

THE IMPACT OF SEARCH FIRM USE IN ATHLETIC DIRECTOR HIRES BASED ON
ATHLETIC, ACADEMIC, AND FINANCIAL MEASURES OF DIVISION I POWER FIVE
INSTITUTIONS

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ABSTRACT

Alexander Kimura: The impact of search firm use in athletic director hires based on athletic, academic, and financial measures of Division I Power Five institutions
(Under the direction of Nels Popp)

As a result of the growing business within college athletics, athletic departments have resorted to utilizing search firms to assist in the hiring process of athletic directors. The purpose of this study is to examine whether athletic departments that utilized a search firm in their athletic director hires significantly differ in performance measures compared to those athletic departments who did not use a search firm.

Athletic directors hired between 2008 and 2015 were analyzed. Background information for each athletic director was collected, as well as whether each athletic director was hired with the aid of a search firm or not. For each athletic director, academic, athletic, and financial data was collected for the corresponding athletic department. Of the athletic directors hired during the given period, 57% included search firm assistance. Statistical t-tests revealed no significant difference of percent change when analyzing two-year pre and post hire performance measures. Three-year post hire means also showed no statistical difference in performance measures of search firm usage. The multi-level models also indicated that over time, there was no significance of search firm use in athletic director hires as it related to the three different performances measured. Implications for practitioners are discussed in the following study.

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CHAPTER I: INTRODUCTION

INTRODUCTION

National Collegiate Athletic Association (NCAA) Division I Power Five athletics is a continuously growing business. In looking at 50 public institutions from the Power Five, total spending increased by \$332 million in 2015 from the previous year, while revenues only increased \$304 million (Brady, Berkowitz, & Upton, 2016). College athletics is fierce competition, as everyone is always looking for an edge as it relates to winning and increased performance (Knight Commission, 2010). Universities seek high performing athletic departments, which require elevated standards in the areas of academics, athletics, and finances (Smith, 2011; Smith, 2012).

Search firms are paid thousands of dollars to help find athletic directors who can create winning programs at their respective institutions. In 2015, the University of Illinois paid Korn Ferry International \$140,000 in consultant fees in relation to the hiring of current athletic director, Josh Whitman (Ryan, 2015). The same firm was used to hire the new University of Missouri athletic director, Mack Rhoades, as the university paid a total of \$206,000 to the company. Korn Ferry billed Missouri with an initial retainer fee of \$75,000, a consultant fee of \$125,000, and administrative fees of \$8,000 (Morrison, 2015). On average, firms charge about \$75,000 to conduct athletic director and college football coaching searches (Pedersen & Thibault, 2014).

Athletic departments tend to use search firms for numerous reasons, including cutting down on time during the search process, as athletic departments conducting the search alone may take longer to complete (Solomon, 2016). Firms are also used for the promotion of confidentiality and plausible deniability, as to lessen media inquiry and the possibility of embarrassment if a candidate were to reject the offered position (Schoenfeld, 2013). Most importantly, firms are employed to find the right “fit” for an open position. Firms are looking for candidates who can relate to an organization’s norms, cultures, and strategies, while at the same time bringing a new vision to an ever-changing environment (Hamori, 2010). Characteristics regarding chemistry and personality are key factors when finding the best candidate possible. One search firm employee even said that 80 percent of every hire he’s been a part of has been based on chemistry, regardless of aspects associated with the candidate’s background (Coverdill & Finlay, 1998).

Some firms tend to have a select pool of candidates from which they choose and favor certain clients, rather than finding the best fit for an athletic department. In 2007, when University of Washington President Mark Emmert was looking for a new athletic director, he hired Parker Executive Search (Schrotenboer & Axon, 2013). Then in 2010, the NCAA hired Parker to find a new president. Emmert became the NCAA’s new president, and Emmert since then used Parker to fill at least twelve other executive positions within the NCAA for the past few years. There is perhaps no hiring process more political than that for an athletic director (Lattinville & Speyer, 2013). One major criticism of search firms is that at times they do not have the university’s best interest in mind (Schrotenboer & Axon, 2013). It has been suggested search firms restrict their recommendations to only their select “clients”, and are limiting the applicant pool for these searches. By only targeting possible candidates from partner

organizations, firms are able to control the job market for high-level executive positions (Hamori, 2010). Athletic departments differ in size, culture, mission, and goals, so it's important that they hire search firms that can find administrators that suit their needs.

STATEMENT OF PURPOSE

Division I Power Five athletic departments are using search firms and paying them thousands of dollars to find the best athletic director candidates in the country. However, no current research exists on evaluating the actual performance of talent recruited by these search firms, particularly compared to searches conducted internally. The purpose of this research is to analyze the impact of search firm use in athletic director hires based on athletic, academic, and financial performance measures of Division I Power Five athletic departments, and compare performance to athletic departments which don't use firms.

RESEARCH QUESTIONS

Q1: What are the demographic backgrounds of Division I Power Five athletic directors hired between 2008 and 2015?

Q2: Is there a statistically significant difference in percent change of two-year pre and post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

Q3: Is there a statistically significant difference in three-year post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

Q4: Is there a statistically significant change over time of academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

DEFINITION OF TERMS

Academic Progress Rate: A method the NCAA uses to measure academic success of its student-athletes on an annual basis.

Executive search firm: Type of employment agency that specializes in recruiting professional and managerial personnel for companies in various industries.

NCAA: The National Collegiate Athletic Association is a voluntary membership organization of colleges and universities that participate in intercollegiate athletics. The NCAA develops and maintains rules and regulations governing the athletic programs and activities of its member institutions.

Power Five: The Power Five is a collection of athletic conferences that are viewed as having the largest and finest athletic departments in the country. Member conferences include the Atlantic Coast Conference, Big 12 Conference, Big Ten Conference, Pac-12 Conference, and Southeastern Conference.

ASSUMPTIONS

1. It is assumed that all information collected was truthful and accurate.
2. If resources concerning an athletic director being placed with the help of a search firm cannot be found, then it is assumed that the athletic director was hired without a firm.

LIMITATIONS

1. The specific athletic, academic, and financial metrics used may not be representative of the entire performance level of athletic departments and their athletic directors.
2. Because of the limited public information released concerning the use of search firms during athletic director hires, some information might be inaccurate.

DELIMITATIONS

1. This study is only representative of NCAA Division I Power Five institutions and may not be generalized to other Division I, II, or III institutions.
2. This study only includes NCAA Division I Power Five athletic directors who have been hired between 2008 and 2015.

SIGNIFICANCE OF STUDY

When the average cost of hiring a search firm is \$75,000, it is important to athletic departments their money is spent wisely (Schrotenboer & Axon, 2013). However, with Power Five athletic departments such as The University of Texas at Austin spending over \$150 million in the 2015-16 school year, in the grand scheme of their budgets, \$75,000 is not a large percentage (EADA, 2017). Rather than focusing on the expenses to hire firms, this study is more focused on the outcomes of utilizing a search firm, and if there is a significance to athletic department performance measures such as academics, athletics, and financials.

Multiple studies have examined the use of search firms in college athletic involving athletic directors and coaches, what their hiring process is like, what type of candidates they look for, and whether administrators were satisfied in using them (Lutz, 2012; Read 2017; Smith, 2011; Weight, Lutz, & Osborne, 2015). This study looks to examine the differences of athletic, academic, and financial performance measures of Division I Power Five athletic departments, based upon whether or not the university's athletic director was hired by utilizing the aid of a search firm. This study is important to practitioners as it hopes to provide empirical evidence on athletic director performance, which will allow universities to make a more informed decision the next time they think about hiring a search firm to find a new athletic director.

CHAPTER II: LITERATURE REVIEW

This chapter discusses the use of search firms in the corporate and business world, and how there has been a rapid increase in search firm utilization over the past few decades. Next, the relationship between search firms, sports, and intercollegiate athletics is explained, especially as it relates to athletic directors. Existing demographics of athletic directors are also examined. Then, characteristics that athletic departments look for in their athletic directors are described. Afterwards, measures of success that are significant in college athletics are also explained, specifically as it relates to the categories of academics, athletic performance, and finances.

SEARCH FIRMS IN THE CORPORATE AND BUSINESS WORLD

The utilization of executive search firms first started growing rapidly in the early 1950s. Search firms were seen as an innovative and cost-effective way to acquire managerial talent (McKenna, 2006). By the 1970s, more than 900 firms offered hiring services, and by 1985 that number grew to over 2,000 (Ammons & Glass, 1988). In the search firm industry, over 80 percent of firms currently in existence were established after 1980 (McKenna, 2006). By 2009, over 72,000 private employment agencies existed, employing over 741,000 internal staff (Ciett, 2012).

McKenna (2006) found 97 percent of the top 200 companies in the U.S. and U.K. have used some type of consulting service or search firm to hire their executives and employees. One reason for this extensive search firm use can be explained by population growth and corporate isomorphism. This form of isomorphism is the practice of organizations imitating and modeling

themselves after others (DiMaggio & Powell, 1983). Ammons and Glass (1988) found an increase in government entities utilizing search firms when the population sizes were bigger in certain jurisdictions. Through their findings, Ammons and Glass saw a “bandwagon effect” with the use of search firms, which concludes that as the practice of hiring search firms became more common, then other entities would follow suit and hire search firms as well. In the current research, we investigate whether the growing use of these firms leads to significant outcomes in intercollegiate athletics.

SEARCH FIRMS IN SPORTS AND INTERCOLLEGIATE ATHLETICS

The utilization of executive search firms is very prevalent within the realm of sports. According to the *SportsBusiness Journal*, about 25 percent of pro franchises hire their executives using a third party search firm (Schoenfeld, 2013). In intercollegiate athletics, search firms account for as much as 75 percent of athletic director hires (Schoenfeld, 2013). At the Division I level, there can be anywhere between 35 to 45 high profile firm searches, as it pertains to the positions of head football coach, basketball coach, or athletic director per year (Smith, 2011). In 2017, Read conducted a study that examined multiple variables as it related to the performance of college football head coaches hired between the years 2004 and 2014. One of the variables examined was whether the hiring of the football coach involved firm assistance or not. Out of 58 Division I football coaches, about 41 percent were hired with the assistance of a search firm (Read, 2017). Building on these findings, the current study explores the percentage of Division I Power Five athletic directors that were hired with the use of search firms.

Weight, Lutz, and Osborne (2015) examined the prevalence of search firm use by Division I athletic departments. This study provides foundational knowledge as it relates to the use of search firms in intercollegiate athletics. Surveys were sent to athletic administrators, and

243 fully completed responses were returned. The study reported internal search costs averaged \$30,000, and the average cost of using an external search firm was \$53,000. Overall, administrators were satisfied with the search firm process. In addition, those administrators who actually hired a search firm were more likely to use a search firm again for a future hire.

ATHLETIC DIRECTOR DEMOGRAPHICS

In 2016, Wong analyzed the demographics of Division I athletic directors. Among the 106 athletic directors hired since May 2014, the average age of athletic directors was 46.9 years old. When looking at athletic director experience, 49 of the 106 held the position previously at another institution, and 71% of Power Five athletic directors previously held an athletic director position as well. It was also mentioned that 62% of athletic directors within Division I were also previously student-athletes. Fewer than 20% of Division I athletic directors were of color, and fewer than 10% were women. Only 8 of the 106 were women, and 18 of the 106 were African-American. All 106 athletic directors had a bachelor's degree, and 82% earned an advanced degree. Athletic directors who held a master's degree made up 60%, more than half of which were in sport administration, sport management, or education. Another 12% had an MBA, and 16% held a doctorate degree. Eight of the 106 athletic directors were hired with a nontraditional background, meaning they did not have prior college athletics experience before being hired (Wong, 2016).

Dr. Richard Lapchick, Founder and Director of the Institute for Diversity and Ethics in Sport created an annual report analyzing demographics within college sport. In the 2016-17 Division I Leadership Report, of the 128 Football Bowl Subdivision schools, 78.9% of athletic director positions were white males. White women held 7% of athletic director positions (Lapchick, 2017). Of the 18 non-white athletic directors, 13 were African-American men, 4 were

Latino men, and one Asian male (Lapchick, 2017). No female athletic director was of African-American, Latino, or Asian ethnicity (Lapchick, 2017).

COMPONENTS OF AN ATHLETIC DIRECTOR'S JOB

At the Division I Power Five level, athletic directors hold a great amount of responsibility. In regards to the emerging duties of athletic directors and their fundamental qualifications, institutions may differ on immediate needs. However, over the long run, athletic directors will require the ability to raise funds and generate support (Lattinville & Speyer, 2013). Revenue generation plays an important role, as athletic directors are tasked with evaluating media rights deals and network distributions, which require advanced knowledge of financial planning and budgeting. Balancing a budget, while simultaneously investing millions in capital projects is a unique ability athletic directors must possess. Lattinville and Speyer (2013) mentioned that more recently, athletic director responsibilities have included an emphasis on internal operations, including the athletic department's business operations. As the cost to fund athletic programs increased, it has required athletic directors to expand their business focus. In the analysis of *USA Today* revenues and expenses of athletic departments between 2006 to 2011, Lattinville and Speyer (2013) found there was a 42 percent increase in revenues, and a 39 percent increase in total expenses.

Many universities are now seeking athletic directors who possess training, knowledge, and experience in business and corporate management, including accountability for multi-million dollar operating budgets (Duderstadt, 2009). According to a survey conducted by Turnkey Sports, 80 percent of sport industry executives felt business experience was the most important type of experience for candidates to have, while only 17 percent chose experience in sports (Smith, 2011).

It is also the responsibility of athletic directors to manage head coaches, and to create an environment where teams and student-athletes can thrive. Northington (2016) conducted a study in which semi-structured interviews took place with 20 college athletic directors from top rated National Association of Collegiate Directors of Athletics (NACDA) athletic programs, to identify the most important behaviors these athletic directors thought they possessed (Northington, 2016). Three of the most important themes and roles of athletic directors included taking care of student-athletes, supporting coaches, and adhering to NCAA rules. Taking care of student-athletes can translate to academic and graduation success, and supporting coaches can take the form of providing an atmosphere of athletic achievement.

A study by Cooper and Weight (2011) examined program elements that are highly valued by athletic administrators in regards to sport programs. In responses from senior-level Division I athletic administrators, it was found that academic achievement and athletic success were very important when referring to sport program values. When looking specifically at revenue generating sports, the values of revenue production and fundraising received higher value ratings. Athletic directors can also earn bonuses for achieving performance target benchmarks in the areas of athletics and academics, as analyzed by Lattinville and Speyer (2013). For example, University of Oklahoma athletic director, Joe Castiglione, can earn up to \$700,000 in additional performance bonuses (Lattinville & Speyer, 2013).

Athletic directors have many different job descriptions. Through the following study, the literature was expanded by analyzing the actual performance of athletic directors in relation to search firm utilization with quantifiable numbers.

ACADEMIC METRICS

Academic performance is a primary metric for examining athletic director performance. Cooper, Weight, and Fulton (2015) sent a survey to NCAA Division I athletic administrators. The administrators were asked to rate priority levels for 11 pre-selected values from a ranking of “not a priority” (value:1) to “essential priority” (value: 5), as it related to carrying out the mission of their athletic departments. A total of 437 administrators responded, and out of the 11 values, academic excellence received the highest mean score of essential priority, 4.63. One way to measure academic performance is by looking at APR scores. The NCAA defines the APR as providing “real-time” measures of academic progress towards degree for student-athletes (Crowley, 2006). In calculating APR, each student-athlete receives one point for staying in school, and one point for being academically eligible. Then, a team’s total points are divided by total possible points, then multiplied by 1,000, which is the team’s annual APR score (NCAA). APR is one of the best tools to use when comparing between different schools, as the information is publicly available for all universities. In a study conducted by Christy, Seifried, and Pastore (2008), college athletic administrators were also asked what their opinions were on the effectiveness of the APR system. A total of 75 respondents returned a completed questionnaire, which showed 64 percent of the athletic administrators felt the APR scoring system had a positive impact on college athletics. The APR is also an important metric as it has the potential to analyze patterns or problems that need to be addressed within recruiting, admissions, or support services (LaForge & Hodge, 2011).

Athletic directors value APR scores, as certain score values provide extra benefits and bonuses. The University of North Carolina’s (UNC) athletic director, Bubba Cunningham, has an annual salary of over \$700,000 (Carter, 2016). For every year UNC has a four-year APR average

across all teams that is 975 or above, Cunningham receives a one-twelfth bonus of his annual salary (Morrison, 2013). The goal of achieving high APR scores can also be found in an athletic department's strategic plan. For example, the University of Colorado at Boulder made it a goal to achieve a combined APR score average of 980 or above for all its teams by the 2016 academic year (University of Colorado at Boulder Department of Athletics, 2014).

WINNING METRICS

Winning is a vital metric in measuring athletic director performance as demonstrated by the University of Iowa's strategic plan for 2013 to 2018. According to their strategic plan, Iowa's athletic department strives to perform in the top half of the Big Ten conference in all sports on a consistent basis (Iowa Department of Athletics, 2013). North Carolina State University also has winning metrics according to their 2012 to 2017 strategic plan, as they gradually started off with a goal of finishing 65th or better in the Directors' Cup standings for 2013, and have increased their goal by ten positions within the standings per year, with a goal of finishing 25th or better in the 2017 school year (NC State Department of Athletics, 2012).

Winning is also given value through financial bonuses. For Debbie Yow of NC State, a national championship in either football or men's basketball would provide her a \$100,000 bonus (Morrison, 2013). More specifically, she earns \$25,000 for any top-25 Directors' Cup finish for NC State, and a \$20,000 bonus if in the top-50. Ohio State University's (OSU) athletic director Gene Smith would receive a \$50,000 bonus if OSU athletics finished first in the Directors' Cup standings, \$35,000 for top-5, or \$25,000 for top-10 (Weese, 2015).

Cunningham (2009) analyzed 75 NCAA athletic departments and examined the degree to which a proactive diversity management strategy had on the relationship of racial diversity and organizational performance. In the study, Directors' Cup points were used as a measure of

performance. It was found that Directors' Cup points were positively associated with expenditures, number of coaches, proactive diversity management, and department diversity (Cunningham, 2009). In 2008, Rocha and Turner examined organizational effectiveness within athletic departments across four dimensions, one of the dimensions being athletic achievement, which was measured using Cup points. In their study, it was found that there was a significant correlation between athletic achievement and financial performance (Rocha & Turner, 2008). Jones (2013) conducted a study that analyzed the relationship between athletic expenditures and on-field success of athletic departments. In using Directors' Cup points as their tool of measurement in conducting a regression analysis, it was found that athletic expenditures were strongly correlated with on-field winning performance of FBS institutions (Jones, 2013). Through these studies, Directors' Cup points are an important unit of measurement when analyzing athletic winning performance.

FINANCIAL METRICS

Athletic directors are charged with managing and balancing the budget of an athletic department and are judged on financial performances (Jacobs, 2016). Schneider and Stier (2005) examined the perception of university presidents, and what they viewed as the most important areas of knowledge athletic directors must possess, as associated to the background education of athletic directors. Out of 161 returned surveys from Division I university presidents, almost 62 percent viewed budget and finance as essential background education for athletic directors to have in order to be successful, the highest percentage of any other area of education.

In a study conducted by the *SportsBusiness Journal*, it was found that 82 percent (287 of 351) of current Division I athletic directors had a background in business or revenue generation (Wong, 2014). Some of the most common backgrounds included 20 percent from fundraising or

development, 11 percent from marketing, and 11 percent from finance. In another study, sixteen junior college athletic directors from California were examined (Baghurst, Murray Jr., Jayne, & Carter, 2014). Face-to-face and phone interviews were conducted, and through the semi-structured interview process it was found junior college athletic directors valued finances heavily. The athletic directors mentioned how finances play a key role to their responsibilities, specifically related to balancing budgets, securing funding, and distributing it appropriately.

INTERTWINING OF WINNING AND FINANCES

The two measures of winning and finances are closely linked to each other. The expenditures an athletic department has also relates to on-field success. Orszag and Israel (2009), examined the relationship between money spent by FBS institutions and on-field success of their football programs. From the seasons of 2004 to 2007, findings suggested that a \$1 million increase in football spending would increase team winning percentage by 1.8 percentage points, and a potential ranking in the Associated Press Top 25 would also increase by 5 percent. A study by Jones (2013) looked at the relationship between EADA expenses and Directors' Cup performance from 2006 to 2009. In examining FBS institutions, every 1 percent increase in total athletic department spending correlated with a 1.08 increase in total Directors' Cup points.

In addition to Directors' Cup points, the Excellence in Management (EM) Cup is another model that quantifies winning as an important metric as it relates to expenses. The Laboratory for the Study of Intercollegiate Athletics (LSIA) at the University of Texas A&M created the EM Cup in 2008 to determine the most economically efficient Division I Football Bowl Subdivision (FBS) athletic department as it relates to winning conference and national championships ("EM Cup", 2016). The formula to develop cup winners includes total operating expenses, total

number of conference championships won, and total number of NCAA national championships won (Fontana, Overholt, and Hudson, 2014).

Through the given research, it is explained how search firms play a significant role in their utilization by athletic departments in placing athletic directors (Lumpkin, Achen, & Hyland, 2015; Lutz 2012; Smith, 2011; Weight, Lutz, & Osborne, 2015). The research also shows that academics, athletic achievement, and finances are important categories when analyzing performance of athletic departments and the athletic directors they hire (Cooper & Weight, 2011; Lattinville & Speyer, 2013; Northington, 2016; Smith, 2011). The three key metrics that this study will examine are academics, athletic achievement, and finances. Certain tools and criteria will be used to quantify these metrics, including APR, Directors' Cup points, and EADA revenues, as used in other studies (Christy, Seifreid & Pastore, 2008; Jones, 2013; LaForge & Hodge, 2011; Wong, 2014). The three are not perfect tools of measurement, but they provide one way to assess performance. The question this study hopes to answer is, "Is there a significant difference in athletic department performance measures of academics, athletics, and revenues, based upon whether an athletic department utilized a search firm in the hiring of their athletic director?" This study will examine athletic directors that were recommended for hire by search firms, and compare them to athletic directors that were not placed by search firms, and see if there is a significant difference between their performance measures.

CHAPTER III: METHODOLOGY

To further examine the effectiveness and impact of search firms placing athletic directors at Division I Power Five athletic departments, secondary sources were used to provide quantifiable data to gauge the performance levels of athletic departments. Comparisons between search firms were then made, between those firms that assisted in the hiring process of athletic directors versus athletic director with no firm involvement. Descriptive statistics, mean scores, and three multi-level models were analyzed to compare differences between each group.

DATA COLLECTION

Athletic directors of all 65 Division I Power Five athletic departments were the population of interest, and were assigned into two groups, based upon whether the athletic department utilized a search firm to hire an athletic director or not between the years 2008-2015. All athletic directors in the sample must have held the position for at least one full academic year. Names of athletic directors, schools, conference affiliation, search firm affiliation, and years in which individuals held the athletic director position were obtained through official institution, search firm, and news websites. If search firm utilization was not confirmed through the mentioned secondary sources, then members of the athletic departments and affiliated institutions were contacted to retrieve that information. Other athletic director related information, including gender, race, background experience, education, and previous student-athlete experience were also gathered through the same secondary sources. Information was also collected based upon whether athletic directors were entering their jobs in a good or bad

situation. If the previous athletic director was fired or left the athletic department in a troubling social, academic, or financial state, then the incoming athletic director was classified as coming into a bad situation. If the previous athletic director simply retired or moved on to another job without any surrounding controversy, then the incoming athletic director was classified as coming into a good situation. This information was gathered through online articles and press releases.

Through the review of past literature, three variables were decided upon to create a responsive dataset to answer the research questions. The variables include Learfield Directors' Cup points, EADA revenues, and APR scores. All information and resources were collected through secondary sources from respective database websites.

Athletic performance was measured through the Learfield Directors' Cup points. All schools are evaluated on a universal measure of athletic achievement. A maximum of twenty teams (10 men, 10 women) from each institution's athletic department can be scored for points towards final standings. A maximum of 100 points can be allotted to each team that wins an NCAA Championship or finishes in first position in the final ranking polls. For Division I FBS Football, the final USA Today poll is used to determine places 1-25, and points were awarded based on the 64-team non-bracket system as defined by the Directors' Cup point chart. For sports that participated in a non-bracketed postseason, a separate scoring chart was followed for allocating points. For other sports that had a postseason bracket, the size of the bracket determined point totals awarded as charted by the Learfield Directors' Cup. A minimum of five points were awarded to any team that placed 65th or lower in postseason play ("Learfield Directors' Cup Scoring Structure," 2016).

The Equity in Athletics Disclosure Act database was utilized to gather revenues which will measure financial performance in this study. Revenues from the EADA database have been used in the past to analyze finances of college athletics (Otto, 2005; Dohrn, Lopez, Reinhardt, 2015). The Equity in Athletics Disclosure Act is a federal law that was passed in 1994, that requires universities to make information regarding gender equity in their athletic programs readily available to the public. This includes overall revenues and expenses for women's and men's teams, as well as other measures related to gender equity in sports. EADA reports revenues including appearance guarantees, concessions, financial contributions, institutional support, ticket sales, radio, television, royalties, signage, sponsorships, student activity fees, and any other revenues attributed to intercollegiate athletic activities. The EADA expense reporting includes athletically-related student aid, contract services, equipment costs, operating expenses, recruiting, salaries and benefits, travel, and general supplies. The EADA financial reports are excellent measures of the variables of interest as they report out actual numbers, not budgeted or estimated values ("EADA Data Collection Guide," 2015).

The NCAA's APR scores measure academic performance. The NCAA implemented this program in 2003, as there was a push to hold athletic departments and institutions in higher accountability for the academic progress of their student-athletes. The APR is calculated by including all student-athletes that receive athletically related financial aid. A student-athlete receives one point for remaining in school, and one additional point for being eligible academically. A team's total points are then divided by the total possible number of points, multiplied by 1000 and the result is the team's APR score. If any team receives a four-year average of 930 or less, then the team is ineligible to compete in postseason championships ("APR Explained," 2015). Scores used in this study were single-year APR scores, which were

reported publicly by the NCAA starting in year 2008. Single-year APR scores provided up-to-date year by year scores to analyze immediate results. APR scores have been used in past studies to account for academic performance (Christy, Seifried, & Pastore, 2008; LaForge & Hodge, 2011).

DATA ANALYSIS

The data collected were analyzed using SPSS to generate descriptive statistics. This provided a good base for explaining the search firm landscape in relation to athletic director performance at the Division I Power Five level. This also gave detailed information of the athletic directors as it related to their school, conference, firm affiliation, gender, race, personal, professional, and educational background.

Independent samples t-tests were used to compare the percent change between two-year pre and two-year post hire results of athletic directors. Two-year pre and post percent change was chosen as to maximize the sample size. Any larger period of time would have cut the sample size in half. Data of APR scores, Directors' Cup points, and revenues were taken per athletic director, and an average was calculated for each pre hire and post hire measure. From the averages, a percent change for each of the three measures was calculated for each athletic director. The athletic directors were then classified as to whether their hiring involved the utilization of a search firm or not. Means of percent change were then calculated per category and analyzed together to see if there was a statistical significance between using a search firm or not.

In looking at three-year post hire results, independent samples t-tests were used to compare the mean scores of APR scores, Directors' Cup points, and revenues. Athletic directors that had data of three-years post hire results between 2008 and 2015 were analyzed. A three-year post hire time period was analyzed, as to maximize the sample size. These statistical tests

examined a longer timeframe during the post hire period than the previous t-tests, and showed actual mean scores of APR scores, Directors' Cup points, and revenues rather than percent changes. A three-year mean was used to calculate each of the three measures per athletic director. Then, athletic directors were classified as to whether their hiring involved the utilization of a search firm or not. These two categories were then compared to each other to analyze if there was a statistically significant difference in the category means.

Multi-level linear models were conducted to examine change over time of the three measures of APR scores, Directors' Cup points, and revenues, to see if any of the three measures had a significant relationship with search firm utilization. Unlike the previous statistical tests, these multi-level linear models included data from all 61 athletic directors. The variables that acted as control variables when analyzing the three measures included firm use, race, gender, education level, size of athletic department, state of the athletic department, development background, previous experience, and whether the athletic director was a former student-athlete. For each main measure that was being analyzed (APR scores, Directors' Cup points, revenues), the other two measures acted as control variables as well in each multi-level model. These statistical tests determined if athletic department search firm utilization in athletic director hires significantly changed over time across the three athletic, academic, and financial measures.

CHAPTER IV: RESULTS

The results of this research were grouped by research question in order to provide structure to the findings. Between the years 2008 and 2015, 61 Power Five athletic directors were hired, 57 athletics directors of which were unique, as four were hired twice. For the year 2008, ten athletic directors were hired, five in 2009, ten in 2010, seven in 2011, nine in 2012, seven in 2013, four in 2014, and nine in 2015. In total, 48 Power Five schools hired athletic directors. This number of 48 was lower than the total 61 athletic directors examined, as some schools hired multiple athletic directors between 2008 and 2015. The year of 2008 was chosen as the start year of data collection, as the 2008-09 academic year was the first in which the NCAA reported single year APR scores. This may have potentially skewed APR scores towards the high end, as another tool of measurement, the multi-year APR was spread across four years. In addition, EADA information was missing for the University of Maryland between the years 2005 and 2007. In order to make the years consistent across all Power Five schools, years before 2008 were not included in the study. In relation to conference frequency, numbers are based off of a school's 2015 conference affiliation. An alpha level of .05 was used as a significance criterion for all statistical tests.

Research Question #1: What are the backgrounds of Division I Power Five athletic directors hired between 2008 and 2015?

Of the 61 Power Five athletic directors hired, 93% (n = 57) were male. Among female hires, three of the four female athletic directors were hired through the utilization of a search

firm. The race of white or Caucasian made up 92% (n = 56) of total athletic directors hired. Out of the five athletic directors who were black or African-American, four were hired through search firm utilization. At 54%, most athletic directors were hired during a period of time in which their department was facing problems (n = 33).

Out of the 65 total Power Five schools, 48 hired an athletic director within the span examined, while 17 schools did not. The ACC and Big Ten had the most hires with 15 each. The schools with the most turnover during the 2008-15 period were Miami and Rutgers with three athletic directors each.

Table 1
Demographic information of athletic directors

	Firm ADs (n)	% Firm ADs	No Firm ADs (n)	% No Firm ADs	Total (n)	% Total
Sex						
Male	32	91%	25	96%	57	93%
Female	3	9%	1	4%	4	7%
Race/Ethnicity						
White or Caucasian	31	89%	25	96%	56	92%
Black or African American	4	11%	1	4%	5	8%
Former Student-Athlete						
Yes	26	74%	15	58%	41	67%
No	9	26%	11	42%	20	33%
Coming in good/bad situation						
Good	17	49%	11	42%	28	46%
Bad	18	51%	15	58%	33	54%
Bachelor's Degree						
Yes	35	100%	26	100%	61	100%
No	0	0%	0	0%	0	0%
Master's Degree						
Yes	25	71%	14	54%	39	64%
No	10	29%	12	46%	22	36%
Doctorate Degree						
Yes	6	17%	11	42%	17	28%

No	29	83%	15	58%	44	72%
Development Background						
Yes	13	37%	12	46%	25	41%
No	22	63%	14	54%	36	59%
Previous Experience (Yrs)						
0	5	14%	7	27%	12	20%
1-5	2	6%	1	4%	3	5%
6-10	0	0%	0	0%	0	0%
11-15	7	20%	5	19%	12	20%
16-20	6	17%	4	15%	10	16%
21-25	4	11%	1	4%	5	8%
26-30	8	23%	3	12%	11	18%
31-35	1	3%	4	15%	5	8%
36-40	1	3%	1	4%	2	3%
41+	1	3%	0	0%	1	2%
Conference						
ACC	12	34%	3	12%	15	25%
Big Ten	7	20%	8	31%	15	25%
Big 12	3	9%	5	19%	8	13%
Pac-12	6	17%	6	23%	12	20%
SEC	7	20%	4	15%	11	18%

n = 61

All 61 athletic directors graduated with at least a bachelor's degree. The most common major among bachelor degrees earned was business administration (15%, *n* = 9). A large percentage of athletic directors earned a master's degree (64%, *n* = 39), the most popular specialization being sport administration. Less than a third of the 61 athletic directors obtained a doctorate degree (28%, *n* = 17), of which the overwhelming majority had a law degree.

Table 2
Frequency of bachelor's degree type

	<i>n</i>	%
Bachelor's Degree		
Accounting	1	2%
Biology	1	2%
Business Admin.	9	15%
Communications	2	3%

Economics	4	7%
Education	2	3%
English	4	7%
Finance	3	5%
Health Sciences	1	2%
History	3	5%
Industrial Mgmt.	1	2%
Journalism	2	3%
Kinesiology	1	2%
Liberal Arts	1	2%
Marketing	2	3%
Mathematics	1	2%
Organizational Mgmt.	1	2%
Physical Education	2	3%
Political Science	6	10%
Psychology	1	2%
Recreation Admin.	2	3%
Science	1	2%
Sociology	1	2%
Sport Management	1	2%
Unknown	8	13%

$n = 61$

Table 3
Frequency of master's degree type

	<i>n</i>	<i>%</i>
Master's Degree		
Athletic Administration	13	33%
Business Administration	5	13%
Communications	1	3%
Counseling	1	3%
Education	9	23%
Journalism	1	3%
LLW Law	1	3%
National Security Strategy	1	3%
Physical Education	2	5%
Public Affairs	1	3%
Teaching	1	3%
Unknown	3	8%

$n = 39$

Table 4*Frequency of doctorate degree type*

	<i>n</i>	<i>%</i>
Doctorate Degree		
Education	4	24%
Law	12	71%
Medical	1	6%

n = 17

For those athletic directors who were a former student-athlete (*n* = 41), a majority of them played football (63%, *n* = 26). Basketball was the second most common sport played at 12% (*n* = 5), and baseball was the third most common at 7% (*n* = 3).

Table 5*Sport played by athletic director as a former student-athlete*

	<i>n</i>	<i>%</i>
Sports played as former S-A		
Baseball	3	7%
Basketball	5	12%
Field Hockey	1	2%
Football	26	63%
Golf	1	2%
Soccer	1	2%
Tennis	1	2%
Track & Field	2	5%
Volleyball	1	2%

n = 41

In regard to overall search firm utilization, 57% of the 61 athletic directors were placed with the aid of a search firm (*n* = 35), and 43% had no firm involvement (*n* = 26). Additionally, the most frequent search firm utilized by athletic departments was Parker Executive Search (*n* = 14). Carr Sports Associates/Consulting was used 9% of the time out of all search firms (*n* = 3), which was the same frequency as both DHR International and Spencer Stuart. Between 2008 and

2015, the year with the most Division I Power Five athletic directors hired was 2010 (17%, n = 10).

Table 6
Frequency of search firm utilization

	<i>n</i>	<i>%</i>
Search Firm		
Yes	35	57%
No	26	43%

n = 61

Table 7
Athletic directors hired per year

	<i>n</i>	<i>% per year</i>	<i>% Total</i>
2008			
Firm	7	70%	11%
No Firm	3	30%	5%
2009			
Firm	2	40%	3%
No Firm	3	60%	5%
2010			
Firm	4	40%	7%
No Firm	6	60%	10%
2011			
Firm	4	57%	7%
No Firm	3	43%	5%
2012			
Firm	5	56%	8%
No Firm	4	44%	7%
2013			
Firm	5	71%	8%
No Firm	2	29%	3%
2014			
Firm	3	75%	5%
No Firm	1	25%	2%
2015			
Firm	5	56%	8%
No Firm	4	44%	7%
<i>n</i> = 61			100%

Table 8*Comparing the frequency of search firms*

	<i>n</i>	%
Carr Sports Associates/Consulting	3	9%
College Sports Solutions	1	3%
Collegiate Sports Associates	4	11%
DHR International	3	9%
Eastman & Beaudine	2	5%
Korn Ferry	4	11%
Neinas Sports Services	1	3%
Parker Executive Search	14	40%
Spencer Stuart	3	9%
<i>n</i> = 35		100%

Table 9*Frequency of Power Five schools that utilized firms*

	<i>n</i>	%
Schools		
Arizona State	1	3%
Arkansas	1	3%
California	1	3%
Clemson	1	3%
Duke	1	3%
Florida St.	2	6%
Georgia Tech	1	3%
Illinois	1	3%
LSU	1	3%
Miami	1	3%
Michigan	1	3%
Minnesota	1	3%
Mississippi St.	1	3%
Missouri	1	3%
NC State	1	3%
Nebraska	1	3%
North Carolina	1	3%
Notre Dame	1	3%
Ole Miss	1	3%
Oregon	1	3%
Oregon State	1	3%
Penn State	1	3%
Pittsburgh	1	3%
Rutgers	2	6%
Stanford	1	3%

Syracuse	1	3%
TCU	1	3%
Tennessee	1	3%
Texas	1	3%
Texas A&M	1	3%
Texas Tech	1	3%
Virginia Tech	1	3%
Washington	1	3%
<hr/>		
<i>n</i> = 35		100%

Table 10
Frequency of Power Five schools without firms

	<i>n</i>	%
<hr/>		
Schools		
Alabama	1	4%
Arizona	1	4%
Arizona State	1	4%
Boston College	1	4%
Colorado	1	4%
Georgia	1	4%
Indiana	1	4%
Kansas	1	4%
Kansas State	1	4%
Maryland	1	4%
Miami	2	8%
Michigan	1	4%
Michigan State	1	4%
Minnesota	1	4%
Mississippi State	1	4%
Northwestern	1	4%
Oregon	1	4%
Penn State	1	4%
Rutgers	1	4%
South Carolina	1	4%
Texas	1	4%
USC	1	4%
Washington State	1	4%
West Virginia	2	8%
<hr/>		
<i>n</i> = 26		100%

All 61 athletic directors also had their initial year of hire examined, based upon the measures of APR scores, Directors' Cup points, and total athletic department revenues. Values

were separated based upon whether the athletic director had been affiliated with a search firm or not during the hiring process, then each metric for each category was averaged together.

Table 11
Base year means of performance measures of total sample

	Search Firm <i>n</i> = 35	No Search Firm <i>n</i> = 26	Mean Difference
APR Score	Mean 1 979.686	Mean 2 979.269	0.417
Directors' Cup Points	681.005	606.69	74.315
Revenues	\$81,091,341	\$80,043,125	\$1,048,216

n = 61

Research Question #2: Is there a statistically significant difference in percent change of two-year pre and post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

Between the years of 2008 and 2015, athletic directors that had data for two-years pre-hire and two-years post-hire were analyzed (*n* = 36). The average for each athletic director’s pre and post hire performance in regards to single-year APR scores, Directors’ Cup points, and total athletic department revenues were calculated. For APR, single year APR scores were collected per athletic team per school each year. Directors’ Cup points were collected per academic year of each school, and athletic department total revenues per fiscal year were collected from the EADA database. Percent change of each performance measure between pre and post hire of each athletic director was found, then separated in category by whether each athletic director hire utilized a search firm or not.

As shown in tables 12-14, independent samples t-tests were conducted to compare the means of percent change for single year APR scores, Directors’ Cup points, and total athletic department revenues. For this research question, 36 athletic directors were used to analyze the difference in percent change between athletic directors that had search firm involvement or not.

The first independent samples t-test compared percent change of APR scores between firm utilization ($M = 0.00396$, $SD = 0.00606$) and no firm use ($M = 0.00062$, $SD = 0.00728$) of athletic directors; $t(34) = 1.47$, $p = 0.15$. These results suggest that there were no significant findings of percent change of APR scores between firm versus no firm use in athletic director hires. The second independent samples t-test compared percent change of Directors' Cup points between firm utilization ($M = 0.07811$, $SD = 0.32198$) and no firm use ($M = 0.07061$, $SD = 0.21426$); $t(34) = 0.08$, $p = 0.94$. These results suggest that there were no significant results of percent change of Directors' Cup points between firm and no firm use in athletic director hires. The third independent samples t-test compared percent change of total athletic department revenues between firm utilization ($M = 0.17514$, $SD = 0.13228$) and no firm use ($M = 0.10319$, $SD = 0.08025$); $t(34) = 0.15$, $p = 0.07$. The findings suggest that there was no statistical significance in percent change of total athletic department revenues between firm and no firm use in athletic director hires. The only measure that was relatively close to significance at the 95% confidence level ($p < .05$) was percent change in revenues, which was significant at the 90% confidence level ($p < .10$).

Table 12

Percent change in two-year pre and post hire academic progress rate

	Search Firm		No Search Firm		Mean Difference	<i>t</i>	<i>p</i>
	Mean 1	SD 1	Mean 2	SD 2			
APR	0.396%	0.606%	0.062%	0.728%	0.334%	1.470	0.151

n = 36

Note: Mean and standard deviation reported as percent

Table 13*Percent change in two-year pre and post hire directors' cup points*

	Search Firm		No Search Firm		Mean Difference	<i>t</i>	<i>p</i>
	Mean 1	SD 1	Mean 2	SD 2			
Cup Points	7.811%	32.198%	7.061%	21.426%	0.750%	0.079	0.938

n = 36

Note: Mean and standard deviation reported as percent

Table 14*Percent change in two-year pre and post hire revenues*

	Search Firm		No Search Firm		Mean Difference	<i>t</i>	<i>p</i>
	Mean 1	SD 1	Mean 2	SD 2			
Revenues	17.514%	13.228%	10.319%	8.025%	7.195%	0.150	0.070

n = 36

Note: Mean and standard deviation reported as percent

Research Question #3: Is there a statistically significant difference in three-year post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

In Tables 16-18, independent samples t-tests were run to compare the means of search firm utilization versus no search firm involvement as it related to the three metrics of APR, Directors' Cup points, and total revenues. For APR, single year APR scores were collected per athletic team per school each year and averaged together. Total Directors' Cup points were collected per academic year of each school, and athletic department total revenues were collected as well. Data was collected for the first three years post hire of an athletic director's tenure, and mean scores were calculated. Out of the total 61 athletic directors in the population, 42 held the position of athletic director for at least three years between 2008 and 2015. Table 15 depicts mean scores for the three metrics of APR scores, Directors' Cup points, and revenues during the

first year of each athletic director’s tenure. The means are split into two categories, whether a firm was utilized in the search process of an athletic director hire or not. Table 15 gives a base number for each category, to compare to the means of the three-year post hire metrics. If the two groups of means are similar at the very start of an athletic director hire, then it is notable if they are different over a three-year period after being hired.

Table 15

Base year means of performance measures between firm vs. no firm

	Search Firm <i>n</i> = 25	No Search Firm <i>n</i> = 17	Mean Difference
APR Score	Mean 1 977.36	Mean 2 978.588	1.228
Directors' Cup Points	700.93	589.609	111.321
Revenues	\$75,943,863	\$73,582,283	\$2,361,580

n = 42

The first independent samples t-test compared APR scores between athletic director hires that were involved with a search firm ($M = 980.347$, $SD = 7.979$) versus those athletic director hires that were not ($M = 978.941$, $SD = 8.269$); $t(40) = 0.55$, $p = 0.58$. This statistical test suggests that there was no significance in APR scores between firm versus no firm use in athletic director hires. The second independent samples t-test examined Directors’ Cup points between athletic director hires that utilized a search firm ($M = 696.286$, $SD = 309.905$) compared to those athletic director hires with no firm involvement ($M = 579.527$, $SD = 262.678$); $t(40) = 1.27$, $p = 0.21$. These results suggest that there was no significance in Directors’ Cup points between firm use versus no firm use in athletic director hires. The third independent samples t-test compared total athletic department revenues between athletic director hires that involved a search firm ($M = 80,830,000$, $SD = 20,469,000$) versus athletic director hires that did not ($M = 79,428,000$, $SD =$

26,037,000); $t(40) = 0.20$, $p = 0.85$. The results from this t-test suggests that there was no significance in revenues between firm use versus no firm use in athletic director hires.

Table 16

All-sport academic progress rate compared by search firm utilization

	Search Firm		No Search Firm		Mean Difference		<i>p</i>	Overall	
	Mean 1	SD 1	Mean 2	SD 2	Mean Difference	Mean 3		SD 3	
APR	980.347	7.979	978.941	8.269	1.406	0.584	979.778	8.027	

$n = 42$

Table 17

Directors' cup points compared by search firm utilization

	Search Firm		No Search Firm		Mean Difference		<i>p</i>	Overall	
	Mean 1	SD 1	Mean 2	SD 2	Mean Difference	Mean 3		SD 3	
Directors' Cup Points	696.286	309.905	579.527	262.678	116.759	0.211	649.027	294.127	

$n = 42$

Table 18

Revenues compared by search firm utilization

	Search Firm		No Search Firm		Mean Difference		<i>p</i>	Overall	
	Mean 1	SD 1	Mean 2	SD 2	Mean Difference	Mean 3		SD 3	
Revenues	80,830	20,469	79,428	26,037	1,402	0.845	80,269	22,590	

$n = 42$

Note: Mean and SD in thousands

Research Question #4: Is there a statistically significant change over time of academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

Table 19 is the multi-level random effects output of the all-sport APR. This model measured within subject variation, and examined if search firm use predicted a significant

change over time of single year APR scores. The multi-level model also controlled for other independent variables as shown. The independent variable of search firm use was not significant ($z = 0.59, p = 0.555$). Other independent variables of the state of the athletic department ($z = -0.55, p = 0.585$), race ($z = 0.12, p = 0.903$), and gender ($z = -1.15, p = 0.250$) were not significant. The two other dependent variables of Directors' Cup points ($z = -2.03, p = 0.042$) and revenues ($z = 4.70, p = 0.000$) used as control variables in this model were significant. Independent variables that were also significant included size of athletic department ($z = 2.84, p = 0.005$), education level ($z = 2.64, p = 0.008$), experience ($z = 2.51, p = 0.012$), development background ($z = -2.35, p = 0.019$), and being a former student-athlete ($z = -2.91, p = 0.004$).

Table 19

Multi-level random effects model output of academic progress rate

All-Sport APR	Standardized Coefficient (β)	Standard Error	p
Firm Use	1.032	1.748	0.555
Revenues	1.40×10^{-7}	2.97×10^{-8}	$p < .001^*$
Total Director Cup Points	-0.006	0.003	0.042*
Size of athletic department	0.015	0.005	0.005*
State of athletic department	-0.884	1.617	0.585
Race	0.346	2.855	0.903
Gender	-3.974	3.454	0.250
Education Level	4.601	1.741	0.008*
Experience	4.950	1.969	0.012*
Development Background	-4.615	1.965	0.019*
Former Student-Athlete	-4.773	1.638	0.004*

* $p < .05$

Table 20 is the multi-level random effects output of Directors' Cup points. This model measured within subject variation, and examined if search firm use predicted a significant change over time of Directors' Cup points. The multi-level model also controlled for other independent variables as shown. In the model, search firm use was not significant ($z = 0.62, p = 0.532$). The control variable of revenues was significant ($z = 3.59, p < .001$), while the other

control variable of all-sport APR was not ($z = -1.37, p = 0.170$). Other independent variables that showed a significant difference included size of athletic department ($z = 2.58, p = 0.010$), race ($z = 1.98, p = 0.048$), and development background ($z = -2.11, p = 0.035$). Variables that did not show a significant relationship with Directors' Cup points were state of athletic department ($z = -1.94, p = 0.052$), gender ($z = 0.53, p = 0.599$), education level ($z = 0.93, p = 0.351$), experience ($z = 1.09, p = 0.278$), and former student-athlete ($z = 0.11, p = 0.913$).

Table 20

Multi-level random effects model output of directors' cup points

Directors' Cup Points	Standardized Coefficient (β)	Standard Error	p
Firm Use	41.226	65.987	0.532
Revenues	2.35×10^{-6}	6.53×10^{-7}	$p < .001^*$
All-Sport APR	-1.581	1.152	0.170
Size of athletic department	0.369	0.143	0.010*
State of athletic department	-117.675	60.509	0.052
Race	208.903	105.49	0.048*
Gender	64.422	122.584	0.599
Education Level	61.46	65.897	0.351
Experience	80.132	73.795	0.278
Development Background	-147.569	69.901	0.035*
Former Student-Athlete	6.757	62.155	0.913

* $p < .05$

Table 21 is the multi-level random effects output of total revenues. This model measured within subject variation, and examined if search firm use predicted a significant change over time of total athletic department revenues. The multi-level model also controlled for other independent variables as shown. The independent variable of focus, search firm use, was not significant ($z = 0.55, p = 0.579$). Two control variables of all-sport APR ($z = 5.68, p < .001$) and Directors' Cup points ($z = 4.52, p < .001$) were significant. Other significant independent variables that were also used as controls included size of athletic department ($z = 2.49, p = 0.013$), experience ($z = -2.90, p = 0.004$), development background ($z = 2.53, p = 0.011$), and

former student-athlete ($z = 2.45, p = 0.014$). Variables of state of athletic department ($z = 1.24, p = 0.215$), race ($z = -1.25, p = 0.212$), gender ($z = 0.68, p = 0.498$), and education level ($z = 0.29, p = 0.770$) were not significant in the model.

Table 21

Multi-level random effects model output of revenues

Total Revenues	Standardized Coefficient (β)	Standard Error	p
Firm Use	3,033,126	5,470,269	0.579
All-Sport APR	646,249	1,113,750	$p < .001^*$
Total Director Cup Points	29,469	6,515	$p < .001^*$
Size of athletic department	33,320	13,384	0.013*
State of athletic department	6,280,525	5,060,031	0.215
Race	-1.10×10^7	8,810,794	0.212
Gender	6,959,913	1.03×10^7	0.498
Education Level	1,605,566	5,495,633	0.770
Experience	-1.75×10^7	6,032,173	0.004*
Development Background	1.48×10^7	5,869,844	0.011*
Former Student-Athlete	1.25×10^7	5,094,595	0.014*

* $p < .05$

CHAPTER V: DISCUSSION

Division I athletic departments are utilizing search firms in hiring athletic directors, as the business of college athletics continues to grow, and as everyone looks for new ways to increase winning and performance. Through past research it is clear the use of search firms is common, however, the effect that these search firms have on athletic department performance measures was still unknown. The results of this study will allow university administrators to have a better understanding of the potential effect search firms have on their athletic departments as it relates to the type of candidates they hire, as well as academic, athletic, and financial performance measures.

Research Question #1: What are the demographic backgrounds of Division I Power Five athletic directors hired between 2008 and 2015?

In the literature, its mentioned that less than 8% of head athletic director positions within all of Division I were held by females (Wong 2016). This is very similar to findings within Power Five schools, as only 7% of athletic directors within the study were found to be female. Also, about 14% of athletic directors of the 128 Division I FBS schools were minorities (Lapchick, 2017). The study showed a slightly smaller percentage within Division I Power Five athletic directors, as minorities made up 8% of the sample, all of which were African-American. It seems that the demographic categories of gender and ethnicity don't greatly differentiate with athletic directors, whether it's across all of Division I or just Power Five schools.

In looking at past literature, less than 7% of Division I athletic directors were hired with nontraditional backgrounds, those which excluded sports (Wong, 2016). When looking at Power Five athletic directors, that number jumped to 20% in the study. One possible reason for this larger percentage in Power Five athletic directors is that these athletic departments typically have larger budgets. In having larger budgets, Power Five athletic departments might be more inclined to hire someone with more of a business background. For example, Jim Hackett of Michigan was the CEO of Steelcase and had no prior experience in college athletics, and during his tenure negotiated Michigan's new Nike apparel contract worth over \$127 million (Snyder, 2016).

Previous literature states that as much as 75% of athletic director hires utilize a search firm (Schoenfeld, 2013). In the study, this amount was only 57%. There may be a smaller percentage for Power Five schools simply because the sample size is smaller, which may skew the results. If search firm use was examined for all Division I schools, then the percentage of firm utilization might be closer to the 75% as mentioned in the literature. With typically larger numbers of athletic department staff at Power Five schools, it may also be possible that some Power Five schools think they already have the necessary people and resources to conduct a search on their own. With other Division I schools outside the Power Five, the percentage of firm use might be higher because these schools potentially feel like they lack the necessary resources, expertise, and manpower needed to conduct a strong athletic director search. Even at 57%, this rate is higher than the 41% rate in search firms being used in the selection process of head Division I football coaches (Read, 2017). In any case, the current study proves that the use of search firms is prevalent within college athletic, specifically as it concerns athletic directors.

Research Question #2: Is there a statistically significant difference in percent change of two-year pre and post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

The percent change of APR scores based upon search firm utilization was only 0.396%, and the percent change of APR scores with no search firm involvement was even less at 0.062%. With such a small difference between the two values, the results suggest that there was no significant difference in percent change of academic performance between athletic directors that were hired with the assistance of a search firm, versus those athletic directors that had no involvement with a search firm. Even though athletic administrators hold APR scores in high priority (Cooper, Weight, & Fulton, 2015), and try to maximize their numbers for personal gain and bonuses (Morrison, 2013), search firm utilization in this case does not significantly affect APR percent change between pre and post hire. These findings suggest that between the two ways in which a new athletic director could be hired, either method would produce relatively the same results.

In analyzing the percent change of Directors' Cup points, the means between the two categories were very close in value to one another. Search firm utilization had a percent change of 7.811%, while no search firm utilization was at 7.061%. With such a small difference between the two, the results suggest that there is no difference as to whether a search firm was used in an athletic director hire or not, as both categories perform relatively the same in percent change of Directors' Cup points. In both situations when a new athletic director is hired, the results indicate that Power Five schools tend to do better in sport performance. If schools with new athletic directors are steadily improving in the metric of Directors' Cup points, then it potentially leads to

the theory that longer tenured athletic directors could actually be dropping their athletic department's Cup standings.

Out of the three measures, revenues had the largest mean difference. Athletic directors with search firm utilization had an average change of 17.514%, and athletic directors that had no relations with a firm saw a 10.319% change in their revenues. When looking at 50 Division I Power Five institutions, and seeing their revenues increase by \$304 million between 2014 to 2015 (Brady, Berkowitz, & Upton, 2016), it would be expected for the percent change of athletic department revenues to increase. Statistically, the reason the difference was not significant was due to fluctuations in individual scores. At the 95% confidence level, revenues were not significant, but at the 90% confidence level they were. With this in mind, it appears that athletic directors who were hired with the assistance of a search firm actually helped with revenue increases. For this research question, 21 of the 36 athletic directors analyzed were affiliated with a search firm during the hiring process. Of these 21 athletic directors, 11 had a business related degree, 14 were a previous athletic director, and 13 had over 20 years of experience in college athletics. This combination of having a business background, previous experience, and longevity could potentially account for this significant percent change in revenues. In addition, 8 schools that operated with over \$90 million in revenue during the initial year of the athletic director hire were also in this group, which included Florida State, Michigan, Minnesota, Nebraska, Penn State, Stanford, Tennessee, and Texas. Schools that bring in large amounts of revenue could potentially account for the percent increase as well, as they can afford to pay for firms. Also, 13 of the 21 firm affiliated athletic directors were also hired with their initial year being in the second half of the 8-year time frame between 2008 and 2015. With more search firms utilized in

later years of the sample, revenues were naturally higher, which could also potentially account for the large percent increase.

When looking at the initial year for all 61 athletic directors originally collected, the average revenue was about \$80 million per Power Five school. If this is the case, then the results of revenue percent change suggest that a new athletic director can generate 7% more if a search firm is used during the hiring process. That is potentially a \$5.6 million difference. Even if a school were to pay over \$200,000 for a search firm, as similar to the hiring of Mack Rhoades at Missouri (Morrison, 2015), it would be money well spent in this case. Even with these findings, it is important to remember that the statistical t-test of percent change of revenues still did not pass the 95% confidence level.

Research Question #3: Is there a statistically significant difference in three-year post hire academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

In analyzing the three-year post means of APR scores, search firm athletic directors had a slightly higher mean ($M = 980.347$) than athletic directors with no search firm utilization ($M = 978.941$). While there was no significant difference between the two, both categories were above the 930 APR score threshold required to compete in NCAA championships. In theory, if these APR averages held constant for an additional year, these four-year scores would potentially allow some athletic directors to receive bonuses, depending on each athletic director's unique contract. In the case of Bubba Cunningham for example, any four-year APR average of 975 or more equates to a one-twelfth base salary bonus (Carter, 2016). The NCAA defines the APR as providing "real-time" measures of academic progress (Crowley, 2006). Both categories of search

firm and no search firm utilization do a relatively equal job in producing high level, “real-time” measures of APR scores.

Directors’ Cup points had a large mean difference, as search firm athletic directors ($M = 696.286$) were 116.759 points higher than that of athletic directors with no search firm affiliation ($M = 579.527$). However, there was no significance in the three-year post hire mean between the two categories. This may potentially be the case because when looking at base year numbers when athletic directors were initially hired, there were already 111 points in difference between the means of search firm athletic directors versus those athletic directors not affiliated with a firm. In comparison to the three-year post mean, the post mean of Directors’ Cup points was only 5 points higher than the base year mean difference, which is potentially why there is no significance. It may also be possible that schools that are less successful on the field tend to use search firms less. With internal searches costing an average of \$23,000 less than external searches, it makes sense that smaller, less successful Power Five programs would refrain from using search firms (Weight, Lutz, & Osborne, 2015). However, \$23,000 in the grand scheme of an athletic department’s operating budget is small, so this may not be the case.

When examining total athletic department revenues, search firm athletic directors had a slightly higher mean ($M = \$80,830,000$), than those of the no search firm category ($M = \$79,428,000$). Revenues did not show a significant difference between the two categories of search firm, and no search firm affiliated athletic directors. The mean difference from the t-test was also in relatively close range to the mean difference of the base revenues. Even though revenues had increased by about \$5 million in each category from the base means, the mean difference only decreased by \$1 million. Since the means of athletic department revenues are in the range of \$70 to \$80 million, a \$1 million difference in the grand scheme of these statistical

tests is not a lot. One of the most important categories that athletic directors are evaluated upon by university presidents are finances (Schneider & Stier, 2005). Yet, there was no significant difference in revenue generation between athletic directors who were hired with the aid of a search firm, and those who were instead hired without a search firm. Again, athletic departments with larger budgets may be more inclined to hire search firms, which is potentially why the search firm category has a higher revenue mean than the no firm category.

Research Question #4: Is there a statistically significant change over time of academic, athletic, and financial performance measures compared to search firm utilization of Division I Power Five athletic directors?

In relation to the research question, it was clear through the multi-level model that search firm athletic directors do not outperform those athletic directors hired in-house based upon APR scores. Through the survey study by Cooper, Weight, and Fulton (2015), athletic administrators rated academic excellence as the highest priority. With academic achievement being such an integral part to athletic department goals and strategic plans, search firms should be looked at more carefully by administrators to analyze their effectiveness on APR score performance, as it may play an important role as to whether they decide to utilize a search firm again for another hire. Even though there was no significant relationship between search firm use and APR scores, other independent variables were controlled for in the model, and other significant findings were made.

Revenues had a significant relationship to APR scores ($p < .05$). According to the output, every dollar is worth 0.00000014 APR points. That means for an athletic department to achieve an increase of a single APR point, the athletic department would have to spend \$7,142,857.14. The more an athletic department spends in academic resource aids, the more likely the

department will do well in regards to their annual all-sport APR score. Directors' Cup points also showed significance to APR scores ($p < .05$), as that every Directors' Cup point is worth -0.006 APR points. In this case, Directors' Cup points and APR scores are inversely related. When looking at the size of an athletic department, the output shows that every student-athlete is worth 0.015 APR points. Typically, if an athletic department has more student-athletes, there are usually more teams that compete, and larger amounts of academic resources are available to the student-athletes to use, which can in return drive up APR scores. These relationships are interesting and are open to future researchers for further examination.

In defining education level, a doctorate degree was used, and the output from the model significantly showed that if an athletic director has a doctorate degree, then an athletic department's APR scores increase by 4.601 points. Athletic directors with doctoral degrees may value academics more, and possibly create a culture of emphasizing academic achievement, despite not spending more financial resources in the area. It could also be possible that better academic schools would be more inclined to hire athletic directors with a doctorate. According to the output, athletic directors with a development background oversee athletic departments where teams saw a significant decrease in their department's APR standing by 4.615 points. An athletic director with a development background may potentially be more concerned with fundraising, revenues, expenses, and overall financials, rather than how their department is performing academically. Additionally, the study suggests that a former student-athlete turned athletic director would significantly see a decrease in the department's APR scores by 4.773 points. These results may suggest less concern for APR scores by former student-athlete turned athletic directors, but potentially more emphasis and focus in other areas, such as winning.

When examining the output from the multi-level model, it was clear that the relationship between Directors' Cup points was not statistically significant with firm use ($p = 0.532$). It was shown that search firm athletic directors do not outperform those athletic directors hired without a search firm based upon Directors' Cup points. Part of an athletic director's job is to manage head coaches, and to create an environment in which student-athletes can thrive athletically (Northington, 2016). If this is true, then this study suggests that over time, athletic directors hired without a search firm perform just as well as athletic directors who were aided during the hiring process by a search firm. As like the previous multi-level model, there are other athletic director variables that showed statistical significance to Directors' Cup points.

The control variable of revenues was significant to Directors' Cup points ($p < .05$), as every dollar of revenue equates to 0.00000235 points. That means for an increase of a single Directors' Cup point, an athletic department would have to spend \$425,531.92. It is possible that if an athletic department spends more money, they may invest in resources that will allow their teams and student-athletes to compete at higher levels of athletic achievement, which will increase Cup points. Another independent variable that showed statistical significance included size of athletic department. For each additional student-athlete, Directors' Cup points increased by 0.369 points. Larger athletic departments naturally have more student-athletes, which leads to greater chances at attaining Cup points. The model also suggests that having a development background as an athletic director will decrease a department's Cup standing by 147.569 points. These athletic directors may potentially be more concerned about fundraising, which might mean allocating more resources towards achieving financial stability than increased athletic performance. Even though race was listed as a significant predictor of Directors' Cup points, data of only five African-American athletic directors were collected in the study. This is too

small of a sample size to come to a clear conclusion, and should be examined further by future researchers. These are all interesting relationships that future researchers may examine further.

In the revenues multi-level model, it was shown that search firm athletic directors do not outperform those athletic directors hired without the assistance of a firm as it related to revenues ($p = 0.579$). One of the most important jobs of athletic directors is to raise and generate funds (Lattinville & Speyer, 2013). The majority of university presidents even say that they prefer an athletic director with a background education in budgeting and finance (Schneider & Stier, 2005). Universities now seek athletic directors who possess knowledge and experience in business and corporate management (Duderstadt, 2009). With these priorities in mind, this model suggests that when looking at change over time, there was no difference in utilizing a firm than hiring an athletic director in-house as it related to increases in revenue. Instead of spending \$75,000 extra to hire a search firm (Schrotenboer & Axon, 2013), universities and athletic departments alike could instead save that money, and allocate it to other avenues as needed. This contradicts the findings slightly in RQ2, as percent change in revenues between search firm and no search firm use in athletic director hires was found to be significant along the 90% confidence level. However, the sample in RQ2 was smaller than the sample used in this multi-level model, which may explain the differentiation in results. If hiring committees look to search firms as an answer for increased revenues, it is not certain that they would find a difference as compared to conducting the search internally instead. When examining the model, there are also other athletic director variables that showed statistical significance to revenues.

The two control variables of all-sport APR and total Directors' Cup points have a strong significant relationship to revenues ($p < .05$). As stated by the model, \$646,249 of total revenues results in an increase of a single APR point, and \$29,469 of revenues will increase Directors'

Cup standings by one point as well. As revenues increase, it is likely that more funds are allocated to athletic teams and academic support programs to increase APR points and standings within the Directors' Cup.

Other independent variables that displayed statistical significance included size of athletic department, experience, development background, and being a former student-athlete ($p < .05$). In the model, \$33,320 more revenue dollars equates to one student-athlete. This makes sense, as a bigger athletic department with larger fan bases will naturally bring in more gate receipts and donations. If an incoming hire had previous experience being an athletic director, then the results suggest that revenues would decrease by \$17,500,000. According to the model, if an athletic director had experience in development, then revenues would increase by \$14,800,000. With experience in development, an athletic director will probably be more focused on raising funds for the department, which will increase overall revenues. In the model output, an athletic director being a former student-athlete would also increase a department's revenue by \$12,500,000. As a former student-athlete, an athletic director may be more effective in conveying the importance of scholarship funding to staff and donors, which may lead to this increase seen in revenue. These relationships should be examined further by future researchers.

CONCLUSION

When examining the main focus of this research, there was no significant relationship between search firm utilization on athletic director hires based upon academic, athletic, and financial performance measures. Based on the key factors examined, search firms do no better than internal hires as it related to athletic director performance measures. When looking at examples such as the University of Louisville paying Korn Ferry search firm \$165,000 to aid in the hiring process of their already interim athletic director Vince Tyra, it seems as if universities

are simply wasting money (Sullivan, 2018). Utilizing search firms may increase efficiency, speed up the hiring process, and allow confidentiality and plausible deniability for institutions during the hiring process. However, this study suggests that there are no benefits for using a search firm to increase athletic, academic, and financial performance measures.

This study suggests that firm utilization does not change performance measures, rather it appears the characteristics of a department and the background of its athletic director make a difference. If athletic departments are looking to hire a new athletic director, and have a focused area in which they want to see improvement, this study has outlined potential characteristics that hiring committees may consider. If an athletic department wants to see an increase in APR scores, then a potential candidate may have the following background of having a doctorate and previous experience being a head athletic director. If a department wants to potentially maximize their chances of increasing revenues, then a possible candidate may have a development background and be a former student-athlete.

LIMITATIONS

This study only covered Division I Power Five athletic directors hired between the years 2008 and 2015. If the time frame was expanded, and more athletic directors were analyzed across all of Division I and possibly Division II and III, more complete and accurate data could be collected and examined. Some athletic directors were hired when their athletic departments were still under a conference not included in the Power Five, however in this study, 2015 conference affiliation was used to categorize athletic directors. There were three athletic directors in which search firm utilization could not be confirmed. This included Kevin Anderson of the University of Maryland, Pat Haden of the University of Southern California, and Shawn Eichorst of the University of Miami. Since search firm utilization could not be confirmed for the

three athletic directors, they were classified in the study as having no involvement with a search firm during the hiring process. Even though there were significant findings among different demographic groups, it is important to remember that correlation does not equal causation. There were only four females and five African-Americans in the population collected, which may alter the data in a different way than if there were more from these demographic groups. The year of 2008 was the starting point within the research, as 2008 was the first year the NCAA had publicly released single-year APR scores for its member institution sports teams, as that was the specific APR score collected for the study. At the time of data collection, information from the 2015-16 school year was the most recent information available. If the research lasted a couple more years, then extending the time frame of the study would allow for more data to be collected and examined.

FUTURE RESEARCH

There are multiple ways in which this study can be expanded upon further research. Instead of focusing on the Power Five, a study could focus on Division I athletic directors within the Group of Five, maybe only Division I athletic departments without football. This study can also be replicated, but simply focus on Division II or Division III as mentioned earlier. The same study can be conducted 5-10 years in the future, in order to update the data. Patrick Chun just became the first Asian-American Power Five athletic director at Washington State University, so it would be interesting to see if the Asian demographic has any statistical significance concerning the different performance measures analyzed. If looking at demographics, the sample should be expanded to include all athletic directors of Division I. The multi-level models can be run again, but with different independent variables to analyze other potential significant effects.

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