

The Value of Intercollegiate Athletics Participation from the Perspective of Employers who Target Athletes

Peter Chalfin, M.A.

University of Michigan

Erianne Weight, M.B.A., Ph.D.

University of North Carolina at Chapel Hill

Barbara Osborne, J.D.

University of North Carolina at Chapel Hill

Shelly Johnson, M.A.

University of North Carolina at Chapel Hill

Many companies specifically target former student-athletes when hiring employees. This study utilized attribution theory to explore why employers target student-athletes and to identify which skills employers believe that student-athletes develop through athletics that make them more qualified to succeed in their industry. A survey of 50 employers revealed ten qualities/skills most strongly associated with athletic participation. Employers' perceived value of athletic participation was significantly impacted by the athletic success and leadership experience of the student-athlete. The sport, competition level and gender of the student-athlete were not found to have a significant impact on the perceived value of athletic participation. The results of this study add to the literature examining the value of athletics and support the premise that intercollegiate athletics are aligned with the goals of higher education as they help develop student-athletes into future leaders.

cholars often questioned the extent to which intercollegiate athletics align with the mission of higher education (Enlinson, 2013; McCormick & McCormick, 2006; Sack & Staurowsky, 1998; Sperber, 1990, 2000; Zimbalist, 1999). In the wake of the O'Bannon v. NCAA trial wherein the model of American intercollegiate athletics was under heavy scrutiny, university presidents from leading institutions throughout the country unitedly voiced a belief that "the intercollegiate athletics experience and the educational mission are inextricably linked" (bigten.org, 2014, para 13). This link, they argued, stemmed from the tremendous educational value that participation in intercollegiate athletics can hold (bigten.org, 2014, para 13). At this pivotal moment wherein the entire governing structure of American intercollegiate athletics is undergoing thorough review and inevitable change, it is imperative to lead policy-making efforts through empirical literature addressing the true valuation of intercollegiate athletic participation. As such, this study investigates the value of intercollegiate athletic participation from the perspective of employers who specifically target college student-athletes when hiring.

A review of literature suggests a current void in quantification of educational outcomes of athletics participation. Research has hypothesized that participation in intercollegiate athletics may make athletes more marketable when applying for employment (Long & Caudill, 1991; Henderson et al., 2006; McCann, 2012; Rivera, 2011; Shulman & Bowen, 2001; US Department of Education, 1990), though there is limited literature specifically addressing this phenomenon. This study addresses this current shortcoming in the literature utilizing attribution theory to test the value of tangible skills and intangible qualities that employers associate with intercollegiate athletics participation from the perspective of employers who specifically target collegiate athletes when hiring. The data from this study are particularly important during this time of governance evaluation and policy making in order to provide further understanding of the role of athletics within the academy.

Conceptual Framework

Role of Intercollegiate Athletics within Higher Education

Athletics has been accepted as an element of the American educational experience since the mid-1800s, (Chu, Segrave, & Becker, 1985; Oriard, 1998; Rader, 1999 Smith, 1990), yet the quantification of this education is largely anecdotal, and the legitimacy of the educational experiences are often questioned and deemed largely unworthy of academic credit (Enlinson, 2013; McCormick & McCormick, 2006; Sperber, 1990, 2000; Zimbalist, 1999). Despite the philosophy of some early pioneer coach-educators who viewed college sport as an avenue to create the next generation of leaders and managers (Oriard, 1998; Smith, 1990), the evolution of the academic-athletic merger has been tenuous and wrought with tension as commercial elements present since inception have overshadowed educational purposes and organizational integration (Oriard 1998, 2004, 2009; Rader, 1999; Sack & Staurowsky, 1998; Zimbalist, 1999).

The theoretical foundation for this study is based upon attribution theory (Fiske & Taylor, 1991; Heider, 1958; Knouse, 1989), which states that people rely on certain informational cues to determine whether the ultimate cause of behavior is a result of factors that are internal (dispositional) or external (situational). Through examining employer attributions for those who participate in intercollegiate athletics, we can begin to identify and quantify athletics educational

outcomes. We will first explore the literature addressing the benefits and criticisms of athletics within the academy.

Benefits of Intercollegiate Athletics within the Academy. Multiple scholars have identified various ways that athletics benefit a university (Brand, 2006; Chung, 2013; Gayles & Hu, 2009; Henderson et al., 2005; Jaschik, 2012; Miller, 2003; Pope & Pope, 2008; Sperber, 1990; Sternberg, 2011). These scholars emphasized broadly that athletics is integral to the educational foundation of a university because it contributes to overall personal development (Brand, 2006; Gayles & Hu, 2009; Henderson et al., 2005; Sternberg, 2011), increased graduation rates and GPAs (Duderstadt, 2009; Long & Caudill, 1991; Robst & Keil, 2000), and upward occupational and social mobility for the students who participate in athletics (Long & Caudill, 1991; Miller, 2003) – all goals central to the mission of a university. Other widely-cited benefits of college sports are that they generate money for the university (Chung, 2013; Jaschik, 2012; National Bureau of Economic Research, 2012; Sternberg, 2011; Tucker, 2004), draw attention to the school (Chung, 2013; Sternberg, 2011), increase the school's academic prestige (Anderson, 2012; Jaschik, 2012; Pope & Pope, 2008), boost student enrollment (Chung, 2013; Jaschik, 2012; National Bureau of Economic Research, 2012; Pope & Pope, 2008) and improve school spirit (Sternberg, 2011).

Criticism of Intercollegiate Athletics within the Academy. Various scholars refute some of these cited benefits and argue there are some elements of intercollegiate athletics that harm the academy and are in direct conflict with the mission of higher education (Clotfelter, 2011; Chu et al., 1985; Gayles & Hu, 2009; Miller, 2003; Sack & Staurowsky, 1998; Sperber, 2000; Thelin, 1994). These criticisms have largely existed since the moment competitive athletics were brought into the academy in the late 19th century (*Harvard Advocate*, 1880; Smith, 2011). Though nearly a century and a half of commissions and scandals related to amateur college athletics have ensued, only recently have these issues gained traction in American courts which are forcing some change, causing new perspectives and spurring policy development related to recent reports highlighting low graduation rates (College Sport Research Institute, 2014), excessive 40+ hour per week time-commitments that detract from the ability of students to focus on academic studies (Duderstadt, 2000; NCAA, 2011; Sack & Staurowsky, 1998; Wolverton, 2008) and academic scandals involving transcript alterations (Chu, 1989; Miller, 2003; Myerberg, 2013; Sternberg, 2011), recruiting violations (Chu, 1989; Miller, 2003; Myerberg, 2013), grade forging (Chu, 1989; Miller 2003; Myerberg, 2013), and "paper" classes (Wainstein, Jay, & Kukowski, 2014).

As evidenced by this research, there are conflicting philosophies relative to the merits of offering intercollegiate athletics within the academy. This divide underscores the need for additional empirical research evaluating the educational outcomes of athletics participation.

Student Development through Athletics Participation

Life-experience based statements found in anecdotal accounts and popular press support the notion that athletics participation develops positive character traits. James Duderstadt, former University of Michigan president, states that "college sports provided an opportunity for teaching people about character, motivation, endurance, loyalty, and the attainment of one's personal best – all great qualities of great value in citizens" (Duderstadt, 2000, p. 70).

Multiple studies revealed skills can be learned and enhanced through athletic participation, such as discipline, dedication, sacrifice, integrity, leadership, ambition, perseverance, teamwork, work ethic and drive to succeed (Duderstadt, 2000; Henderson et al., 2006; Long & Caudill, 1991; Ryan, 1989; Soshnick, 2013; Williams, 2013). Summarizing many of these attributes, student-athletes are described as "people who are disciplined, used to taking direction but able to take initiative" – skills widely accepted as useful in the labor market (Soshnick, 2013, ¶6).

Ryan (1989) surveyed 3,800 student-athletes to examine the role of athletic participation in contributing to student affective development. The data indicated intercollegiate athletics to be associated with a high level of satisfaction with the overall college experience, motivation to earn a college degree, and the development of interpersonal skills and leadership abilities (Ryan, 1989). Follow-up studies by Pascarella, Edison, Hagedorn, Nora & Terenzini (1996) and Astin (1993) supported these findings. More recently, Barratt and Frederick (2011) conducted a fouryear 250,000 student University Learning Outcomes Assessment (UniLOA) designed to measure growth in seven areas said to be indicative of future success including critical thinking, selfawareness, communication, diversity, citizenship, relationship, and leadership. The study sought to discover general college student growth, but results revealed that by the student's final semester, student-athletes performed at a higher level in almost every area than their non-athlete counterparts (Barratt & Frederick, 2011). Commenting on the findings, Barratt said, "I'm the faculty member who used to say athletics is a waste of time and it's stupid.... Once I looked at this data, I realized I was wrong. I still don't go to games, but I do understand the educational value behind athletics" (qtd. in McCann, 2012, ¶15). "We're rather convinced that studentathletes are far more ready to face the world than non-athletes", Frederick said (qtd. in McCann, 2012, ¶17).

Student-Athlete Characteristics and the Job Market

Several industry leaders also commented on the job-specific characteristics that make athletes more attractive candidates within their field. In a 2013 article titled 42 of the Biggest Football Players on Wall Street, the trend of hiring athletes in trading, investment banking and wealth management was discussed. The author attributes this correlation to the cut-throat, competitive environment present and the discipline and long hours required for success (La Roche, 2013). In a similar article titled Why You Should Fill Your Company with 'Athletes,' David K. Williams, CEO of Fishbowl, argued that athletes make exceptional entrepreneurs. Williams, who has authored a book on business leadership and contributes to *Harvard Business* Review, attributes this success to athletes' ability to think strategically, focus on long-term goals, and put strategy into action. Athletes, Williams believes, "have the drive to practice a task rigorously, relentlessly, and even in the midst of failure until they succeed" (Williams, 2013, ¶3). Other leaders echoed the importance of this developed characteristic of resiliency through defeat in addition to their ability to embrace and offer constructive criticism (McCann 2012; Rosche, 2013; Soshnick, 2013). Another common and highly-sought-after attribute of athletes in the workplace is the ability to be an effective member of a team. "Working with a greater-than-I sort of mentality... [is] the most coveted thing at a corporation, especially at the executive level" (Boardman, qtd. in Soshnick, 2013).

These beliefs have led to the creation of companies aimed at connecting former collegiate athletes with potential employers. Two such companies are Career Athletes

and Game Theory Group. Other organizations are targeting athletes within their recruiting networks. New York-based Drum Associates, for example, opened the first division of an executive search firm that caters exclusively to current and former college athletes in February of 2013 (Soshnick, 2013). There appears to be a faction of corporate America that highly values athletics experience.

Critical factors in hiring decisions

The recruitment and eventual hiring of employees has been an area of tremendous focus for scholars and practitioners (Anderson, Lievens, van Dam, & Ryan, 2004; Salgado, 2001). Analyzing a resume to determine the qualifications of an applicant is a multi-layered process (Hakel, Dobmeyer, & Dunnette, 1970). Extracurricular activities are one of the three main components, along with academic qualifications and work experience (Brown & Campion, 1994; Nemanick & Clark, 2002; Singer & Bruhns, 1991).

When looking solely at entry-level positions, the area of focus in this study, academic qualifications may take priority over work experience (Rynes, Orlitzky, & Bretz, 1997). Multiple studies have shown that a student's grade point average is often considered a reflection of his/her intelligence, motivation, and additional skills needed for a job (Roth & Bobko, 2000; Schmit, Ryan, Stierwalt, & Powell, 1995; Wolfe & Johnson, 1995). Also, Rynes et al. (1997) observed that recruiters often preferred applicants who had not been exposed to the procedures of previous employers, believing them to be more trainable and more open to different experiences.

Other research indicates that recruiters desire applicants with strong interpersonal skills (Rynes, Trank, Lawson, & Ilies, 2003) and often associate involvement in extracurricular activities with interpersonal skills, leadership, and motivational qualities (Brown & Campion, 1994; Rubin, Bommer, & Baldwin, 2002). Multiple studies confirmed that extracurricular activities are an important component in resume evaluation (Field & Holley, 1976; Harcourt & Krizan, 1989; Hutchinson, 1984; Pibal, 1985), but there is less literature on which aspects of these activities are most valuable to an employer (Nemanick & Clark, 2002). Barratt and Frederick found that extracurricular activities such as student government, Greek life, and intercollegiate athletics benefit a student in the seven intangible skills critical to success in life after college (McCann, 2012).

The mission statement of the National Collegiate Athletic Association is "to be an integral part of higher education and to focus on the development of our student-athletes" (Office of the President, 2010, ¶5). Athletics can serve as a positive and powerful factor in the academic and overall success of student-athletes (Robst & Keil, 2000). While Henderson et al. (2005) pointed out that athletes learn valuable life lessons by participating in athletics, few studies looked at what specific life lessons are actually learned. This study will explore the skills and qualities that student-athletes are believed to acquire or develop through athletic participation from the perspective of potential employers who actively seek athletes to fill their entry-level positions.

Theoretical Framework

The theoretical foundation for this study is based upon attribution theory (Fiske & Taylor, 1991; Heider, 1958; Knouse, 1989), which states that people rely on certain informational cues to determine whether the ultimate cause of behavior is a result of factors that are internal

(dispositional) or external (situational). Examples of internal attributions would be personality, motivation or ability (Knouse, 1989). External attributions would include task difficulty, environmental constraints, or luck (Knouse, 1989). Attribution theory can provide insight into how employers evaluate the relative contributions of person and environment to employment potential (Harvey & Weary, 1984; Harvey, Weary, & Harris, 1981; Kelley, 1973; Kelley & Michela, 1980). Attribution theory has been used as a lens through which to view performance evaluation (Brown, 1984), leadership (Martinko & Gardner, 1987), conflict management (Baron, 1988), and decision making (Ford, 1985).

The appropriate attribution is determined based upon three criteria: distinctiveness, consistency, and consensus. Behavior is attributed to internal (dispositional) factors when it demonstrates low distinctiveness (different situations yield the same behavior), high consistency (behavior remains the same over time), and low consensus (different people display different behavior in the same situation) (Knouse, 1989). Conversely, when there is high situational distinctiveness (different situations yield different behavior), high consistency (the same situation results in the same behavior) and high consensus (different people display the same behavior in the same situation), then behavior is attributed to external (situational) factors (Knouse, 1989).

When it comes to the job interview, Tucker and Rowe (1979) found interviewers that had read positive letters of recommendation were more likely to make internal attributions for applicant success. Conversely, those who read unfavorable letters were more apt to make internal attributions for applicant failure and external attributions for applicant success. These attributions often had a strong impact on the hiring decisions.

This theory is relevant to the selection process by an employer in a hiring position, as they are actively seeking information about the applicant's skills and abilities. Recruiters use resume information to draw conclusions regarding the personality, motivation, abilities, and job fit of an applicant. As a result, recruiters may engage in a fundamental attribution error (Ross, 1977) by interpreting the presence or absence of certain resume information to be due to the applicant's dispositional factors. Fundamental attribution error may account for a recruiter to misidentify certain skills or abilities (or lack thereof) in an applicant, solely due to the presence or absence of certain information on a resume (Knouse, 1989). Attribution theory can be used to determine how the presence or absence of athletic participation on an applicant's resume will influence a recruiter's impression of the candidate. This study utilizes attribution theory as a foundation for this study as it applies to hiring former intercollegiate athletes. Employers, upon seeing intercollegiate athletic participation on a resume, may attribute certain dispositional tangible skills and intangible qualities to that candidate based upon their athletic experience. Toward this exploratory purpose, the following research questions guided the study:

- RQ 1. Why do certain companies specifically target former intercollegiate athletes when they are hiring employees?
- RQ 2. What dispositional attributes do employers who recruit athletes associate with former intercollegiate athletes?
- RQ 3. How does intercollegiate athletic participation compare to other extracurricular experiences on a resume in the eyes of an employer who recruits athletes?

RQ 4. Is intercollegiate athletic participation valued differently by employers who recruit athletes based on the athlete's gender, sport, athletic success, level of competition, or leadership experience?

Method

Participants

The population for this study was employers who target former collegiate athletes when they recruit and/or hire new employees. The majority of sample members were found utilizing two organizations that strive to connect former intercollegiate athletes with companies seeking to hire former intercollegiate athletes, www.careerathletes.com and Game Theory Group. These organizations facilitated distribution of the survey to their employer-clients who seek to hire athletes. A final, much smaller, source of respondents came from employers who attended a student-athlete career fair on the campus of a "Power Five" Conference institution. Between these three sources, 81 surveys were distributed via e-mail, and 50 subjects participated in the survey, for a response rate of 62%.

It is important to note that the sample used for this survey is not intended to represent the population of all corporate employers. Rather, the researchers specifically sought companies that had already expressed an interest in hiring former student-athletes. This was done because the purpose of this study was not to find out *which* companies target athletes, but rather, of the companies that do, to find out *why* they target athletes.

Procedures

Due to the unique nature of this study, it was necessary to develop an instrument specific to the research questions addressed. The instrument was compiled based on a foundational review of literature. In an effort to enhance validity, the survey was reviewed by a panel of experts, including six professors, three athletics administrators, and an expert in survey methodology from the Odum Institute for Social Science Research. The instrument includes Likert scale, multiple choice, "check all that apply" and open-ended questions. A pilot study with a sample size of 10 was conducted to confirm that the questions are clear and easily understood.

Each research subject received a link to the survey via e-mail and completed the survey online using Qualtrics. The survey was composed of four sections. The first section included demographic questions including gender, age, job title, industry, and role in the hiring process. The second section asked questions specific to preferences related to hiring candidates including company policies, personal preference, and experiences with hiring athletes. The third section included a table with 30 extracurricular activities (e.g., member of the debate team, male member of a DI tennis team) with a prompt for respondents to rate the experience on how favorably it would be viewed if listed on a job candidate's resume. Options for each experience included a Likert scale from (1) "not at all valuable", to (5) "extremely impressive and would make this candidate stand out". The final section listed 20 qualities/skills found in athlete-centric literature (e.g., competitive nature, ability to handle pressure, and bully). Participants were asked to rate how much they associated these qualities/skills with intercollegiate athletics participation utilizing a Likert scale ranging from (1) "not at all" to (5) "very much".

Data Analysis

Quantitative data from the completed surveys was entered into Statistical Package for the Social Sciences software (SPSS 19). Descriptive statistics provided the means and standard deviations necessary to indicate which qualities are most commonly associated with athletic participation. For each quality/skill listed, a one-sample t-test was performed comparing the mean score to a score of 4.0 (moderately associated with athletic participation). Lastly, a total of 465 paired samples t-tests were run in order to test for significant differences between the unique, combined independent variables of gender, sport, level of competition, level of athletic success and leadership experience of the student-athlete. This was the most appropriate statistical test to utilize as each experience (e.g., a female Division III tennis All-American) was regarded as independent. To control for Type I errors, Bonferroni Corrections were run to control for the multiple comparisons with the largest adjustment (8/.05).

Throughout the survey there were a few opportunities to follow-up quantitative responses with narrative comments. There were not extensive responses to these open-ended opportunities, thus qualitative data analysis was not conducted. A few narratives are included within the discussion to supplement quantitative findings where appropriate and give voice to the respondents who took the time to extrapolate on their codified survey responses.

Results

Demographic Information

Of the 50 respondents to the survey, 60% (n=30) were female and 40% (n=20) were male. Twenty respondents (40.8%) fell between the ages of 20-29, while 7% (n=16) were 30-39, 14% (n=7) were 40-49 and the remaining 12% (n=6) were 50 years or older. A large percentage (36%, n=18) of respondents identified themselves as former student-athletes. Among the former student-athletes, 67% (n=12) competed at the NCAA Division I level, two (11%) competed in NCAA Division II, three (17%) played in Division III of the NCAA and one respondent (6%) competed in the National Association of Intercollegiate Athletics (NAIA). A complete listing of respondent demographic information is presented in Table 1.

Table 1
Demographic information of recruiters

	n	%
Sex		
Male	20	40%
Female	30	60%
Age		
20-29	20	41%
30-39	16	32%
40-49	7	14%
50+	6	12%
Student-Athlete?		
Yes	18	36%
No	32	64%
Level of Competition		
NCAA DI	12	24%
NCAA DII	2	4%
NCAA DIII	3	6%
NAIA	1	2%
Junior College	0	0%

Of the companies represented by the respondents, 42% were in the sales industry (n=21), 18% were in finance (n=9), 8% were in service/hospitality (n=4), 8% were in healthcare (n=4), 2% were in the engineering field (n=1), and the remaining 22% were in other industries (n=11). These companies varied in size, with 20% employing 500 workers or less, 16% employing between 501-1,000, 20% between 1,001-10,000, 18% between 10,001-100,000, and 6% employing more than 100,000 employees. The remaining 20% of respondents did not have an estimate for the number of employees within their company.

Each respondent was asked to estimate the percentage of employees at his/her company that are former student-athletes. The breakdown of responses to this question and other company demographic information is provided in Table 2. More than half of the respondents (52.3%) indicated that their company has a company-wide policy/strategy to target former student-athletes when recruiting employees.

Table 2

Demographic information of companies

	n	%
Industry		
Sales	21	42%
Finance	9	18%
Service/Hospitality	4	8%
Engineering	1	2%
Healthcare	4	8%
Other	11	22%
Number of Employees		
0-500	10	20%
501-1,000	8	16%
1,001-10,000	10	20%
10,001-100,000	9	18%
100,001+	3	6%
Don't Know	10	20%
% Former Student-Athletes		
<10%	5	10%
10-19%	5	10%
20-29%	6	12%
30-39%	1	2%
40-49%	2	4%
50-59%	1	2%
60-69%	2	4%
70+%	0	0%
Don't Know	28	56%
Policy?		
Yes	23	52%
No	21	47%

N = 50

Qualities/skills associated with student-athletes

Participants were asked "How much do you associate the following qualities/skills with intercollegiate athletic participation?" Thirty-four of the 40 total respondents gave competitive nature the highest score, (5) "very much" (M = 4.83, SD = 0.45). After competitive nature, the next highest scores were goal-oriented (M = 4.63, SD = 0.54), ability to handle pressure (M = 4.63, SD = 0.63), strong work ethic (M = 4.45, SD = 0.78), confidence (M = 4.41, SD = 0.68); and coachable (M = 4.38, SD = 0.81). Other qualities that yielded scores significantly greater than 4.0 (moderately) at the p < .01 level were ability to work with others (M = 4.33, SD = 0.73),

Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

and self-motivated (M = 4.33, SD = 0.73). The negative characteristics included on the list all received mean scores below 2.0 ("slightly"). Perception of student-athletes as being a bully received the lowest score (M = 1.18, SD = 0.50), with "dumb jock" (M = 1.23, SD = 0.53), sense of entitlement (M = 1.85, SD = 0.92), and arrogant (M = 1.90, SD = 0.87) higher, but still very low.

Table 3

Qualities/skills associated with intercollegiate athletic participation

	M	SD
Competitive Nature*	4.83	0.44
Goal-Oriented*	4.63	0.54
Ability to Handle Pressure*	4.63	0.62
Strong Work Ethic*	4.45	0.78
Confidence*	4.41	0.67
Coachable*	4.38	0.80
Ability to Work with Others*	4.33	0.73
Self-Motivated*	4.33	0.73
Mentally Tough	4.30	0.79
Time Management Skills	4.30	0.91
High Energy Level	4.15	0.77
Ability to Lead	3.98	1.00
Accountable	3.95	0.93
Integrity	3.55	1.06
Articulate	3.18	1.01
Intelligent	3.13	1.01
Arrogant	1.90	0.87
Sense of Entitlement	1.85	0.92
"Dumb Jock"	1.23	0.53
Bully	1.18	0.50

Note: Scale from (1) not at all to (5) very much

Value of experiences listed on job candidates' resumes

Respondents rated a variety of hypothetical college experiences on how they would value them if listed on a job applicant's resume. The five-point Likert scale included (1) not valuable at all, (2) somewhat valuable, (3) valuable, (4) very valuable, and (5) extremely impressive and would make this candidate stand out. All experiences involving being a captain of a sports team yielded the highest collective means, followed by athletic All-Americans. After the All-American group were two extracurricular leadership positions (president of a fraternity and captain of the debate team). The next clear grouping is the student-athletes that were merely members of their respective teams but did not hold any supplemental title such as "captain" or

Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

^{*} $\mu > 4.0$, p < .005, one-tailed

"All-American." All student-athlete experiences were viewed to be more valuable than all remaining experiences, including part-time job as a manager at a restaurant, editor-in-chief of the student newspaper, member of the debate team, and resident advisor (RA) in a dormitory on campus. A complete list of the experiences and their associated descriptive statistics are included in Table 4.

Table 4 Value of experiences listed on job candidate's resume

	Mean	SD
Captain of DIII women's tennis team	4.10	0.92
Captain of DIII men's tennis team	4.10	0.94
Captain of DI men's tennis team	4.08	0.94
Captain of DI women's tennis team	4.08	0.94
All-American on DIII men's tennis team	4.05	0.88
All-American on DIII women's basketball team	4.03	0.86
All-American on DIII women's tennis team	4.03	0.89
All-American on DI women's basketball team	4.03	0.90
All-American on DI men's tennis team	4.03	0.92
All-American on DI women's tennis team	4.03	0.92
All-American on DIII football team	4.00	0.94
All-American on DI football team	4.00	0.96
President of a fraternity	3.82	0.91
Captain of the debate team	3.78	0.97
Member of DIII women's basketball team	3.60	0.84
Member of DIII football team	3.59	0.91
Member of DIII men's tennis team	3.59	0.93
Member of DI women's basketball team	3.58	0.81
Member of DI football team	3.58	0.87
Member of DIII women's tennis team	3.58	0.93
Member of DI men's tennis team	3.53	0.98
Member of DI women's tennis team	3.53	0.98
Part-time job as a manager at a restaurant	3.45	0.90
Editor-in-Chief of the student newspaper	3.30	1.09
Member of the debate team	3.13	0.82
Resident Advisor (RA) in a dormitory on campus	3.08	1.02
Volunteer for Boys and Girls Club	3.05	0.91
Part-time job as a waiter at restaurant	2.95	1.08
Reporter for the student newspaper	2.70	0.93
Played trumpet in the marching band	2.55	0.81

Note: Scale from (1) not valuable at all to (5) extremely impressive and would make this candidate stand out

Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

Impact of select independent variables on perceived value of intercollegiate athletic participation

Paired-sample t-tests were run to analyze the impact of five independent variables on employers' perceived value of intercollegiate athletic participation. These five independent variables were gender, sport, athletic success, level of competition and leadership experience. The results revealed that both athletic success and leadership experience have a statistically significant impact on perceived value of athletic experience. The tests for gender, sport and level of competition groupings did not yield significant findings. The results were remarkably consistent, as every comparison testing athletic success or leadership experience yielded a significant finding, and every comparison testing gender, sport and level of competition did not yield a significant finding. Tables 5 and 6 provide a listing of all significant statistical findings.

Gender. None of the t-tests to analyze the effect of gender on employers' perceived value of athletic experience yielded significant findings. In fact, in most cases, the mean score for the male athlete and the female athlete in the same sport and at the same level of competition were nearly equivalent. For example, a male Division III tennis captain (M = 4.12, SD = 0.916) had almost the exact same mean and standard deviation as a female Division III tennis captain (M = 4.14, SD = 0.926).

Sport. Within college athletics, there exists a divide between "revenue" sports (football, basketball) and "non-revenue" or "Olympic" sports (in most cases, everything else). The revenue sports typically garner more attention and are considered by some to be more time-consuming (NCAA, 2011; Wolverton, 2008). In selecting sport as an independent variable for this research question, the authors ultimately wanted to compare revenue sports to non-revenue sports to test for differences. In order to make this comparison and facilitate specific resume possibilities for respondents to consider, tennis was selected to represent non-revenue sports and was compared to the revenue sports of football (for men) and basketball (for women).

The tests analyzing the impact of sport on the perceived value of athletic participation also yielded non-significant findings. While the mean for a male Division I football player (M = 3.60, SD = 0.877) was slightly higher than the mean for a male Division I tennis player (M = 3.53, SD = 1.008), the paired sample t-test comparing the two showed no statistically significant difference between the means t(42) = 1.138, p = 0.262. These findings were consistent for all other tests analyzing the independent variable of sport.

Athletic success. For the purpose of measuring athletic success as an independent variable, the rating of an All-American student-athlete was compared to that of a student-athlete participating in the same sport at the same level that was not named All-American. As shown in Table 5, athletic success was shown to have a significant impact on the perceived value of athletic participation in every test that was run. In each case, an All-American student-athlete received a higher mean score than a non-All-American member of the team in the same sport. See Table 5 for the statistical results of comparisons based on the perceived value of athletic success.

Table 5
Impact of athletic success (team member vs. All-American) on employer's perceived value of a student-athlete's experience

	All-American		Member				
	Mean 1	SD 1	Mean 2	SD 2	Mean Difference	T	p
DI Men's Tennis	4.02	0.96	3.53	1.01	0.48	4.35	.000
DI Women's Tennis	4.02	0.96	3.53	1.01	0.48	4.35	.000
DI Football	4.00	1.00	3.60	0.88	0.39	3.56	.001
DI Women's Basketball	4.02	0.95	3.60	0.83	0.42	3.76	.001
DIII Men's Tennis	4.05	0.94	3.55	0.94	0.50	4.58	.000
DIII Women's Tennis	4.02	0.94	3.53	0.94	0.48	4.55	.000
DIII Football	4.00	0.99	3.60	0.91	0.40	3.42	.001
DIII Women's Basketball	4.02	0.91	3.58	0.82	0.44	3.95	.000

Level of competition. Level of competition is another independent variable that could have been predicted to impact the perceived value of athletic participation in either of two completely different ways. On one hand, Division I is the highest level of intercollegiate athletic competition, so it would make sense for Division I athletes to be more coveted than their Division III counterparts. On the other hand, the Division III model is widely considered to be more student-athlete focused with a stronger emphasis on academics than Division I (Naughton, 1997; NCAA, 2014). As a result, employers may value the experience of a Division III athlete more than that of a Division I athlete. The results of this study, however, suggest that neither of the above two hypotheses are true, as level of competition did not have an effect on the perceived value of athletic participation.

There were no significant differences found for any comparisons testing the independent variable of level of competition. For example, when comparing a female Division I basketball player (M = 3.60, SD = 0.821) to a female Division III basketball player (M = 3.58, SD = 0.823), no statistically significant difference was found t(42) = 0.443, p = 0.660.

Leadership experience. To assess the impact of leadership experience on the perceived value of athletic participation, a student-athlete that was the captain of his/her team was compared to a student-athlete in the same sport at the same level that was not a captain of the team. In each comparison made, the mean score of the captain was significantly higher than the non-captain.

Table 6
Impact of leadership experience on the employer's perceived value of a student-athlete's experience

	Capt	ain	Member		Member		Member				
	Mean 1	SD 1	Mean 2	SD 2	Mean Difference	t	p				
DI Men's Tennis	4.12	0.94	3.53	1.01	0.58	6.49	.000				
DI Women's Tennis	4.12	0.93	3.53	1.01	0.58	6.49	.000				
DIII Men's Tennis	4.12	0.91	3.55	0.94	0.57	6.27	.000				
DIII Women's Tennis	4.14	0.91	3.53	0.94	0.60	6.36	.000				

Discussion

The results of this study suggest there are direct dispositional attributes associated with participation in intercollegiate athletics that employers seek to maximize by recruiting former intercollegiate athletes because the attributes are highly valued within their organizations. Relying on a foundation of attribution theory, we will now discuss 1) the attributes employers in our sample associate with former intercollegiate athletes, 2) how intercollegiate athletic participation compares to other extracurricular experiences, and 3) whether intercollegiate athletic participation is valued differently based on the athlete's gender, sport, athletic success, level of competition, or leadership experience.

Qualities/skills associated with intercollegiate athletes

The executives attached meaning to the experience of "intercollegiate athlete" and tended to attribute competitiveness, goal-orientation, ability to handle pressure, strong work ethic, confidence, coachability, ability to work with others, self-motivation, mental toughness, and time management skills to these athletes. These attributions support previous research that suggests athletic participation can develop these skills (Duderstadt, 2009; Henderson et al., 2006; Long & Caudill, 1991; Ryan, 1989; Soshnick, 2013; Williams, 2013).

Many of the open-ended responses within the survey support the findings provided in Table 3. For example, a female talent acquisition manager in sales (Respondent 16), who has been involved in approximately 500 hires over the past five years, and estimated that 20% of those hires were former student-athletes stated:

We view athletics in college as a full-time job, where other employers may not. The time, effort and dedication the candidate has by committing time to a sport can be easily translated to our work environment. We have a very competitive culture here. Student athletes have a great opportunity for leadership at a young age which makes them perfect for our culture.

Many of the former student-athletes who took this survey made reference to the time commitment involved with college athletics, having participated themselves. "If you are an NCAA athlete, then you know what it takes to be successful," said a 43-year-old former Division II baseball player and current Vice President in the sales industry,

Those long hours of training, pushing through the pain and challenges, even when you thought it was too hard. You stayed focused and stuck to the plan because you know that is what it takes to win. When you are an athlete at the highest level, those feelings never leave you. It will always be a part of who you are. These same life lessons you learned in sports directly translate to success in business. Teamwork, individual accountability, a strong work ethic and adaptability are some of the key attributes of successful employees. (Respondent 39)

Of the approximately 200 hires that Respondent 39 was involved in over the past five years, he estimated that 25% were former student-athletes. This particular response provides an example of how a former student-athlete in a hiring position may incorporate their personal experiences in making attributions for candidates that are also former student-athletes.

Many participants identified the qualities and skills of student-athletes that are beneficial in their particular industry. Multiple respondents from the sales industry cited competitiveness as a key quality. A 31-year-old Director of Internship Development in the finance industry (Respondent 43) stated, "student-athletes have the natural skillset that transfers well to a financial representative. We need people who are disciplined, competitive, and coachable. One out of six of our full-time reps are former student-athletes." Some of the characteristics provided in the written responses that were not included in Table 3 included aggressiveness, diversity, motivation, success, holding themselves to a higher standard, the ability to overcome obstacles, and the ability to critically and honestly assess failures.

The findings of this study are consistent with attribution theory (Fiske & Taylor, 1991; Heider, 1958; Knouse, 1989), which states that people rely on certain informational cues to determine whether the ultimate cause of behavior is a result of factors that are internal (dispositional) or external (situational). The results show that there are indeed certain skills and qualities that employers attribute to former student-athletes, just as the theory would suggest. As a 24-year-old female campus recruiter (Respondent 9) put it, "student-athletes have those unteachable skills necessary to be successful in our industry."

As Knouse (1989) found, some attributions are strictly internal (competitive nature, self-motivated), while others involve some external factors (overcome adversity, deal with defeat). These attributions would likely play a key role in the evaluation of the candidate, influence the hiring decision, and possibly influence evaluation of the candidate throughout their career. These findings support previous research citing the positive impact athletics can have on personal development (Brand, 2006; Gayles & Hu, 2009; Henderson et al., 2006) and career success (Long & Caudill, 1991; McCann, 2012; Miller, 2003; Rosche, 2013; Soshnick, 2013; Williams, 2013) while contradicting the research of Chu et al. (1985) which indicates that athletics inhibit personal development.

Value of experiences listed on job candidates' resumes

Overall, experiences involving athletic participation compared favorably to non-athletic experiences on a resume, supporting the argument that that sports contribute to upward occupational mobility (Long & Caudill, 1991; Miller, 2003). Among the athletic experiences, those that involved serving as team captain consistently scored the highest. This supports the findings of Long and Caudill (1991), and Henderson et al., (2006) that the development of leadership through athletics will be useful in the labor market and therefore coveted by

businesses. Leadership skills identified as non-athletic experiences such as president of a fraternity, captain of the debate team, and editor-in-chief of the student newspaper scored lower than membership on any athletic team at any level.

Perhaps one explanation for these results is a teamwork dynamic of athletic participation that often sets it apart from non-athletic experiences. For many companies, the ability to work as a team is critical (De Vries, 2000; Tarricone & Luca, 2002). A 52-year-old former Division I basketball player and current CEO in the healthcare industry explained the broad attributes he associates with former athletes that he believes makes them better prepared to work with others: "culturally, they collaborate better, respect the other team members, understand roles and responsibilities across the team and keep an eye towards the broader vision and mission for the organization" (Respondent 28).

Perhaps the best example from Table 4 to illustrate the value these employers see in athletic participation is that mere participation on a varsity team in college received a higher mean score than being editor-in-chief of a student newspaper. The role of editor-in-chief of a student newspaper is traditionally viewed by employers in very high regard, as it requires skills such as leadership that are useful in the workforce (Hewitt, 2002). That being a member of a varsity athletic team, regardless of the sport or level of competition, rated higher than editor-in-chief of a student newspaper speaks volumes to the value these employers see in athletic participation.

The results shown in Table 4 may also help explain why previous studies found that former student-athletes earn higher wages than non-athletes (Long & Caudill, 1991; McCann, 2012; Shulman & Bowen, 2001; US Department of Education, 1990). If athletic participation is valued more highly than all other experiences, this makes athletes more attractive candidates, and therefore may facilitate higher wages. It is important to note that nearly 60% of the sample were employers in sales or finance – business-related fields. Shulman and Bowen (2001) found male athletes to be much more likely to focus on business-related fields in post-graduate education and career choice than their non-athlete peers. The over-representation of business-related sectors in the sample supports these findings presented by Shulman and Bowen (2001), and points, perhaps, toward sales as an area of particular athlete-centricity, supporting Soshnick's (2013) documentation of athlete-employees on Wall-Street.

Gender

None of the t-tests analyzing the effect of gender on the perceived value of athletic experience yielded significant findings. This suggests that, when evaluating candidates, employers do not value participation in athletics any more or less for males than they do for females. In other words, the experience of participating on the varsity tennis team in college is equally valuable for men and women in the eyes of employers.

Sport

The tests analyzing the impact of sport on the perceived value of athletic participation also yielded non-significant findings. These results suggest that employers do not value the experience of participating in one sport over that of another. As long as all other factors are equal (level of competition, athletic success, leadership experience), it appears that an employer values a tennis player the same as they value a football player. Given that football is considered a more

"high profile" sport and is generally considered to be a larger time commitment (NCAA, 2011; Oriard, 2004, 2009; Wolverton, 2008), with its roots firmly planted in leadership and management development (Oriard, 1998) one may have surmised that being a member of a football team would carry more weight on a resume than being a member of a tennis team.

Conversely, with multiple reports suggesting that football student-athletes are underprepared academically and are more likely to leave school in poor academic standing, one may have surmised that employers value football players less than other sports as they may be skeptical of their academic merit (Clotfelter, 2011; Ganim, 2014; Gayles & Hu, 2009; Gurney & Stuart, 1987; Phillips, 2008; Sack & Staurowsky, 1998). These findings refute those claims by demonstrating that these employers' perceived value of football players are not statistically different than those for other sports.

Level of Competition

Level of competition is another independent variable that could have been predicted to impact the perceived value of athletic participation in either of two ways. NCAA Division I is widely recognized as the highest level of intercollegiate athletic competition, so one might assume that Division I athletes would be valued higher than their Division III counterparts. On the other hand, the Division III model is widely considered to be more student-athlete focused with a stronger emphasis on academics than Division I (Naughton, 1997; NCAA, 2014). As a result, employers may value the experience of a Division III athlete more than that of a Division I athlete. The results of this study do not support either of these assumptions are true, as level of competition did not have a statistically significant effect on the perceived value of athletic participation.

Athletic Success

As demonstrated in Table 5, athletic success was shown to have a significant impact on the perceived value of athletic participation in every test that was run. In each case, an All-American student-athlete received a higher mean score than a non-All-American member of a team in the same sport. Upon initial glance, this seems logical as an All-American athlete might be more coveted than another athlete in the same sport that lacked this prestigious. However, with regard to qualifications to work in the business world, it might seem strange to assume that a more successful athlete would make a better employee. This study revealed these employers target student-athletes because they value the attributes they associate with them – their competitive nature, ability to handle pressure, goal-orientation, strong work ethic, confidence, coachability and ability to work with others. Is an All-American tennis player more likely to possess these qualities than a non-All-American on the tennis team, just by virtue of the fact that he/she is an All-American? According to the results of this study, employers that seek athletes apparently believe the answer to that question is "yes".

To achieve All-American status, it is reasonable to deduce that a student-athlete must possess a strong determination to succeed. Employers may perceive that these athletes are "winners" and will succeed in whatever venture they pursue. Employers are not necessarily attracted to the superior athletic ability associated with All-American athletes, but rather their attainment of excellence. A 33-year old former Division I women's volleyball player and current

corporate recruiter in the service/hospitality industry referred to this trait of student-athletes as a "unique drive for success" (Respondent 1).

One comparison that can be made to test this assumption is to compare a Division III All-American to a Division I non-All-American member of the same sport. While the Division III student-athlete was successful enough to earn the All-American honor, the Division I student-athlete was competing against a higher level of competition. It's possible that the Division IIII student-athlete could have been an All-American had he/she chosen to compete at a Division I school, but given the lack of statistical difference in perceived value for All-Americans between divisions, the All-American status, logically, speaks to their determination to succeed, rather than their superior athletic ability.

In broader application, if a high school student is trying to decide whether to compete at a Division I school or a Division III school, this finding could prove very useful for the student to assist with this decision. If the goal for this student-athlete is to find a job after graduating college, she would want to make herself as marketable as possible. If she feels, based on her skill level, that she would thrive in Division III and potentially be an All-Conference or All-American athlete – but has doubts about how much playing time she would receive on a Division I team – she may wonder which experience would be more impressive in the eyes of employers. According to the results of this study, her resume would be viewed more favorably if she was an All-American athlete in Division III than if she was just a member of a Division I team.

Leadership Experience

In each comparison made, the mean score of the captain was significantly higher than the non-captain. Therefore, this data indicates that leadership experience significantly and positively affects the perceived value of athletic experience in the eyes of employers. Serving as team captain suggests leadership ability and the respect of one's teammates, both desirable characteristics in the workforce (Kuhn & Weinberger, 2005). These findings may also support Kuhn & Weinberger's (2005) findings that former team captains go on to earn higher wages. Notably, as shown in Table 3, the ability to lead received a mean score below 4.0, indicating that respondents believe that merely participating in college athletics does not necessarily imply the ability to lead.

In each comparison, the mean difference between a captain of a team and a non-captain member of that same team was always greater than the mean difference between the member of the team and an All-American for that same team. In other words, while employers value athletic success, they value leadership experience even more. This was evident in Table 4, as the four most highly rated resume experiences were all athlete captains.

Conclusion

In accordance with attribution theory, there are certain qualities and skills that employers who target athletes associate with participation in intercollegiate athletics. The companies that seek athletes to fill positions within their organizations do so because they pair athletic participation with dispositional attributes highly valued within their organizations including a competitive nature, goal-orientation, ability to handle pressure, strong work ethic, confidence, coachability, ability to work with others, self-motivation, mental toughness, and time management skills.

These employers value the team captain (leader) and All-American (winner) status of athletes more highly than mere membership on an athletic team, yet membership on a team was valued more highly than leadership positions in other campus organizations or select part-time vocations. Value of athletic participation was not significantly impacted by sport, gender or level of competition. These findings are a tremendously valuable addition to the literature, public commentary, legal and governance dialogue on the current collegiate model. An understanding of the benefits of intercollegiate athletics participation can help to quantify the value of the current experience and strengthen areas of impact that seem to directly translate into marketable skills.

Limitations and Future Research

This study is one of the first to explore the distinct connection between the value of intercollegiate athletics participation and the workforce. As such, there are a myriad of potential follow-up studies to this research. The most logical follow-up would be to replicate the study with a broader population, rather than limiting participants to employers that strategically target former student-athletes in the hiring process. The purpose of this study was to analyze the employers that deliberately target student-athletes and investigate why they utilize this strategy. The goal was to uncover the specific skills and characteristics that these employers believe student-athletes develop through participation in intercollegiate athletics that set them apart from non-student-athletes and makes them more qualified employees. While appropriate for the specific research questions addressed, this sample poses a limitation to the ability to generalize these findings to a broader sample of companies.

Replicating this study with companies who do not specifically target athletes in their hiring practices will provide a better idea of what percent of companies actually apply this strategy of targeting athletes, and whether the attributions uncovered within this sample hold true with a broader sample. This alternative sample would also provide a strong overview of which specific industries are more likely to target athletes, which skills are the most coveted for each industry, and which industries align most closely with the skills commonly attributed to former athletes. These findings could prove to be tremendously valuable if it is found that a certain industry that doesn't currently target student-athletes could benefit greatly from the skill set currently attributed to many student-athletes.

This study investigated the value of intercollegiate athletics participation from the perspective of employers. Investigating the value of intercollegiate athletics participation from the perspective of the athletes would also be a compelling study. Instead of surveying employers, the target population could be former athletes that are currently employed. They could provide insights on what skills and qualities they believed they developed from their participation in college athletics. These former athletes could share specific examples from their athletic careers where they learned valuable lessons or skills. Similarly, they could also provide specific examples from their professional careers where they utilized these skills. It would also be interesting to have them compare the value of their athletic experience to their academic experience in college to see which they believe benefited them more in different aspects of their professional career.

Another interesting limitation of this study is the narrow timeframe of hiring athletes right out of college. The attributes associated with athletic participation just after the completion of the intercollegiate athletics experience may be very different than the attributes associated

with intercollegiate athletics 10, 20, or 30 years into a career. It would be very interesting to examine mid or late-career perceptions of the value of intercollegiate athletics experience. Through this exploration, we may be able to understand whether the four-year period of competition sets athletes on a trajectory of positive-attributions throughout their career in some companies or whether it is a short-lived phenomenon. Similarly, we may then understand whether hiring attributions translate into job-performance attributions. Understanding the lifetime value intercollegiate athletics participation and education may hold can help to frame many of the current discussions related to the value of an athletic scholarship.

There is a limitation with the sample that was used for this study as well. To answer the research question comparing athletic participation to other extracurricular experiences, survey takers were asked to rate how much they valued extracurricular activities on a resume such as being on the debate team or president of a fraternity. It's possible that employers in certain fields may not be familiar with the experiences involved with such extracurricular activities, and therefore are not qualified to accurately rate their value.

References

- Anderson, N., Lievens, F., VanDam, K., & Ryan, A. M. (2004). Future perspectives on employee selection: Key directions for future research and practice. *Applied Psychology: An International Review,* 53, 487-501.
- Arvey, R. D., & Campion, J. E. (1982). The employment interview: A summary and review of recent research. *Personnel Psychology*, *35*, 281-322.
- Astin, A. W. (1993). What matters in college? Four critical years revisited. San Francisco, CA: Jossey-Bass.
- Baron, R. A. (1988). Attributions and organizational conflict: The mediating role of apparent sincerity. *Organizational Behavior and Human Decision Processes*, 41, 111-127.
- Barratt, W., & Frederick, M.A. (2011). *University learning outcomes assessment national report of norms*. Center for Learning outcomes Assessment: Indiana State University, Tarre Haute, IN.
- Berkowitz, S., Upton, J., & Brady, E. (2013). Most NCAA Division I athletic departments take subsidies. *USA Today*. Retrieved from http://www.usatoday.com/story/sports/college/2013/05/07/ncaa-finances-subsidies/2142443/
- Blann, F. (1985). Intercollegiate athletic competition and students' educational and career plans. *Journal of College Student Personnel*, *26*, 115-118.
- Brand, M. (2006). The role and value of intercollegiate athletics in universities. *Journal of the Philosophy of Sport*, 33(1), 9-20.
- Brown, K. A. (1984). Explaining group poor performance: An attributional analysis. *Academy of Management Review*, 9(1), 54-63.
- Brown, B. K., & Campion, M. A. (1994). Biodata phenomenology: Recruiters' perceptions and use of biographical information in resume screening. *Journal of Applied Psychology*, 79, 897-908.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.) San Francisco, CA: Jossey-Bass.
- Chu, D. (1989). *The Character of American Higher Education and Intercollegiate Sport*. Albany, NY: State University of New York Press.
- Chu, D., Segrave, J., & Becker, B. (1985). *Sport and higher education*. Champaign, IL: Human Kinetics Publishers, Inc.
- Chung, D. J. (2013). The dynamic advertising effect of collegiate athletics. *Marketing Science*, 32(5), 679-698.
- Clotfelter, C. T. (2011). *Big-time sports in American universities*. Cambridge, England: Cambridge University Press.
- College Sport Research Institute (2014). 2013-2014 Adjusted Graduation Gap Report: NCAA D-I Basketball. Retrieved from: http://csri-sc.org/wp-content/uploads/2014/03/2013-14_MBB-WBB_AGG-Report_3-12-14.pdf
- De Vries, M. F. (2000). High-performance teams: lessons from the pygmies. *Organizational Dynamics*, 27(3), 66-77.
- Dosh, K. (2012). *Tournament pays handsomely for schools*. Retrieved from http://espn.go.com/blog/collegebasketballnation/post/_/id/53175/tournament-pays-handsomely-for-schools
- Duderstadt, J. J. (2009). *Intercollegiate athletics and the American university: A university president's perspective*. Ann Arbor, MI: University of Michigan Press.
 - Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

- Elinson, Z. (2013, June 21). Lawsuit could alter college athletics. *The Wall Street Journal*: A6 Feild, H. S., & Holley, W. H. (1976). Resume preparation: An empirical study of personnel managers' perceptions. *Vocational Guidance Quarterly*, 24, 229-237.
- Fiske, S. T., & Taylor, S. E. (1991). Social cognition (2nd ed.). New York, NY: McGraw-Hill.
- Ford, J. D. (1985). The effects of causal attributions on decision makers' responses to performance downturns. *Academy of Management Review*, 10(4), 770-786.
- Gayles, J. G., & Hu, S. (2009). The influence of student engagement and sport participation on college outcomes among division I student athletes. *The Journal of Higher Education*, 80(3), 315-333.
- Gurney, G. S., & Stuart, D. L. (1987). Effects of special admission, varsity competition, and sports on freshman student-athletes' academic performance. *Journal of College Student Personnel*. 28, 298 303.
- Hakel, M. D., Dobmeyer, T. W., & Dunnette, M. D. (1970). Relative importance of three content dimensions in overall suitability ratings of job applicants' resumes. *Journal of Applied Psychology*, 54, 65-71.
- Harcourt, J., & Krizan, A. C. (1989). A comparison of resume content preferences of Fortune 500 personnel administrators and business communication instructors. *Journal of Business Communication*, 26, 177-190.
- Harvard Advocate, December 17, 1880, p. 77.
- Harvey, J. H., Weary, G., & Harris, B. (1981). *Perspectives on attributional processes*. Dubuque, IA: WC Brown Company.
- Harvey, J. H., & Weary, G. (1984). Current issues in attribution theory and research. *Annual Review of Psychology*, *35*, 427-459.
- Henderson, D. J., Olbrecht, A., & Polachek, S. W. (2006). Do former college athletes earn more at work? A nonparametric assessment. *Journal of Human Resources*, 41(3), 558-577.
- Heider, F. (1958). The psychology of interpersonal relations. Hillsdale, NJ: Lawrence Erlbaum.
- Hewitt, B.L. (2002). *Effects of academic achievement, extracurricular involvement and work experience on entry-level employment of college graduates* (Doctoral dissertation). Retrieved from University of Pennsylvania Full Text Dissertations & Theses. (Publication No. AAT 3052940).
- Hutchinson, K. L. (1984). Personnel administrators' preferences for resume content: A survey review of empirically based conclusions. *Journal of Business Communication*, 21, 5-14.
- Imada, A. S., & Hakel, M. D. (1977). Influence of nonverbal communication and rater proximity on impressions and decisions in simulated employment interviews. *Journal of Applied Psychology*, 62, 295.
- Jaschik, S. (2012). Research finds financial impact on colleges that win football games. Retrieved from http://www.insidehighered.com/news/2012/10/29/research-finds-financial-impact-colleges-win-football-games#sthash.ZRuG0N9x.dpbs
- Kelley, H. H. (1973). The processes of causal attribution. American psychologist, 28(2), 107.
- Kelley, H. H., & Michela, J. L. (1980). Attribution theory and research. *Annual review of psychology*, 31(1), 457-501.
- Kennedy, S., & Dimick, K. (1987). Career maturity and professional sports expectations of college football and basketball players. *Journal of College Student Personnel*, 28, 293-297.
- Kinicki, A. J., & Lockwood, C. A. (1985). The interview process: An examination of factors recruiters use in evaluating job applicants. *Journal of Vocational Behavior*, 26, 117-125.
 - Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

- Knouse, S. B. (1989). The role of attribution theory in personnel employment selection: A review of the recent literature. *The Journal of General Psychology*, *116*, 183-196.
- Kuhn, P., & Weinberger, C. (2005). Leadership skills and wages. *Journal of Labor Economics*, 23(3), 395-436.
- Kulik, C., & Rowland, K. (1986, August). *College seniors' job search: An attributional approach*. Paper presented at the meeting of the Academy of Management, Chicago, IL.
- La Roche, J. (2013). 42 of the biggest football players on Wall Street. Retrieved from http://www.businessinsider.com/football-players-on-wall-street-2013-10?op=1
- Long, J. E., & Caudill, S. B. (1991). The impact of participation in intercollegiate athletics on income and graduation. *The Review of Economics and Statistics*, 73, 525-531.
- Martinko, M. J., & Gardner, W. L. (1987). The leader/member attribution process. *Academy of Management Review*, 12(2), 235-249.
- McCann, Z. (2012). *Athletes more prepared for real world?* Retrieved from http://espn.go.com/espn/page2/story/_/id/7633078/skeptical-researchers-surprised-find-student-athletes-more-prepared-real-world
- McCormick, R. A., & McCormick, A. C. (2006). The myth of the student-athlete: The college athlete as employee. *Washington Law Review*, 81, 71-157.
- McGovern, T. V., & Tinsley, H. E. (1978). Interviewer evaluations of interviewee nonverbal behavior. *Journal of Vocational Behavior*, *13*, 163-171.
- Miller, R. (2003). The Role of Athletics in Higher Education. *Major Themes in Economics*, 5, 31-47.
- Myerberg, P. (2013). *Report: Auburn paid players, altered grades under Gene Chizik*. Retrieved from http://www.usatoday.com/story/sports/ncaaf/2013/04/03/ncaa-football-auburn-violations-gene-chizik/2051041/
- National Bureau of Economic Research (2012). The benefits of college athletic success: An application of the propensity score design with instrumental variables. No. w18196: Anderson.
- National Collegiate Athletic Association (2011). Summary of findings from the 2010 GOALS and SCORE studies of the student-athlete experience. Retrieved from http://www.ncaa.org/wps/wcm/connect/public/ncaa/pdfs/2011/summary+of+findings+from+the+2010+goals+and+score+studies+of+the+student+athlete+experience
- National Collegiate Athletic Association (2014). *Division III: About*. Retrieved from http://www.ncaa.org/about?division=d3
- Naughton, J. (1997). In Division III, college sports thrive with few fans and even fewer scandals. *The Chronicle of Higher Education*, *44*, A41-42.
- Nemanick Jr, R. C., & Clark, E. M. (2002). The differential effects of extracurricular activities on attributions in resume evaluation. *International Journal of Selection and Assessment*, 10, 206-217.
- Olivia, J. (1989). What trustees should know about intercollegiate athletics. *Association of Governing Boards of Universities and Colleges*, Washington D. C.
- Office of the President. (2010, October 5). Retrieved from http://www.ncaa.org/wps/wcm/connect/public/NCAA/NCAA+President/On+the+Mark
- Oriard, M. (1998). *Reading football: How the popular press created an American spectacle*. University of North Carolina Press.

- Oriard, M. (2004). King football: Sport and spectacle in the golden age of radio and newsreels, movies and magazines, the weekly and the daily press. University of North Carolina Press.
- Oriard, M. (2009). *Bowled over: Big-time college football from the sixties to the BCS era.* University of North Carolina Press.
- Pascarella, E. T., Edison, M., Hagedorn, L. S., Nora, A., & Terenzini, P. T. (1996). Influences of students' internal locus of attribution for academic success in the first year of college. *Research in Higher Education*, *37*(6), 731-753.
- Pascarella, E. T., Smart, J. C., Ethington, C. A., & Nettles, M. T. (1987). The influence of college on self-concept: A consideration of race and gender differences. *American Educational Research Journal*, 24(1), 49-77.
- Pascarella, E. T., Truckenmiller, R., Nora, A., Terenizini, P. T., Edison, M., & Hagedorn, L. S. (1999). Cognitive impacts of intercollegiate athletic participation: Some further evidence. *Journal of Higher Education*, 70(1), 1-26.
- Pibal, D. C. (1985). Criteria for effective resumes as perceived by personnel directors. *Personnel Administrator*, *30*, 119-123.
- Pope, D. G., & Pope, J. C. (2008). The impact of college sports success on the quantity and quality of student applications. *Southern Economic Journal*, 75, 750-780.
- Rader, B. G. (1999). *American Sports: From the Age of Folk Games to the Age of Televised Sports* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Rasmussen, K. G. (1984). Nonverbal behavior, verbal behavior, resumé credentials, and selection interview outcomes. *Journal of Applied Psychology*, 69, 551.
- Rivera, L.A. (2011). Ivies, extracurriculars, and exclusion: Elite employers' use of educational credentials. *Research in Social Stratification and Mobility*. 29(1): 71-90.
- Robst, J., & Keil, J. (2000). The relationship between athletic participation and academic performance: Evidence from NCAA Division III. *Applied Economics*, *32*, 547-558.
- Rosche, M. (2013). Former K-State athlete discuss why student-athletes make great employees. Retrieved from https://www.careerathletes.com/news_detail.php?id=18
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in Experimental Social Psychology*, *10*, 173-220.
- Roth, P. L., & Bobko, P. (2000). College grade point average as a personnel selection device: ethnic group differences and potential adverse impact. *Journal of Applied Psychology*, 85, 399-406.
- Rubin, R. S., Bommer, W. H., & Baldwin, T. T. (2002). Using extracurricular activity as an indicator of interpersonal skill: Prudent evaluation or recruiting malpractice? *Human Resource Management*, 41, 441-454.
- Ryan, F. J. (1989). Participation in intercollegiate athletics: Affective outcomes. *Journal of College Student Development*. 30, 122-128.
- Rynes, S. L., Orlitzky, M. O., & Bretz, R. D. (1997). Experienced hiring versus college recruiting: Practices and emerging trends. *Personnel Psychology*, *50*, 309-339.
- Rynes, S. L., Trank, C. Q., Lawson, A. M., & Ilies, R. (2003). Behavioral coursework in business education: Growing evidence of a legitimacy crisis. *Academy of Management Learning & Education*, 2, 269-283.
- Sack, A. L., & Staurowsky, E. J. (1998). *College athletes for hire: The evolution and legacy of the NCAA's amateur myth.* Westport, CT: Praeger.

- Salgado, J. F. (2001). Some landmarks of 100 years of scientific personnel selection at the beginning of the new century. *International Journal of Selection and Assessment*, 9, 3-8.
- Schmit, M. J., Ryan, A. M., Stierwalt, S. L., & Powell, A. B. (1995). Frame-of-reference effects on personality scale scores and criterion-related validity. *Journal of Applied Psychology*, 80, 607-620.
- Shulman, J. L., & Bowen, W. G. (2001). *The game of life: College sports and educational values*. Princeton, NJ: Princeton University Press.
- Smith, R. A. (1990). Sports & freedom: the rise of big-time college athletics. Oxford University Press.
- Smith, R. A. (2011). *Pay for play: A history of big-time college athletic reform*. Urbana, IL: University of Illinois Press.
- Singer, M. S., & Bruhns, C. (1991). Relative effect of applicant work experience and academic qualification on selection interview decisions: A study of between-sample generalizability. *Journal of Applied Psychology*, 76 (4), 550.
- Southall, R. M., Nagel, M. S., Amis, J., & Southall, C. (2008). A method to March Madness: Institutional logics and the 2006 National Collegiate Athletic Association Division I men's basketball tournament. *Journal of Sport Management*, 22(6), 677-700.
- Soshnick, S. (2013). Wall Street hires losers turned winners after college athletics. Retrieved from http://www.bloomberg.com/news/2013-10-16/wall-street-hires-losers-turned-winners-after-college-athletics.html
- Sowa, C. & Gressard, C. (1983). Athletic participation: Its relationship to student development. *Journal of College Student Personnel*, 24, 236-239.
- Sperber, M. (1990). College Sports, Inc., New York, NY: Henry Holt and Co.
- Sperber, M. (2000). *Beer and circus: How big-time college sports is crippling undergraduate education*, New York, NY: Henry Holt and Co.
- Sternberg, R. (2011). *College Athletics: Necessary, not just nice to have.* Retrieved from http://www.nacubo.org/Business_Officer_Magazine/Business_Officer_Plus/Bonus_Material/College_Athletics_Necessary_Not_Just_Nice_to_Have.html
- Stone, J. & Strange, C. (1989). Quality of student experiences of freshmen intercollegiate athletes. *Journal of College Student Development*, 30, 148-154.
- Tarricone, P., & Luca, J. (2002). Employees, teamwork and social interdependence—a formula for successful business? *Team Performance Management*, 8, 54-59.
- Thelin, J. R. (1994). *Games colleges play: Scandals and reform in intercollegiate athletics*. Baltimore, MD: Johns Hopkins University Press.
- Tucker, D. H., & Rowe, P. M. (1979). Relationship between expectancy, causal attributions, and final hiring decisions in the employment interview. *Journal of Applied Psychology*, 64(1), 27.
- Tucker, I. B. (2004). A reexamination of the effect of big-time football and basketball success on graduation rates and alumni giving rates. *Economics of Education Review*, 23(6), 655-661.
- US Department of Education Office of Educational Research and Improvement. (1990). *Light and shadows on college athletes: College transcripts and labor market history*. Washington, DC: Adelman.
- Wainstein, K.L., Jay, Joseph A., III, Kukowski, C.D. (2014). *Investigation of irregular classes in the Department of African and Afro-American Studies at the University of North Carolina at Chapel Hill.* Washington, DC: Cadwalder, Wickersham & Taft.
 - Downloaded from http://csri-jiia.org ©2015 College Sport Research Institute. All rights reserved. Not for commercial use or unauthorized distribution.

- Williams, D. (2013). Why you should fill your company with 'athletes'. Retrieved from http://www.forbes.com/sites/davidkwilliams/2013/10/02/why-you-should-fill-your-company-with-athletes/
- Wolfe, R. N., & Johnson, S. D. (1995). Personality as a predictor of college performance. *Educational and psychological measurement*, *55*, 177-185.
- Wolverton, B. (2008). *Athletes' hours renew debate over college sports*. Retrieved from https://chronicle.com/article/Athletes-Hours-Renew-Debate/22003
- Young, D. M., & Beier, E. G. (1977). The role of applicant nonverbal communication in the employment interview. *Journal of Employment Counseling*, *14*, 154-165.
- Zimbalist, A. (1999). *Unpaid professionals: Commercialism and conflict in big-time college sports*. Princeton, NJ: Princeton University Press.