, 2012. This method illuminated those institutions that enjoy high levels of athletic prestige while enabling the identification of those with less exposure and notoriety. ESPN networks constitute the premier television networks broadcasting sport in the United States, with these networks airing live professional and intercollegiate sport events on a daily basis throughout the calendar year. Three years of broadcast data (2010-2012) were obtained and analyzed to coincide with the timeframe utilized for other variables within the theoretical model. This three-year window was determined to be an ideal timeframe for this broadcast data, as it allows for
fluctuations in broadcast frequency and is likely to encompass the tenure of the current athletic director for the majority of institutions in the study sample.

Finally, academic reputation was obtained using third-party university academic rankings such as those published by U.S. News and World Report's national ranking of top 300 universities for undergraduate students. Once again, three years of academic rankings (2010-2012) were used to align the data with other measures in the model. For each of these three variables, institutions were ordered by rank over the most recent five-year period and assigned a rank score among the group of participating institutions (300-n). A small remainder of universities participating in the study did not appear on the national U.S. News and World Report rankings, but did appear on the publication's regional university rankings for each school's respective region (North, South, Midwest, West). For these institutions, a rank score of 25 was entered to position these institutions' academic reputation on the same scale but below those appearing in the national list. As a final step, scores obtained for each of these three upper-level variables (ACAREP, ATHPRS, and ATHREV) were then modified into standardized scores to assign them equal value with other variables within the hypothesized model during data analysis.

Additionally, the survey instrument contained items designed to capture data related to several demographic variables, including gender, tenure in athletic administration, tenure with the department, and tenure working under the current athletic director. This additional data allowed for the analysis of findings relative to each group based upon the perspective of respondents working under the leadership of an athletic director for a long tenure compared to those with a short tenure, the overall
tenure of respondents working in athletics in general, or other demographic influences on their responses, such as gender or employee status (full-time vs. part-time).

4.3. Data Collection

Data collection efforts, in total, spanned the four-month period between December 2013 and March 2014. In December 2013, contact was made with the Institutional Review Boards of more than 60 NCAA Division I FBS institutions to secure approval to recruit participants from each university's athletics staff. Upon receipt of this consent, each university’s athletic director was contacted and informed of the intention to recruit athletics staff to participate in the study. Subsequently, those institutions which provided both IRB and AD consent were determined to be voluntary participants.

Email invitations to athletics staff members at these randomly selected institutions were sent during the months of February and March 2014 and contained links to two parts of an online survey at two different times, separated by approximately one week. Data collection was split into two time sessions to help reduce common method bias as recommended by Podsakoff, Mackenzie, Lee, and Podsakoff (2003) (Avey, et al., 2010). At Time 1, participants completed a 38-item instrument related to their perceptions of their athletic director’s ethical leadership (EL) (15 items), the presence of HPWS within their departments (22 items), and demographic information (3 items). At Time 2, they completed a second 32-item instrument related to their perceptions of their athletic director’s authentic leadership (AL) (13 items), their positive organizational behaviors (POB) (12 items), value congruence with the athletic director (VC) (4 items), and additional demographic information (2 items). For each part of the survey, participants were asked to provide their employing institutions and a unique
code that allowed the researchers to connect their responses to part 1 of the survey to their responses for part 2. Once two emails, separated by one week, were sent to potential participants, a third and final reminder containing the links to both parts of the survey was sent one week later to encourage additional participation.

In addition to the efforts taken to reduce the possibility of common method biases, care was taken to ensure the anonymity of participants and to reword items, when necessary, in ways that do not elicit desired responses from participants. Furthermore, the items for each instrument were randomly sorted, rather than grouped by each scale, in order to eliminate the likelihood of item context effects (Podsakoff, et al., 2003). Finally, Harman's single factor test was conducted by including all items from all instrument constructs into a confirmatory factor analysis (CFA) to determine whether the majority of the variance can be attributed to one overarching factor. The validity of the measurement model was obtained using a CFA to confirm item loadings and the consistency of each theorized factor within the model.

Upon completion of data collection, 609 individuals had completed some portion of the survey, although a significant percentage had dropped out early in the survey due to confidentiality concerns. A final count of those completing both parts 1 and 2 of the survey (n=363) was used for analysis. This sample may be lower than expected since some respondents experienced trepidation that their responses would be identifiable or would reach their athletic directors. Additionally, data collection occurred during what is widely known as a busy period for intercollegiate athletic departments, as this timeframe is when conference and national tournaments take place for winter sports such as men's and women's basketball and men's and women's hockey. However, according to
the power analysis shown in Appendix C, Figures 2 and 3, this 363 participant sample is large enough to conduct the following data analyses. The profile of the participant sample is included below in Table 2.

4.4. Data Analysis

Upon receipt of the survey data from the study sample and additional data sources, the following procedures were conducted to prepare the data for testing of the hypothesized model: The data was first evaluated for substantial missing responses, with cases with extensive missing data (over 25% missing responses) being removed as part of the data cleansing process. Each institution participating in the study was then assigned a numeric ID# prior to analysis, which served as an identifier without using the names of particular universities. Separate data sheets were created for each analytical level, with the individual-level survey data contained within the Level 1 data sheet and the department-level variables ATHPRS, ATHREV, ACAREP, DCP, and APR contained within the Level 2 data sheet. Both sheets were sorted by university ID# to facilitate analysis.

Means and descriptive statistics were then obtained on all variables, including item descriptives from the athletic staff survey and scale descriptives for all variables. Standardized scores were calculated for all scale variables to align the data for each variable on the same scale (mean = 0, SD = 1). A CFA (Harman’s single-factor test) was conducted as discussed above to account for potential common method biases. Since the survey scales used were obtained from prior research, a CFA was also used to verify the item loadings on each of the model constructs and to establish the overall fit of the model. Items that decrease model fit were removed from the analysis. Lastly,
reliability analyses were conducted to verify the internal consistency of each scale in the instrument, with items hindering the level of reliability being removed from the data set. This helped to ensure that each scale measures its associated latent construct as expected.

Before the model could be analyzed using the obtained individual-level data, survey response data pertaining to each department-level variable was aggregated into their associated higher-level constructs. Aggregated constructs, at times, can provide obstacles to multilevel data analysis, as the difficulty in aligning the units of analysis, theory, and measurement within multilevel research designs occasionally leads to misinterpreted findings (Mathieu & Chen, 2011). As Dixon and Cunningham (2006) advise, in cases where a variable is theoretically grounded at the group level, "then the group, not the individuals, becomes the unit of analysis," (p. 88). However, in order to utilize individual responses for unit-level variables, there must be sufficient agreement among the respondents (Chen, et al., 2004).

For the aggregated variables EL, AL, HPWS, and POB, steps were taken to ensure their internal and external validity and to justify aggregation, in accordance with recommendations from Chen, et al. (2004) and others, prior to aggregating this data to the department-level of analysis. To establish within-unit agreement James, Demaree, and Wolf's (1984) $r_{wg}$ index was determined for EL, AL, and HPWS to ensure that sufficient agreement exists between employees relative to the unit-level constructs (LeBreton & Senter, 2007). A median $r_{wg}$ value of .70 or greater is commonly accepted as indicating sufficient within-unit agreement that warrants the use of aggregating techniques. Additionally, aggregate reliabilities were calculated to establish the internal
consistency of responses on HPWS at its appropriate level rather than at the individual level of analysis. Also, intraclass correlations, ICC(1) and ICC(2), were computed for this variable. ICC(1) indicates the percentage of variance in responses that is a result of within-group effects, while ICC(2) represents the degree of variability that exists between groups. Establishing this within- and between-group variability is essential to being able to utilize individual attitudes to explain group-level latent constructs.

Once justification for aggregation was established, separate data files containing the aggregated data for the department-level and university-level variables were created to enable multilevel analysis of the acquired data via the hierarchical linear modeling software HLM 7. Standardized versions of all variables were used in each analysis, and were entered into models using grand mean centering. In the first model test, POB was entered as the outcome variable with EL, AL, and HPWS as linear predictors to test these direct relationships. Next, department-level outcome variables APR and DCP were entered with POB as a predictor to test the cross-level effects of staff POB on athletic and academic performance. Fixed and random error variance was toggled in the model to determine their effects on the significance of the specified relationships. Within and between-group variance for all significant cross-level relationships was determined to assess the degree to which the measured outcomes are the result of group effects.

In order to test the department-level linkages between ethical leadership, authentic leadership, HPWS, the contextual variables (ACAREP, ATHPRS, and ATHREV), and athletic (DCP) and academic performance (APR), stepwise linear regression was used, as the contributions of each of the forms of leadership to POB must be evaluated in a stepwise manner to allow for the unique contribution of each
variable to the model to be determined. Variables demonstrating significant effects at the .05 level were determined to satisfy their associated hypotheses. Following this step, the remaining hypotheses were tested using HLM 7, since they involve cross-level relationships within the hypothesized model.

In addition to the stepwise regression and hierarchical linear modeling methods used to test the hypothesized relationships, alternate procedures were utilized to test the mediating and moderating influences within the model. The mediating presence of HPWS and POB was evaluated using both Baron and Kenny (1986) and Hayes (2013) methods. First, the links between the hypothesized mediator and the outcomes were tested, followed by the link between each hypothesized predictor and the mediating variable. Next, the direct links between the predictors and the outcomes were measured, followed by the indirect links (X-->Y) while controlling for the mediator. Using Hayes' (2013) PROCESS utility, the results from these preceding mediation tests were confirmed, and effect sizes of the mediation were obtained. The moderating influence of VC with athletic directors was tested by entering interaction variables into the HLM model with each hypothetically moderated predictor (ELxVC and ALxVC) to determine if these variables alter the linkages between leadership type and POB.

For each of the relationships within the model, the variance in each dependent variable attributed to each predictor was partitioned into within- and between- group variance, provided that statistical significance was demonstrated. This was a necessary step to assess how much of the effect of each relationship was due to individual factors and how much was the result of group membership. Overall, the information acquired through the testing of this model allows for the contributions of each form of leadership
behavior on athletic department performance, as well as those of the additional considered factors, to be ascertained.
CHAPTER 5: Results

Preceding analysis of the data to test the hypothesized model relationships, item and scale descriptive statistics were obtained for all variables. The item descriptive data obtained from the athletic staff survey is shown in Table 3 in Appendix B, while the scale descriptives for all variables are detailed in Table 4. Individual item scores were highest for Q64 ("I can think of many ways to reach my current work goals", mean=4.21), from the positive organizational behavior scale, and Q12 ("Our athletic director opposes the use of unethical practices to increase performance", mean=4.18), from the ethical leadership scale. Scores were lowest on Q31 ("Employee salaries and rewards are determined by their performance", mean=2.23) and Q32 ("The department does not attach importance to the fairness of compensation/rewards", mean=2.50), both from the HPWS scale.

Overall survey scale means were highest for Ethical Leadership (3.79) and Positive Organizational Behavior (3.90), while they were lowest for HPWS (3.01) and Value Congruence with athletic directors (3.19). Of the five characteristics of ethical leadership, scores were highest for communicating values (3.93) and honesty (3.91), followed by accountability (3.86), role modeling (3.70), and fairness (3.55). The scale mean for authentic leadership was 3.47. Of the four components of authentic leadership (moral perspective, balanced processing, relational transparency, and self-awareness), scores were highest for the moral perspective of ADs (3.73), followed by perceptions of AD relational transparency (3.42), balanced processing (3.39), and self-awareness (3.02). Among the contextual predictors, the mean academic ranking of the universities participating in this study was 139th nationally, the mean athletic revenue was
$47,546,052 per academic year, and the mean value for athletic prestige (appearances on ESPN family of networks) was 19 per academic year. Among the performance outcome indicators, the mean annual Academic Progress Rate for the sample universities was 974.21 on a 1000 point scale, while the mean Director's Cup Points for the sample was 322.49.

Following the retrieval of descriptive statistics on the obtained athletics staff data set, a Harman's single-factor test was conducted as discussed above to account for potential common method biases. Since the survey scales used were obtained from prior research, a CFA was also used to verify the item loadings on each of the model constructs and to establish the overall fit of the model. Items that decrease model fit were removed from the analysis. Correlations between each of the latent constructs present in the final CFA model were calculated and are shown below in Table 11. Lastly, reliability analyses were conducted to verify the internal consistency of each scale in the instrument, with items hindering the level of reliability being removed from the data set. This helps to ensure that each scale measures its associated latent construct as expected.

Once all variables were entered into a factor analysis using one common factor using principal axis factoring (PAF), results showed that this single overarching factor only accounted for 37.4% of the variance in participant responses. After allowing for an unrestricted factor solution (unrotated), results yielded four factors with eigenvalues > 1 and a fifth with an eigenvalue of .992, collectively representing 50.7% of the variance in participant responses. This finding is fairly consistent with the presence of five latent factors within the data. These five factors are believed to be Ethical Leadership,
Authentic Leadership, HPWS, Positive Organizational Behavior, and Value Congruence, given the use of previously tested scales for each of these variables in the study instrument.

A CFA was subsequently conducted to determine the fit of the model and to verify item loadings on each of their associated constructs. This CFA model demonstrated somewhat acceptable fit, and item loadings were strong for each of the supplied constructs. Standardized item loadings on the Ethical Leadership factor ranged from .638 to .876, while loadings on the Authentic Leadership ranged from .645 to .797. Additionally, loadings on the HPWS factor ranged from .430 to .748, with loadings on POB ranging from .448 to .754, and item loadings on the Value Congruence factor ranging from .676 to .848. Although the model fits the data well, high correlations between several of the factors illustrate the similarity between the some of the constructs being measured. For instance, ethical leadership and authentic leadership are correlated at .82, suggesting that they are highly similar constructs. Similarly, ethical leadership and authentic leadership are also highly correlated with HPWS, at .71 and .67, respectively. The full CFA model, independent of the moderating variable value congruence, is shown below in Appendix C, Figure 4.

Model fit statistics are varied, with some fit indices used indicating good fit. While the chi-square goodness of fit test shows a model that does not fit the data well ($X^2 = 2659.37$, df=1316, $p=.000$), other fit indices refute this result. Additionally, the CFI and TLI statistics fail to indicate the presence of a good-fitting model (CFI=.893; TLI=.884), since values greater than .9 are indications of acceptable model fit. However, the Root Mean Square Error of Approximation (RMSEA) indicator (.053; [.050, .056])
and standardized root mean residual (SRMR) (.0408) each reveal a good-fitting model, since values less than .08 are indicative of good model fit for each index (Hu & Bentler, 1999). Reliability calculations were also conducted on all survey scales (EL, AL, HPWS, POB, and VC) to assess the level of internal consistency between items within each model construct. These statistics are shown in Appendix B, Table 7. Overall, all constructs demonstrated good reliability, with Cronbach's alpha (α) values ranging from .839 (POB) to .963 (EL).

After establishing model fit and construct reliabilities, but before the model could be analyzed using the obtained individual-level data, it was necessary for individual-level responses to be aggregated into their associated higher-level constructs wherever necessary. For the aggregated variables EL, AL, and HPWS, steps were taken to ensure their internal and external validity and to justify aggregation, in accordance with recommendations from Chen, Mathieu, and Bliese (2004) and others. For these analyses, the $r_{wg}$, ICC(1), and ICC (2) statistics were used. The $r_{wg}$ index supplies the level of agreement of multiple raters (within the same group) of a single variable as defined by the proportional reduction in error variance (LeBreton & Senter, 2008). Thus, values indicating complete within-group agreement are those approaching 1.00, while values approaching zero are indications of a complete lack of agreement among group members.

Although a cutoff value of $r_{wg} = .70$ has been cited considerably throughout the literature as being an acceptable level to justify aggregation, Harvey and Hollander (2004) suggest that this rule be eliminated in favor of "using benchmarks that are appropriate to each rating situation" (p. 4). In this case, both EL (.82) and AL (.81)
exceed the accepted .70 threshold, though HPWS (.59) did not. However, because individuals within each athletic department encompass a variety of positions at a variety of levels within each department, it is understandable why there may be fluctuating agreement between members of a particular department. Thus, it has been determined that, for all of consensus variables (EL, AL, and HPWS), $r_{wg}$ has indicated an acceptable level of agreement to warrant aggregating staff responses into department-level constructs.

In contrast to the $r_{wg}$ index, which is an indicator of within-group or interrater agreement, Intraclass Correlation Coefficients (ICCs) are indexes of interrater reliability in addition to providing information about agreement between raters (LeBreton & Senter, 2008). ICCs represent "the proportion of observed variance in ratings that is due to systematic between-target differences compared to the total variance in ratings" (LeBreton & Senter, 2008, p. 822). ICC(1) is known as the degree of agreement and consistency between the mean score obtained from the sample and the score expected from a rater that is randomly selected from the entire population (Bliese, 2000). ICC(2) refers to the reliability of mean ratings provided by the sample, which is assumed to be a subset of all possible raters. ICC(1) values obtained on all three variables indicated a moderate level of interrater agreement and reliability (EL=.32; AL=.26; HPWS=.21). Since ICC(1) values can be used as an estimate of effect size (LeBreton & Senter, 2008; Bliese, 2000), using parameters of .10 for low effect size, .30 for moderate, and .50 for high, these results indicate a relatively moderate effect size. ICC(2) values were high (EL=.76; AL=.67; HPWS=.63), demonstrating acceptable interrater reliability. Due to these results, it was determined that it would not be inappropriate to aggregate
responses on all three variables to the department level to continue data analysis and model testing.

In a final data preparation technique prior to analysis and hypothesis testing, standardized scores were calculated for all scale variables to align the data for each variable on the same scale (mean = 0, SD = 1), which are shown below in Table 8. After navigating the preceding steps in preparation for analysis of the study data with respect to the proposed model, hypothesis testing was completed according to the following steps. First, using the standardized scores computed above, stepwise regression analyses were run to test hypotheses containing variables contained within a single analytical level. In this case, this includes the following Level 2 hypotheses:

H2a (EL -----> HPWS), H2b (AL -----> HPWS), H7a (ATHREV -----> DCP), H7b (ATHREV -----> APR), H8a (ATHPRS -----> DCP), H8b (ATHPRS -----> APR), H9a (ACAREP -----> DCP), and H9b (ACAREP -----> APR).

Hypothesis 2 stated that Ethical Leadership (EL) behaviors practiced by the athletic director will positively affect athletic departments' implementation of High-Performance Work Systems (H2a), and that Authentic Leadership (AL) behaviors practiced by the athletic director will also positively affect athletic departments' implementation of High-Performance Work Systems (HPWS) (H2b). Using a stepwise regression with both EL and AL entered into the model simultaneously, Hypothesis H2a was confirmed, with results demonstrating a significant relationship between athletic director ethical leadership and the presence of HPWS within their athletic departments ($\beta = .658$; $t_{52} = 3.400$; p-value = .001). Hypothesis H2b was disconfirmed, as results failed to show a significant relationship between athletic director authentic leadership and the
presence of HPWS within their athletic departments (β = .110; t_{52} = .570; p-value = .571). However, when entered into the model by itself, AL was significantly related to HPWS (β = .690; t_{52} = 6.874; p-value < .001). This dramatic difference is perhaps related to the fact that EL and AL have been found to be highly correlated constructs, and are measuring similar affective responses among the participants. When EL was used as the sole predictor of HPWS, the relationship between EL and HPWS was significant and strengthened in comparison with the previous two predictor model (β = .730; t_{52} = 7.713; p-value < .001).

Hypothesis 7 stated that a university's athletic revenue will positively affect the overall athletic performance of its teams (H7a) and that a university's athletic revenue will positively affect the overall academic performance of its teams (H7b). When entered into a stepwise regression model with other level 2 variables, Hypothesis H7a was confirmed, with results demonstrating a significant relationship between each school's athletic revenue and DCP (β = .792; t_{1,54} = 5.660; p-value < .001). Hypothesis H7b was disconfirmed, as results failed to demonstrate a significant relationship between each school's athletic revenue and APR (β = -.061; t_{1,54} = -.343; p-value = .733).

Hypothesis 8 stated that a university's athletic prestige will positively affect the overall athletic performance of its teams (H8a) and that a university's athletic prestige will positively affect the overall academic performance of its teams (H8b). When entered into a stepwise regression model with other level 2 variables, Hypothesis H8a was disconfirmed, with results failing to show a significant relationship between each school's athletic prestige and DCP (β = .012; t_{1,54} = .131; p-value = .896). Hypothesis H8b
was also disconfirmed, as results failed to demonstrate a significant relationship between each school's athletic prestige and APR (\( \beta = 0.101; t_{1,54} = 0.848; p\text{-value} = 0.402 \)).

Hypothesis 9 stated that a university's academic reputation will positively affect the overall athletic performance of its teams (H9a) and also that a university's academic reputation will positively affect the overall academic performance of its teams (H9b). When entered into a stepwise regression model with other level 2 variables, Hypothesis H9a was disconfirmed, with results failing to show a significant relationship between each school's academic reputation and DCP (\( \beta = 0.139; t_{1,54} = 1.143; p\text{-value} = 0.260 \)). Hypothesis H9b was confirmed, as results demonstrated a significant relationship between each school's academic reputation and APR (\( \beta = 0.770; t_{1,54} = 4.992; p\text{-value} = <.001 \)).

The subsequent analyses were conducted using HLM 7 since they involve the testing of hypothesized cross-level relationships (Department \(\rightarrow\) Individual, or vice versa). Hypothesis 1a states that Ethical Leadership (EL) exhibited by university athletic directors will positively influence athletic staff members' Positive Organizational Behaviors (POB). Following analysis via HLM, Hypothesis 1a was confirmed, as a significant relationship exists between AD ethical leadership behaviors and staff members' POB (\( \beta = 0.447; t_{52} = 5.302; p\text{-value} = <.001 \)). Additionally, Hypothesis H1b states that Authentic Leadership (AL) exhibited by university athletic directors will positively influence athletic staff members' Positive Organizational Behaviors (POB). Hypothesis 1b was similarly confirmed, as a significant relationship exists between AD authentic leadership behaviors and staff members' POB (\( \beta = 0.452; t_{52} = 5.764; p\text{-value} = <.001 \)). Lastly, Hypothesis H1c states that High-Performance Work Systems (HPWS) present
within athletic departments will positively influence athletic staff members' Positive Organizational Behaviors (POB). Hypothesis 1c was similarly confirmed, as a significant relationship exists between the presence of HPWS within NCAA D-I FBS intercollegiate athletic departments and staff members' POB ($\beta = .445; t_{41} = 7.191; p\text{-value} = <.001$).

The remaining hypotheses were tested separately, since they involve both cross-level relationships and the presence of a mediating or moderating variable. Hypothesis 3 states that HPWS will at least partially mediate the relationship between ethical leadership (H3a) and authentic leadership (H3b) practiced by the athletic director and athletics staff members' Positive Organizational Behaviors (POB). Since this is a multi-level mediational model, this involved first testing HPWS as a level 2 predictor of POB ($M \rightarrow Y$), then testing each form of leadership's influence on both the mediator ($X \rightarrow M$) and the outcome variable ($X \rightarrow Y$), followed by the influence of the predictors on the outcome variable while controlling for the mediator, using the hypothesized model. This procedure yielded the following results: For the $M \rightarrow Y$ relation (HPWS--->POB, while controlling for the influences of EL and AL), a significant relationship was discovered ($\beta = .321; t_{52} = 2.152; p = .036$). Then, the $X \rightarrow M$ relationship was tested to determine the effect of each form of leadership on HPWS at the department level. Both ethical ($\beta = .414; t_{52} = 8.463; p\text{-value} = <.001$) and authentic leadership ($\beta = .456; t_{52} = 6.874; p\text{-value} = <.001$) expressed a significant relationship with the hypothesized mediator, HPWS. Next, the $X \rightarrow Y$ relationship was tested. Using random effects, ethical leadership yielded a significant effect on POB ($\beta = .447; t_{52} = 5.302; p\text{-value} = <.001$), as did authentic leadership ($\beta = .452; t_{52} = 5.764; p\text{-value} = <.001$). Finally, when testing the $X \rightarrow Y$ relationship while controlling for the mediator HPWS, both ethical ($\beta = .170; t_{52} = 2.028; p\text{-value} = .048$) and
authentic \( (\beta = .427; t_{46} = 6.943; p\text{-value} = .001) \) leadership were significantly related to POB.

In confirming these results using Hayes’ (2013) PROCESS utility, it was determined that, for ethical leadership, there was a significant indirect effect \( \beta = .137; \) \( [.015, .315] \) but the direct effect between EL and POB lacked significance \( \beta = .167; \) \( -.005, .339 \). Subsequently, for authentic leadership, both the direct \( \beta = .326; [.159, .423] \) and indirect effects \( \beta = .101; [.010, .247] \) were significant. Therefore, it can be concluded that the effects of ethical leadership on staff members’ POB is fully mediated by the existence of HPWS implementation within their departments, while the effects of authentic leadership on POB was partially mediated by HPWS, providing support for Hypotheses 3a and 3b. The effect sizes for these two mediations was \( .314; [.133, .502] \) for the mediation of HPWS on the relationship between EL and POB, and was \( .334; [.150, .549] \) for the mediation of HPWS on the relationship between AL and POB.

Hypothesis 4 states that athletics staff members' Value Congruence (VC) with their athletic director will moderate the link between athletic director ethical leadership (H4a) and authentic leadership (H4b) behaviors and staff members’ POB. Using HLM with the moderation accounted for using interaction variables between VC and each form of leadership, Hypothesis 4a was disconfirmed, as a significant relationship was not found between AD ethical leadership behaviors and staff members' POB \( \beta = -.012; \) \( t_{46} = 0.116; p\text{-value} = .908 \). Additionally, Hypothesis H4b states that staff members' Value Congruence (VC) with their athletic director will moderate the link between AD Authentic Leadership (AL) and staff members’ POB. Hypothesis 4b was also disconfirmed, as the relationship between AD authentic leadership behaviors and staff members' POB was
not significantly moderated by value congruence between the AD and staff (\( \beta =-.025; t_{48}=0.270; \text{p-value}=.789 \)). Each of these outcomes provides evidence that VC with athletic directors has no measurable effect on the association between each form of leadership and staff members' POB.

Next, the department-level outcomes were tested to verify the hypotheses that athletic and academic performance of high-level intercollegiate athletic departments are directly tied to staff members' engagement in positive organizational behavior. Hypothesis 5 stated that staff members' POB will positively influence the athletic performance (H5a) and academic performance (H5b) of NCAA Division I FBS athletic departments. Hypothesis 5a was disconfirmed, as a significant relationship was not found between staff members' POB and department athletic performance (DCP) (\( \beta =-.100; t_{52}=-1.157; \text{p-value}=.253 \)). Additionally, Hypothesis 5b was similarly disconfirmed, as a significant relationship did not exist between staff members' POB and department academic performance (APR) (\( \beta =-.036; t_{52}=-.336; \text{p-value}=.739 \)). Thus, the specific hypothesized model of leadership behaviors and HPWS leading to followers' POB, which directly contributes to the athletic and academic performance of athletic departments, could not be verified as representing the process leading to performance within high-level intercollegiate athletic departments. In an additional analysis, the direct links between EL, AL, and HPWS with both APR and DCP were tested, with no significant relationships being found, as discussed below.

Hypothesis 6 states that POB will partially mediate the relationship between ethical leadership (H6a) and authentic leadership (H6b) practiced by the athletic director, and the presence of HPWS within athletic departments (H6c) and athletic
department performance. For the M-->Y relation (POB-->APR/DCP), no significant relationship was discovered, as mentioned above. Then, the X-->M relationship was tested for each of the three predictors, EL, AL, and HPWS. Results showed that ethical (\( \beta = .447; t_{52} = 5.302; p\text{-value} = .001 \)) and authentic leadership (\( \beta = .452; t_{52} = 5.764; p\text{-value} = .001 \)), as well as HPWS (\( \beta = .445; t_{41} = 7.191; p\text{-value} = .001 \)) each expressed a significant relationship with the hypothesized mediator, POB. Next, the X-->Y relationship was tested. EL yielded no significant effect on DCP (\( \beta = .174; t_{52} = 1.302; p\text{-value} = .198 \)) or APR (\( \beta = .088; t_{52} = 0.646; p\text{-value} = .521 \)). Similarly, AL also yielded no significant effect on DCP (\( \beta = .105; t_{52} = 0.750; p\text{-value} = .457 \)) or APR (\( \beta = -.149; t_{52} = -1.096; p\text{-value} = .278 \)). This was followed by HPWS, which also yielded no significant effect on DCP (\( \beta = .142; t_{52} = 1.051; p\text{-value} = .298 \)) or APR (\( \beta = .032; t_{52} = 0.233; p\text{-value} = .817 \)).

Consequently, in the absence of any significant M-->Y or X-->Y relationships, it can be concluded that POB does not significantly mediate a relationship between EL, AL, HPWS and athletic and academic performance in athletic departments. Thus, Hypotheses 6a, 6b, and 6c are all disconfirmed.

Next, for the confirmed multi-level hypotheses (H1a, H1b, H1c), the variance explained by the predictive variables was subsequently partitioned into within and between-group effects, to determine whether responses differed among members of the each athletic department staff or if these differences could be attributed to department membership. For the direct cross-level relationships, the large majority of the variance in responses was attributed to within-group differences, as shown below in Table 9.

Given the results obtained from hypothesis testing, the original hypothesized model was edited to reflect the significant relationships discovered between the study...
constructs, shown in Figure 5. As stated previously, the key linkages between POB and the selected athletic department performance measures could not be established, thus leading to a model that contains disconnections between the predictive constructs and these selected outcomes, DCP and APR. These missing connections may be attributable to several potential causes, which will be discussed in the sections to follow.
CHAPTER 6: Discussion

It is essential for research examining organizational behavior to take into account the attributes and practices of organizational leaders, since leaders develop organizational strategy and serve as models for their organizations. In this manner, leaders can influence the organization both at the macro and micro scales. Put differently, leaders can affect broad strategy for the organization while working with subordinates to create a work atmosphere that encourages and supports behaviors that contribute to the organizational collective. Therefore, studies that attempt to explain the mechanisms through which leaders can best influence their organizations are valuable in deepening our knowledge of, and understanding in the scope of the impact of leadership on organizational performance, particularly, in the context of intercollegiate athletics.

Conversely, the contributions of certain types of leadership (i.e., authentic and ethical) behaviors practiced by NCAA Division I (FBS) athletic directors toward the performance of their athletic departments were examined. This type of institutional leadership was hypothesized to bear a primary influence on the athletic and academic productivity of student-athletes, since athletic directors contribute to the formation of department culture and establish expectations for everyone within the department to achieve. Looking at both athletic and academic performance of athletic departments provides a unique context for the effects of organizational leadership, making the intercollegiate athletic department unique from other forms of business and even other sport organizations. Intercollegiate athletic departments, in order to maintain a level of success relative to their competition, must satisfy both athletic and academic
benchmarks, in addition to succeeding in other traditional business functions such as revenue generation. What makes intercollegiate athletics a unique environment is that these additional organizational goals, performing well on the playing field and in the classroom, can run counter to one another. Because of these added dimensions, intercollegiate athletic departments are particularly complex organizations, and thus their need for effective leadership perhaps trumps that of other comparable organizations in other industries.

In order to evaluate leadership’s effects on these large-scale and complex sport organizations, AD ethical and authentic leadership behaviors were assessed using input from administrative staff of 55 NCAA Division I FBS athletic departments from across the United States. In addition, three additional department-level variables were also included in the model. The study attempted to ascertain how these leadership predictors affect performance when considering key organizational factors such as athletic revenue, athletic prestige, and the university’s academic reputation all at the same time using multi-level analytical techniques. Results pertaining to the studied leadership variables were interpreted using an upper echelons theory (Hambrick & Mason, 1984) approach, which involves taking into account the critical contributions that organizational leaders make toward determining the overall success or failure of their enterprises. UET explains that organizational leaders generally have the most influence within any organization, and that their experiences, values, and personal attributes contribute heavily toward the culture, strategy, and decision-making developed within their organizations (Hambrick & Mason, 1984). These leader characteristics influence how they analyze problems and develop solutions to address them (Hambrick, 2007), which
in turn, affects others within the organization either through leader directives or through role modeling. Thus, examining these study results through a UET lens will perhaps shed light on the discoveries made during this investigation of the most senior leaders of several high-profile intercollegiate athletics organizations.

Study findings acquired through this research effort demonstrated that AD ethical leadership behaviors are each independently tied to both the presence of HPWS within athletic departments and to the prevalence of staff members' positive organizational behaviors (POB) within those departments. Given our understanding of ethical leadership as being comprised of behavior that demonstrate a leader's altruism, compassion, honesty, fairness, and justice (Yukl, et al., 2013), this is an expected result. These findings agree with those of Brown et al. (2005), Mayer, et al. (2009), and others who discovered the connection between ethical leadership and followers' positive behaviors in response, and echo the conclusions drawn by Doherty and Danylchuk (1996) who established links between similarly positive leadership behaviors and follower satisfaction and commitment.

Furthermore, the discovered connection between ethical leadership and HPWS within athletic departments was also expected. The characteristics of ethical leadership describe an individual who demonstrates care and concern for others, in addition to caring about performance (Brown, et al., 2005), and who avoids doing harm to others (Kanungo, 2001). HPWS are structures within an organization that exist to reward employees fairly for their work, to establish fit between the organization and its workers, and to develop employee skill-sets to allow both parties to experience benefits from their efforts. Thus, it seems logical that these human resource structures within an
organization would be implemented or maintained by leaders whose values align with the purposes of HPWS.

In addition, findings showed that AD authentic leadership behaviors are also linked with staff members’ POB and with HPWS. This finding coincides with those of Walumbwa, et al. (2010), who concluded that authentic leaders can drive positive behavior among employees. This positive employee response has been related to authentic leaders’ practices of information sharing and transparency (Walumbwa, et al., 2010), and the cultivation of trust between leaders and staff (Mayer & Gavin, 2005; Organ, et al., 2006). Authentic leadership's connection to HPWS is understandable as well, since authentic leadership describes behaviors from an executive who possesses an internalized moral perspective (Gardner, et al., 2005) and demonstrates balanced processing when making decisions (Walumbwa, et al., 2010). Both of these authentic leadership attributes should be co-present in organizations that treat employees equally and fairly as valued contributors to organizational success, explaining the connection between AL and HPWS.

An interesting discovery derived from these initial hypothesis tests revealed that, when both EL and AL were entered into the model together, only EL demonstrated a significant relationship with HPWS. Similar findings relative to these two constructs resurfaced consistently throughout the analysis. This indicates that EL and AL, despite claims from past researchers that they are unique constructs, are essentially measuring very similar perceptions of leaders among staff members. Thus, although prior researchers have dissected authentic leadership into four components, three of which (self-awareness, relational transparency, and balanced processing) are regarded as
minimally related to ethical leadership, the results obtained here refute the presence of two distinct leadership constructs. One possible explanation for this finding could reflect a phenomenon that is exclusive to athletics. Another possibility could be that each of these three authentic leadership behaviors could be regarded as "doing the right thing" when leading a collective. This may be especially true in large, high-profile organizations such as the major intercollegiate athletic departments studied here.

Additionally, it was hypothesized that the presence of HPWS within athletic departments would serve as a mediator between AD leadership behaviors and the engagement in POB by athletics staff. HPWS are a set of human resource practices that are designed to maximize the investment in and productivity of people (Way, 2002; Tomer, 2001). Internal processes regarded as comprising HPWS include ensuring the employment security of workers, being selective for the right fit when hiring, decentralizing decision-making and creating autonomous workgroups, providing competitive performance-based compensation, providing extensive training opportunities, reducing social and structural barriers between organizational levels, and providing continual feedback related to the organization's performance (Pfeffer, 1998; Way, 2002). These processes, by providing evidence of an organization's investment in its individuals, have been often associated with positive responses on the part of employees, including increased commitment, satisfaction, and positive behavior at work.

Using mediation testing techniques established by Baron and Kenny (1986), it was determined that HPWS fully mediates the linkage between EL and POB and partially mediates the relationship between AL and POB. This is a notable finding, since
the conclusion can be reached that ethical and authentic leadership behaviors practiced by ADs do affect employees in a positive manner, but the presence of HPWS within athletic departments plays a significant role in forming these connections. Thus, the establishment of human resource practices that are focused on enhancing person-organization fit and on the development of employee skill sets drives staff members to exhibit POB on behalf of their athletic departments. Results showed that ethical and authentic leadership each motivate employees to exhibit POB within their departments, but the presence of HPWS fully explains the relationship between athletic directors’ EL and staff POB, while HPWS enhances the connection between AL and POB. This outcome is believed to be the result of the high degree of correlation discovered between the leadership constructs and HPWS. HPWS within this type of sport organization may provide athletics staff members with evidence that their organization values their contributions by investing in their development, which can be a reflection of their ethical and/or authentic approaches to leadership. Therefore, while each form of leadership influences a positive outcome with regard to increasing staff POB, implementing HPWS along with consistent practices of ethical and authentic leadership by ADs can exert an even more pronounced positive effect on staff behavior.

This study also helped to clarify the role of value congruence with leadership in determining staff members' POB. Athletics staff members' perceptions of their value congruence with the athletic director was expected to exert a moderating influence. It was hypothesized that perceptions of common values with the athletic director may provide additional motivations for employees to respond positively to the ethical and authentic leadership practices of their superiors, since higher levels of value
congruence with leaders can drive employees to engage in behavior in compliance with their common values (Avolio & Gardner, 2005). Conversely, the opposite may also be true, in that employees who perceive a dearth of value congruence with their leaders may respond negatively. In this study, value congruence did not significantly moderate the relationships between EL and POB and AL and POB. Thus, although it was expected that the more a commonality or alignment of values exists between followers and leaders, the more likely the followers will be positively affected by the leader’s behavior, this was not discovered among the current sample of athletic department staff.

The examination of how leadership influences follower outcomes is not a new endeavor by any means, as the effects of leadership behavior on followers have been studied extensively in the past. However, the findings presented here extend the understanding of ethical and authentic leadership practices, and of high-performance work systems, in an intercollegiate athletics setting. Given the constant ethical discourse surrounding college sport, the presentation of further evidence that demonstrates the multitude of benefits obtained from taking ethical and authentic approaches to leadership is critical in motivating those in leadership roles to adopt these practices. Despite this need, there are few previous research efforts within sport management that have examined how ethical or authentic leaders create work environments in sport organizations that enable employees to maximize their individual productivity and development.

However, the primary undertaking in this research was to investigate potential connections between these styles of leadership and quantifiable performance outcomes
within athletic departments. Using academic progress rate (APR) and Learfield Director's Cup points (DCP) as representations for academic and athletic performance, respectively, no significant connections between staff members' POB and these performance metrics could be established. In supplementary analyses, significant connections between EL, AL, and HPWS and each performance outcome also were not found. These results may be attributable to any of a number of possible causes. First, it seems reasonable that the selection of APR and DCP as indices of academic and athletic performance could have contributed to the study outcomes. However, the results of hypothesis testing related to the contextual variables used in the model seem to refute this possibility, as will be discussed below. Secondly, there could exist other latent factors that have not been analyzed here but may exert a significant effect on those that were investigated in the model. For instance, future studies could test for the presence of other mediating influences (such as OCB, organizational commitment, or group efficacy) that may bridge the divide between AD leadership and team performance on the field and in the classroom. Lastly, the possibility exists that AD leadership behaviors simply do not cascade down to the point where they influence the productivity of student-athletes. Despite the fact that AD leadership clearly affects staff members significantly, staff are direct subordinates of administrative leaders, and are perhaps more regularly affected by the policies and behaviors of executive leadership than are student-athletes.

In addition to examining the effects of the above-mentioned intraorganizational latent factors, the model tested via this study also took into account other department-level factors that are known to have a substantial effect on athletic departments. For
instance, Hypothesis 7 stated that a university’s athletic revenue will positively affect the overall athletic performance of its teams (H7a) and that a university's athletic revenue will positively affect the overall academic performance of its teams (H7b). There have been few empirical investigations into how the revenue generated by an athletic departments contributes to its athletic success. Yet, there is a widespread assumption that institutions that generate higher levels of revenue are more successful than their competitors who accrue less annual athletic revenue. As expected, athletic revenue was a significant contributor to the athletic performance of the departments studied, and had no significant effect on academic performance. Those universities that generate substantial revenue and with abundant resources at their disposal are those that excel in their athletic endeavors compared with their less fortunate competitors. This is understandable, since revenue provides any organization with the ability to allocate funds toward attracting and developing the highest-level student-athletes, coaches, and administrators. A connection between athletic revenue and academic performance, however, could not be established, revealing that the academic performance of a university’s student-athletes is the result of other factors.

Continuing with other department level variable tests, Hypothesis 8 stated that a university’s athletic prestige will positively affect the overall athletic performance of its teams (H8a) and that a university's athletic prestige will positively affect the overall academic performance of its teams (H8b). It was believed that athletic prestige would affect these outcomes since prestige enables universities to leverage their reputation to attract top-quality student-athletes and coaches, and that the attraction of highly-effective student-athletes and personnel would contribute positively to their athletic
performances, and that there would be an ancillary benefit to their academic performances as well. Interestingly, athletic prestige produced no significant effect on either performance outcome. This may result from a number of possible factors. For instance, it is possible that the selection of a variable to represent athletic prestige may be improved if there are better representations of athletic prestige than the frequency of recent ESPN broadcasts, since several external factors contribute to the decisions to air events on this particular family of sports networks. Also, it is plausible that athletic performance actually exhibits a reverse effect on athletic prestige. The more accomplishments that high-profile sport teams are able to achieve, the more their reputation among sport fans and the athletics community will improve, thus leading to an accumulation of prestige associated with athletics at those universities. Because of this likely relationship, any possible effects of athletic prestige on athletic performance may have been obscured by the strong reverse influence of performance on prestige.

Finally, Hypothesis 9 stated that a university’s academic reputation will positively affect the overall athletic performance of its teams (H9a) and also that a university’s academic reputation will positively affect the overall academic performance of its teams (H9b). An institution’s academic reputation was believed to allow it to recruit students (including athletes) with the qualifications needed to excel in a competitive academic environment. However, it was also hypothesized that academic reputation would contribute to athletic performance, since possessing a sterling academic reputation would be effective in attracting high-caliber athletes who also have long and short-term educational and career goals outside of competitive sport.

Again, as expected, the academic reputation of a university was found to strongly
influence the academic performance of athletic departments. This finding is perhaps evidence of the ability of high-profile academic institutions to attract both high-performing traditional students and student-athletes who have long-term career goals outside of athletics. It may also allude to the demands of high-caliber academic institutions, which may influence student-athletes to dedicate a larger percentage of time to class-related endeavors to remain competitive with other students, or to the fact that the highest-caliber universities recruit those student-athletes that demonstrate the ability to excel in both the athletic and academic arenas.

Another interesting discovery obtained from this research involved the proportion of within-group differences to between-group differences on perspectives of AD leadership. Analysis showed that the large majority of the variance in responses was attributed to within-group (within athletic department) differences, rather than to differences between departments. This illuminates the notion that department-level factors, such as EL, AL, and HPWS, affect staff members in a consistent manner in sport organizations, regardless of the organization in question or other organizational factors influencing this effect. Although, this finding also implies that there may exist a wide range of perceptions of a particular leader from different members of a particular organization, possibly resulting from varying degrees of contact with the leader or the prospect of disparate treatment by the leader.

This result may also extend from inconsistent behavior on the part of the leader relative to the study constructs of ethical or authentic leadership. Additionally, leaders may influence staff members in different ways depending upon each member's role in the organization or their position within the organizational hierarchy. Depending upon
other organizational factors such as culture, internal structures, or communication methods, some staff members may perceive the leader's behaviors more readily than others. Those at lower levels of an organization, for example, may experience limited contact with executive-level leaders and may interpret their traits and behaviors inaccurately based upon this limited perspective. The lack of between-group variability, however, indicates that these constructs behave similarly across intercollegiate athletic departments, which enables broad-level discussion of their effects for this type of industry and work environment.
CHAPTER 7: Implications, Limitations, and Future Directions

This study should provide greater clarity to scholars in the field of sport management and leaders in intercollegiate athletics regarding issues related to the role of athletic director leadership in driving department performance on the field and in the classroom. The model tested here may add significant contributions to the collective understanding of how leadership affects performance within a sport organization. For athletics leadership, the findings resulting from this research may prove valuable in helping to identify the role of certain types of leadership behavior on the performance of college athletic programs. Thus, the proposed model may provide athletics' leaders with the ability to better understand and respond to institutional pressures in ways that will inspire their student-athletes to begin to maximize their athletic and academic potential.

The results obtained here demonstrate connections between the ethical and authentic leadership behaviors of athletic directors and the behaviors of athletics staff members in response. In addition, links between the presence of HPWS within athletic departments and staff members' positive behaviors were also found. These findings carry significant implications for college athletic directors and university leaders. Adopting ethical and authentic leadership behaviors can motivate employees to develop positive behaviors that put the needs and goals of the organization first, maximizing their level of engagement, self-development, and work productivity. Therefore, athletics leaders seeking to activate these behaviors in their own administrators should consider examining their approaches to leadership and integrating those aligned with the principles of ethical and authentic leadership. From a practical perspective, the results suggest that colleges and universities should exert much effort, particularly during the
hiring stage, to ascertain the extent to which their future athletic leaders (e.g., athletic director) are authentic and ethical. The nature of the personal characteristics associated with these types of leadership (i.e., ethical and authentic) can be carefully investigated via interviews with third parties that worked under prospective candidates’ leadership. Consistent with upper echelons theory, these personal attributes may be used as proxies for leadership behaviors that will enable high-quality outcomes, university leaders charged with selecting individuals for these highly influential positions would be advised to consider this approach.

Another important detail probed by this research is the utility of multi-level models in evaluating organizational behavior. Though the majority of existing studies employ single-level models when examining organizations, the use of a multilevel framework to explain phenomena within sport may influence future sport management researchers to adopt a similar approach that will allow for multi-level analyses to become more prevalent among the sport management research community. A greater shift of focus in this direction by sport management researchers will enable future investigations to more accurately depict real-world phenomena as they are occurring within sport organizations. New and innovative approaches to more comprehensive models that aim to explain these complex organizational relationships from a systems’ perspective will undoubtedly deepen our knowledge of sport organizations, and how leadership induces and impacts behaviors that lead to desirable organizational outcomes. Furthermore, embracing the value that multilevel research can contribute to our understanding of sport organizations can motivate investigators to revisit earlier research findings established from single-level analyses and re-examine them using
more representative organizational models. These practices would have the potential of
strengthening existing theory and, in turn, could positively affect the predictive ability of
studies that integrate these theories into future investigations.

Multilevel analyses open up the opportunity to simultaneously consider multiple
influences on outcomes of interest. The particular model presented here was only
restricted by the need to forge a balance between comprehensiveness and parsimony
(Taras, Rowney, & Steel, 2009). Including too many variables in a single framework,
even though they may be noteworthy, could cloud the research findings and inhibit
discovery. However, this limitation opens up the opportunity for future research to
integrate additional constructs into the model that could have more explanatory power
than those utilized here. For instance, a follow-up study could investigate the presence
of intermediary variables to resolve the disconnected relationship between athletics staff
members' positive organizational behavior and the department-level performance
outcomes. Discovering these essential missing links can help us to understand the
mechanisms through which employees' work compiles to affect critical organization-
level productivity, which could assist organizational leaders to design strategies to
optimize these elements within their organizations.

Another substantial limitation was encountered when a large percentage of
potential participants elected to opt out of the study upon needing to identify their
employing institutions. This result, coupled with feedback provided by some staff
members who dropped out, led to the conclusion that there were issues of trust in the
research process or perhaps fear of exposure to the AD or other athletics or university
administrators. The 40% dropout rate is another piece of evidence revealing the divide
between officials in intercollegiate athletics and academic researchers. Ideally, research findings would offer value to real-world organizations and provide them with methods to improve their performance. Future research efforts could examine this divide and ascertain pathways that could be explored to bridge the gap between sport management research and some of the most prominent practitioners in the sport industry.

Future studies could also potentially test the hypothesized model using data obtained from a different participant sample within athletics, such as team coaches or the student-athletes themselves. Because each of these groups certainly have more direct influence than administrators on the performance of their teams and, as a result, on their athletic departments, perhaps one of these groups would provide more relevant data that would lead to a more comprehensive confirmation of the model. Additionally, alternate indices for the department performance outcomes could be used in a future research endeavor in this area. For instance, self-referenced performance measures could be derived from the current sample of administrators, or from a new sample of coaches or student-athletes. Alternately, the selection of other published data to represent athletic and academic performance in lieu of DCP and APR, such as overall winning percentage and graduation rate, could perhaps produce different results from those obtained in this study that could further validate aspects of the proposed model.

Future studies could also consider examining different forms of leadership than the ones studied here, to determine the most effective leadership style within athletics organizations. The possibility certainly exists that other leadership approaches may be more appropriate for this type of high pressure environment, and other types of leader
behaviors may motivate more positive responses among athletics staff members. Also, the specific components of HPWS could be investigated in more detail in the future, to learn more about which aspects of these human resource management strategies are most desired by employees in intercollegiate athletics. Emphasizing these systems within organizations could, therefore, constitute another manner in which leaders could produce more gratified and effective athletics administrators.

Another element that should be taken into consideration in future research is the influence of time on the hypothesized model. A repeated measures approach in which data is collected at several equally spaced time points would be optimal for truly understanding how the cascading effects of leadership within the department drive its performance over an extended period. Thus, a future endeavor that considers the effect of time on these performance outcomes would help to better understand the importance of leadership to college athletic departments, especially for those encountering significant adverse events that signal the need for long-term effective leadership to overcome them.
CHAPTER 8: Conclusion

No organization can be successful in the absence of quality leadership. Leaders set the tone for organizations, and also communicate the mission, values and goals to organization members. Leaders also supply organization members with guidelines, structures, and procedures to help the organization accomplish these goals and fulfill its mission. While effective leadership is an essential element of any organization, it is especially important to organizations operating within a continually evolving landscape. Leaders are responsible for preparing organization members for the future, implementing strategies to help the organization overcome adversity, and, once on a productive path, leaders work to cement new values and procedures into a new, more effective standard for the organization.

These same notions apply to leadership within sport organizations. The internal and external pressures facing these organizations, as well as their diverse stakeholders, require that leaders develop management strategies and employ behaviors that can maintain their organizations' long-term competitiveness. The theoretical model proposed in the current study, specifically, sought to determine how certain leadership behaviors exhibited by intercollegiate athletic directors can influence departmental performance. As prior studies (Brown, et al., 2005; Luthans & Avolio, 2003) have demonstrated the benefits of ethical and authentic leadership in developing employees and successfully overcoming negative events, these leader behaviors served as the predictive constructs of interest in this research.

As Waldman, Javidan, and Varella (2004) have declared, management research is primed to examine previously underexplored dimensions of leadership, including from
an upper echelons perspective. The primary principles of the upper echelons approach involve taking a view of leaders’ strategic decision-making as being the function of their values and cognitive attributes, and understanding that these attributes may be estimated by other more perceptible indicators such as their personal attributes, and that these factors provide direct and indirect influences on the performance of the organizations they lead (Carpenter, Geletkanycz, & Sanders, 2004). Studies integrating an upper echelons approach can add value to the management literature by understanding more about how leader attributes and leadership styles influence essential organizational outcomes. This type of research also enables investigators to combine micro- and macro-level perspectives to better understand how leadership influences phenomena within complex nested organizations (Waldman, et al., 2004).

Using this understanding as the base, a hypothesized conceptual model was developed to assess the effects of the leadership provided by institutional leaders on the performance of intercollegiate athletic departments as measured by academic and athletic metrics. This model also takes a multilevel approach, considering a variety of influences on these outcomes in addition to institutional leadership. The combination of using an upper echelons perspective to examine leadership within a multilevel framework is rare in the management literature and would constitute a new design in sport management research that could strengthen the literature by providing more comprehensive and relevant research findings. Thus, through the development of more complex models of leadership and organizational behavior, such as the one advanced here, a more solid understanding of leadership dynamics within sport organizations may
be reached that will lead to the ability of academics to provide more practical recommendations for organizational leaders in real-world settings.

Through the development of a multilevel framework for this task, leadership influences alongside complementary predictors of athletic department performance were able to be evaluated simultaneously. Specifically, this study examined the effects of athletic directors' leadership behaviors on the academic and athletic performance of student-athletes, while also taking into account the department's revenue and prestige and the academic reputation of the university to which it belongs. Though no concrete connections between the studied forms of athletic director leadership, ethical and authentic leadership, and student-athlete performance could be made at this time, results did demonstrate strong associations between these forms of leadership and the positive organizational behaviors of athletic department employees. Furthermore, the existence of high-performance work systems within athletic departments was also found to be connected to the positive behavior of staff in support of their departments, suggesting that investments in the welfare and development of employees can motivate these individuals to strive for excellence in working toward organizational goals. However, some of the additional factors affecting athletic departments were able to be linked to the selected performance outcomes, as athletic revenue was found to influence athletic performance and academic reputation was linked with academic achievement for the sample of major NCAA D-I athletic departments studied here.

Though only these additional studied variables could be linked with the athletic and academic performance outcomes serving as the focus of this research, the findings do advance our collective understanding of phenomena taking place within athletic
departments. Results may have utility for those seeking to learn more about how leadership influences individuals working in athletic departments or other high-profile sport organizations. In addition, future sport management researchers conducting leadership studies, or those who desire to further advance the adoption of multilevel frameworks within the field, may also derive value from this research by employing research designs similar to the one presented here. In these manners, this study is able to offer a lasting contribution to those seeking to refine sport leadership theory and those interested in advancing cutting-edge research methods within the sport management discipline.
APPENDIX

A. INSTRUMENTS

Instrument 1

_Ethical Leadership Questionnaire (ELQ) - (Yukl, 2010)_

1. Our athletic director shows a strong concern for ethical and moral values.
2. Our athletic director communicates clear ethical standards for members.
3. Our athletic director sets an example of ethical behavior in his/her decisions and actions.
4. Our athletic director is honest and can be trusted to tell the truth.
5. Our athletic director keeps his/her actions consistent with his/her stated values ("walks the talk").
6. Our athletic director is fair and unbiased when assigning tasks to members.
7. Our athletic director can be trusted to carry out promises and commitments.
8. Our athletic director insists on doing what is fair and ethical even when it is not easy.
9. Our athletic director acknowledges mistakes and takes responsibility for them.
10. Our athletic director regards honesty and integrity as important personal values.
11. Our athletic director sets an example of dedication and self-sacrifice for the organization.
12. Our athletic director opposes the use of unethical practices to increase performance.
13. Our athletic director is fair and objective when evaluating member performance and providing rewards.
14. Our athletic director puts the needs of others above his/her own self-interest.
15. Our athletic director holds members accountable for using ethical practices in their work.

_HPWS (Chuang & Liao, 2010)_

1. The department selects the best all around candidates when recruiting employees.
2. Internal candidates have the priority for job openings.
3. Qualified employees have good opportunities for promotion.
4. The department provides an orientation program for newcomers to learn about our institution.
5. The department continuously provides training programs.
6. The department invests considerable time and money in training.
7. If a decision made might affect employees, the department asks them for opinions in advance.
8. Employees are often asked to participate in work-related decisions.
9. Employees are allowed to make necessary changes in the way they perform their work.
10. The department does not share information with employees. (R)
11. Performance appraisals provide employees feedback for personal development.
12. Performance appraisals are based on multiple sources.
13. Performance appraisals are based on objective, quantifiable results.
14. Supervisors do not get together with employees to set their personal goals. (R)
15. On average the pay level (including incentives) of our employees is higher than that of our competitors.
16. Employee salaries and rewards are determined by their performance.
17. The department does not attach importance to the fairness of compensation/rewards. (R)
18. Employees receive monetary or nonmonetary rewards for great effort and good performance.
19. The department considers employee off-work situations (family, school, etc.) when making schedules.
20. The department cares about work safety and health of employees.
21. The department cares about work–life balance of employees.
22. The department has formal grievance procedures to take care of employee complaints or appeals.

Instrument 2

*Authentic Leadership Questionnaire (ALQ) (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008)*

(SA= self-awareness; MP = moral perspective; BP = balanced processing; RT = relational transparency)

1. Our athletic director's actions reflect his/her core values. (MP)
2. Our athletic director seeks others’ opinions before making up his/her mind. (BP)
3. Our athletic director openly shares his/her feelings with others. (RT)
4. Our athletic director does not allow group pressure to control him/her. (MP)
5. Our athletic director listens closely to the ideas of those who disagree with him/her. (BP)
6. Our athletic director lets others know who he/she truly is as a person. (RT)
7. Our athletic director seeks feedback as a way of understanding who he/she really is as a person. (SA)
8. Other people know where our athletic director stands on controversial issues. (MP)
9. Our athletic director does not emphasize his/her own point of view at the expense of others. (BP)
10. Our athletic director rarely presents a “false” front to others. (RT)
11. Our athletic director's morals guide what he/she does as a leader. (MP)
12. Our athletic director listens very carefully to the ideas of others before making decisions. (BP)
13. Our athletic director admits his/her mistakes to others. (RT)
Value Congruence with Leader (Becker, Billings, Eveleth, & Gilbert, 1996)

1. If the values of our athletic director were different, I would not be as attached to our athletic department.
2. My attachment to our athletic department is primarily based on the similarity of my values and those represented by our athletic director.
3. Since starting this job, my personal values and those of our athletic director have become more similar.
4. The reason I prefer our athletic director to others is because of what he/she stands for, that is, his/her values.

Positive Organizational Behavior (Luthans, Youssef, & Avolio, 2007)

1. I feel confident analyzing a long-term problem to find a solution.
2. I feel confident in representing my work area in meetings with management.
3. I feel confident contributing to discussions about the company’s strategy.
4. I feel confident helping to set targets/goals in my work area.
5. I feel confident contacting people outside the company (e.g., suppliers, customers) to discuss problems.
6. I feel confident presenting information to a group of colleagues.
7. If I should find myself in a jam at work, I could think of many ways to get out of it.
8. At the present time, I am energetically pursuing my work goals.
9. There are lots of ways around any problem.
10. Right now I see myself as being pretty successful at work.
11. I can think of many ways to reach my current work goals.
12. At this time, I am meeting the work goals that I have set for myself.

Demographic Items

1. What is your gender? (Male/Female)
2. For how long have you been working in intercollegiate athletics?
3. How would you describe your current employment status? (Full-time; Part-time; GA; Intern; Other)
4. For how long have you been working for your current athletic department?
5. For how long have you been working under your current athletic director?
B. TABLES

Table 1

Variable List Indicating Levels of Measurement and Analysis

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Sample (N= 363) 51.1% Male, 48.9% Female

9.90 years 7.80 years 4.85 years

Table 3

*Item Descriptives.*
Table 4

Scale Descriptives

| Q28 | 362  | 1.00 | 5.00 | 3.28 | .981 | .963 |
| Q29 | 362  | 1.00 | 5.00 | 2.58 | 1.156 | 1.336 |
| Q30 | 363  | 1.00 | 5.00 | 2.23 | 1.022 | 1.044 |
| Q31 | 363  | 1.00 | 5.00 | 2.50 | 1.076 | 1.157 |
| Q32 | 360  | 1.00 | 5.00 | 3.14 | .925 | .855 |
| Q33 | 363  | 1.00 | 5.00 | 2.70 | 1.217 | 1.480 |
| Q34 | 362  | 1.00 | 5.00 | 2.99 | 1.123 | 1.260 |
| Q35 | 362  | 1.00 | 5.00 | 3.83 | .971 | .942 |
| Q36 | 362  | 1.00 | 5.00 | 3.28 | 1.162 | 1.350 |
| Q37 | 362  | 1.00 | 5.00 | 3.30 | 1.054 | 1.112 |
| Q38 | 309  | 1.00 | 5.00 | 3.93 | .763 | .582 |
| Q39 | 310  | 1.00 | 5.00 | 3.50 | .941 | .885 |
| Q40 | 308  | 1.00 | 5.00 | 3.25 | .981 | .962 |
| Q41 | 308  | 1.00 | 5.00 | 3.57 | .964 | .930 |
| Q42 | 310  | 1.00 | 5.00 | 3.30 | .922 | .850 |
| Q43 | 308  | 1.00 | 5.00 | 3.47 | 1.063 | 1.129 |
| Q44 | 310  | 1.00 | 5.00 | 3.02 | .950 | .903 |
| Q45 | 310  | 1.00 | 5.00 | 3.56 | .956 | .913 |
| Q46 | 308  | 1.00 | 5.00 | 3.33 | .917 | .840 |
| Q47* | 310 | 1.00 | 5.00 | 3.59 | 1.047 | 1.096 |
| Q48* | 308 | 1.00 | 5.00 | 3.83 | .883 | .744 |
| Q49 | 309  | 1.00 | 5.00 | 3.44 | .908 | .825 |
| Q50* | 310 | 1.00 | 5.00 | 3.35 | .935 | .874 |
| Q51* | 310 | 1.00 | 5.00 | 3.19 | 1.048 | 1.098 |
| Q52 | 309  | 1.00 | 5.00 | 3.01 | 1.105 | 1.221 |
| Q53 | 308  | 1.00 | 5.00 | 3.00 | .936 | .876 |
| Q54* | 308 | 1.00 | 5.00 | 3.55 | 1.110 | 1.232 |
| Q55* | 309 | 1.00 | 5.00 | 4.01 | .897 | .805 |
| Q56 | 309  | 1.00 | 5.00 | 3.66 | 1.002 | 1.004 |
| Q57 | 310  | 1.00 | 5.00 | 3.91 | .854 | .730 |
| Q58* | 307 | 1.00 | 5.00 | 3.60 | 1.009 | 1.018 |
| Q59* | 310 | 1.00 | 5.00 | 4.07 | .851 | .724 |
| Q60* | 309 | 1.00 | 5.00 | 3.85 | .699 | .488 |
| Q61 | 310  | 1.00 | 5.00 | 3.86 | .903 | .815 |
| Q62* | 310 | 1.00 | 5.00 | 3.89 | .747 | .558 |
| Q63 | 309  | 1.00 | 5.00 | 4.21 | .641 | .412 |
| Q64* | 309 | 1.00 | 5.00 | 3.90 | .713 | .509 |
| Q65 | 308  | 1.00 | 5.00 | 3.95 | .700 | .489 |

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<td></td>
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<tr>
<td>- Balanced Proc.</td>
<td>310</td>
<td>3.39</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Moral Pers.</td>
<td>310</td>
<td>3.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPWS</td>
<td>363</td>
<td>3.01</td>
<td>.516</td>
<td>-.098</td>
<td>.128</td>
<td>-.326</td>
</tr>
<tr>
<td>POB</td>
<td>310</td>
<td>3.90</td>
<td>.506</td>
<td>-.385</td>
<td>.138</td>
<td>-.014</td>
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<tr>
<td>VC</td>
<td>310</td>
<td>3.19</td>
<td>.864</td>
<td>-.656</td>
<td>.138</td>
<td>1.392</td>
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<td>APR</td>
<td>56</td>
<td>974.21</td>
<td>9.268</td>
<td>-.155</td>
<td>.319</td>
<td>.716</td>
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<td>DCP</td>
<td>56</td>
<td>322.49</td>
<td>321.777</td>
<td>1.551</td>
<td>.319</td>
<td>2.370</td>
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<td>ATHREV</td>
<td>56</td>
<td>$47,546,052</td>
<td>$26,475,072</td>
<td>.991</td>
<td>.319</td>
<td>.760</td>
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<td>ATHPRS</td>
<td>44</td>
<td>19.02</td>
<td>15.180</td>
<td>1.239</td>
<td>.357</td>
<td>.747</td>
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<tr>
<td>ACAREP</td>
<td>56</td>
<td>161.20</td>
<td>87.850</td>
<td>-.165</td>
<td>.319</td>
<td>-.139</td>
</tr>
</tbody>
</table>

Table 5

*Unrestricted Factor Solution*
Table 6

Confirmatory Factor Analysis (CFA) Fit Indices

<table>
<thead>
<tr>
<th></th>
<th>X2(min)</th>
<th>p-val</th>
<th>df</th>
<th>CFI / TLI</th>
<th>RMSEA (.90 CI)</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>2659.373</td>
<td>.000</td>
<td>1316</td>
<td>.893 / .884</td>
<td>.053</td>
<td>.0408</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

{.050,.056}

Table 7

Scale Reliabilities

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Cr. Alpha.</th>
<th>F</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL</td>
<td>353</td>
<td>.963</td>
<td>76.679</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 8

*Aggregate Reliabilities and Indices of Within-Group Agreement*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Individual Alpha (N= 363)</th>
<th>Aggregate Alpha (N=55)</th>
<th>$r_{wg}$ Min</th>
<th>$r_{wg}$ Mean</th>
<th>$r_{wg}$ Median</th>
<th>$r_{wg}$ Max</th>
<th>F (df=55,307)</th>
<th>ICC (1)</th>
<th>ICC (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (avg N = 6.58)</td>
<td>.963</td>
<td>.979</td>
<td>.11</td>
<td>.78</td>
<td>.82</td>
<td>1.00</td>
<td>4.092***</td>
<td>.32</td>
<td>.76</td>
</tr>
<tr>
<td>AL (avg N = 5.83)</td>
<td>.931</td>
<td>.951</td>
<td>-.47</td>
<td>.76</td>
<td>.81</td>
<td>1.00</td>
<td>3.012***</td>
<td>.26</td>
<td>.67</td>
</tr>
<tr>
<td>HPWS (avg N = 6.58)</td>
<td>.916</td>
<td>.878</td>
<td>-.31</td>
<td>.55</td>
<td>.59</td>
<td>.97</td>
<td>2.711***</td>
<td>.21</td>
<td>.63</td>
</tr>
</tbody>
</table>

N= 363 (309) Individuals in 55 teams; ***: p<=.001

Table 9

*Standardized Mean Scores for All Variables*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL (L2)</td>
<td>363</td>
<td>-3.309</td>
<td>1.506</td>
</tr>
</tbody>
</table>
Table 10

Variance Partitioning - Within vs. Between Group Effects

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Within-Group Variance</th>
<th>Between-Group Variance</th>
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</thead>
<tbody>
<tr>
<td>H1a (EL ---&gt; POB):</td>
<td>97%</td>
<td>3%</td>
</tr>
</tbody>
</table>
H1b (AL --> POB): 100% --
H1c (HPWS --> POB): 99% 1%

Table 11

*Inter-factor Correlations*

<table>
<thead>
<tr>
<th>Factor</th>
<th>r</th>
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</thead>
<tbody>
<tr>
<td>EL &lt;--&gt; AL</td>
<td>.823</td>
</tr>
<tr>
<td>EL &lt;--&gt; HPWS</td>
<td>.710</td>
</tr>
<tr>
<td>EL &lt;--&gt; POB</td>
<td>.511</td>
</tr>
<tr>
<td>AL &lt;--&gt; POB</td>
<td>.546</td>
</tr>
<tr>
<td>AL &lt;--&gt; HPWS</td>
<td>.665</td>
</tr>
<tr>
<td>POB &lt;--&gt; HPWS</td>
<td>.481</td>
</tr>
</tbody>
</table>
C. FIGURES

Figure 1

*Hypothesized model of leadership and athletic department performance.*
Figure 2.

*Power Analysis (Power vs. number of sites)*

![Graph showing power analysis for different number of sites.]

- $\alpha = 0.050$
- $n = 7, \xi = 0.6, \sigma^2 = 0.05$
- $n = 8, \xi = 0.30, \sigma^2 = 0.05$
- $n = 9, \xi = 0.50, \sigma^2 = 0.05$

Figure 3.

*Power Analysis (Power vs. site size)*

![Graph showing power analysis for different site sizes.]

- $\alpha = 0.050$
- $J = 55, \delta = 0.10, \sigma^2 = 0.05$
- $J = 55, \delta = 0.30, \sigma^2 = 0.05$
- $J = 55, \delta = 0.50, \sigma^2 = 0.05$

Figure 4
Figure 5.

*Updated Model of Athletic Director Leadership and Department Performance*
REFERENCES


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BIOGRAPHICAL SKETCH

Raymond J. Cotrufo earned a B.S. in Industrial Engineering from Worcester Polytechnic Institute (WPI) in 1998 and a B.A. in French from the University of Connecticut in 2001. He first entered the field of sport management in 2002, working in sales and marketing with three Minor League Baseball (MiLB) clubs from 2002-2005 (Hudson Valley Renegades, Wilmington Blue Rocks, and New Orleans Zephyrs). After completing his M.S. in Sport Management with a concentration in Intercollegiate Athletic Administration at California University of Pennsylvania in 2008, he served as the Assistant Sports Information Director at WPI from 2008-2010. In 2010, he returned to the University of Connecticut to commence his doctoral studies in Sport Management, where he has taught several Sport Management courses including Intro to Sport Management, Intro to Sport Communication, Sport and Society, and Sport Law. He also advised and guided students during their internship experiences with organizations such as University of Connecticut Athletics, Travelers Championship, Hartford Wolfpack, Connecticut Sun, and others. He completed his Ph.D. at the University of Connecticut in May 2014.