



Toward a More Critical Understanding of the Experiences of Division I College Athletes

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Contents

Toward a More Critical Understanding of the Experiences of Division I College Athletes	2
Profile of Division I Athletes in US Higher Education	5
The NCAA Amateurism Model	8
History of the Amateurism Model	8
Literature and Case Law on NCAA Amateurism	11
Recent Court Cases Against the NCAA	12
The Challenges of Amateurism	13
Review Method	14
Formal Policies for College Athletes	16
Title IX: Opportunities for Women	16
NCAA 4–4 Transfer Rules	19
NCAA Concussion Policy	21
Freedom of Expression: Social Media Policies	25
Engagement in the Academic Experience	26
Academic Clustering	27
Academic Engagement and Performance	28
Academic Support for College Athletes	32
The Effects of Campus Racial Climate on Athlete Experiences	34
Compositional Diversity	36
Organizational/Structural Dimension	36
Psychological Climate	37
Implications for Research	38
New Directions for Future Research	39
Large-Scale Data Sources	39
An Academic Capitalism Approach	40
An Intellectual Elitism Approach	41
An Athletes’ Rights Approach	42
Conclusion	43
References	43

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Abstract

With the centrality of commercialism in college athletics, the academic, physical, and social well-being of Division I athletes is arguably at risk. Although the NCAA's amateurism principle was designed to protect athletes' best interests, its effectiveness in the context of a multi-billion-dollar enterprise remains unclear, and, at times, contentious. This chapter reviews more than 30 years of research on the wide range of issues affecting the academic and personal well-being of athletes. Keeping the current for-profit culture of intercollegiate athletics in mind, the chapter includes a discussion of formal NCAA and member institution policies, including Title IX, transfer rules, policies concerning concussive injuries, and social media; it also describes athletes' academic engagement and the supports designed to facilitate their academic success, as well as the effects of the campus racial climate on their experiences. The chapter highlights gaps in the literature to inform future scholarly research in these important areas.

Keywords

College athletes · Rights · Campus climate · Race · Gender · Equity · Inclusion · NCAA · Intercollegiate athletics · Commercialism · Black athlete · Amateurism · Title IX · Concussions · Social media · Data-driven practices

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For decades, the pageantry and spectacle – and business – of college athletics have aroused passions and sparked national discussions about its role within US higher education (Clotfelter 2011; Comeaux 2015a; Duderstadt 2000; Gurney et al. 2017; Thelin 1996). At the core of these important conversations are concerns about fairness and well-being with respect to athletes in Division I “big-time” college and university athletics – that is, those competing in revenue-generating sports in the Power Five conferences.¹ These conversations stem, at least in part, from concerns about whether the role of athletics is eclipsing the role of academics, especially for athletes.

The Knight Commission on Intercollegiate Athletics (2010) noted, for example, that per-student spending on athletics between 2005 and 2008 increased at a rate 4–11 times faster than spending on academics. Relatedly, Desrochers (2013) found that in the public colleges and universities in the six major football conferences (Southeastern, Big 12, Pacific-10, Atlantic Coast, Big Ten, and Big East), median annual athletic spending was more than \$100,000 per athlete – 6–12 times the amount spent per student on academics. The funds that have flowed into athletic programs at these schools have contributed to the creation of major commercial

¹Power Five conferences include the Atlantic Coast Conference (ACC), Big Ten Conference (BIG), Big 12 Conference, Pac-12 Conference, and Southeastern Conference (SEC).

entertainment with considerable revenue-generating capabilities for postsecondary institutions as well as corporate sponsors (Eitzen 2016).

The total revenue received by the National Collegiate Athletic Association (NCAA) for the fiscal year ending in 2015 exceeded \$1 billion (NCAA 2015a); at present, a significant portion of the NCAA's revenue comes from a 14-year, \$10.8 billion agreement with CBS and Turner Sports for the television and marketing rights to the men's basketball tournament (Wolverton 2010). In 2011, the University of Texas agreed to a 20-year, \$300 million contract with ESPN to distribute its sports television network (Rosenberg 2011). And, in recent years, a number of schools have switched their conference affiliations – in an ongoing, and disruptive, process known as conference realignment – in a quest for greater revenue streams from radio and television contracts (Smith and Hattery 2017). Revenue from lucrative deals with corporate sponsors and media outlets allow many head football coaches to receive generous compensation packages, which may compromise academic values and demonstrate evidence of misplaced priorities of a college or university (Eitzen 2016; Gerdy 2006; Sperber and Minjares 2015). For instance, in 2019, Clemson University's head football coach, Dabo Swinney, received a 10-year, \$93 million contract extension and the average annual salary for head coaches in the Power Five conferences was more than \$3 million (Sallee 2019).

The NCAA and member conferences continue to push for ways to expand their product – including televised games and national commercial ad campaigns – even in the face of claims that athletics create an organizational culture whereby academic goals and obligations of athletes are devalued or are less of a priority among athletic stakeholders (Bowen and Levin 2003; Eitzen 2016; Gerdy 2006; Jayakumar and Comeaux 2016). Sack (2009) suggested that the organizational problems in college sports are a result of differences in underlying assumptions and values about higher education. He summarized three conceptual models – academic capitalism, intellectual elitism, and athletes' rights – each of which views the notion of commercialism – that is, the prioritization of making money from athletics – in a somewhat different way.

Academic capitalism supports the commercialization of college sports under the assumption that it provides revenue streams that broaden access to higher education as well as opportunities to enhance the academic talent development of athletes. Former NCAA president Myles Brand believed, according to Sack, that “commercialism is a good thing as long as commercial activities are perfectly in tune with the values, mission and goals of higher education” (2009, p. 79). In contrast, *intellectual elitists* prioritize the academic enterprise. According to Sack (2009), they believe excessive expenditures and an overemphasis on generating revenue and winning games detract from the fundamental values, practices, and mission of higher education at athletes' expense (Bowen and Levin 2003; Knight Commission 2010). Supporters of the intellectual elitist model, unlike academic capitalists, argue that

²Nonprofit organization comprised of current and former college athletes that work to protect the rights and well-being of college athletes.

the highly commercialized athletic enterprise, at times, contributes to the exploitation of students who participate in athletics as well as to the erosion of their academic success. They are concerned, for example, with the emphasis on, and drive for, winning and profits that lead many schools to consider “special admit” athletes who may be underprepared academically or may not meet admissions standards of the institution.

Proponents of *athletes’ rights* argue that intercollegiate athletics is a commercial entertainment business aligned with NCAA and member institution policies that are inequitable for Division I athletes. They view athletes as part of an exploitive arrangement because they are not considered employees, even though they produce the demand for much of the product. The impressive (albeit educationally questionable) commercial success of the nonprofit NCAA and its member institutions has enabled disproportionately (privileged) White athletic power brokers – for example, coaches, athletic directors, conference commissioners, and externalities such as sponsors – to benefit financially from this agreement, conveniently relying on the sweat and undercompensated athletic labor of amateur athletes, who more often than not are Black students (Branch 2011).

While record sums of money continue to exchange hands, and the NCAA argues that student participation in intercollegiate athletics is an avocation, advocates of college athletes – for example, National College Players Association² – have raised concerns about whether the current system is fair to athletes and whether it sufficiently supports their academic or personal well-being. For example, athletes in the revenue-generating sports of football and basketball – most of whom are Black – are profitable commodities who expose themselves to life-altering and even life-threatening injuries, yet they do not receive equitable remuneration for their athletic labor (Borden et al. 2017; Huma and Staurowsky 2012).

Concerns about well-being go beyond physical health. Research has shown that special admit athletes do not perform well academically once they arrive on college campuses, and they pose unique challenges to their respective schools (Phillips 2008). The outcomes are especially striking at elite private schools, where special admit athletes tend to be positioned near the bottom of the class (Bowen and Levin 2003; Phillips 2008). In a survey administered to Atlantic Coast Conference schools, Barker (2012) revealed that special admit athletes graduated at lower rates and dropped out at higher rates than other athletes. At North Carolina State University, for example, only 35% of the 23 athletes classified as special admits in 2005 ultimately graduated, whereas the Graduate Success Rate for all athletes at the school was 77% (Barker 2012). These students are put in contradictory positions in which decisions associated with their athletic and academic commitment appear at odds with the fundamental values and goals of schools.

Reformers who fit both the intellectual elitist and athletes’ rights models are justifiably concerned with the commercialism and winning-at-any-cost mentality of campus athletic departments, including dishonest academic practices. Unfortunately, some Division I schools have acted unethically and found ways to game the system. Beginning in 2010, for example, there was a widely publicized corruption and academic fraud scheme at the University of North Carolina (UNC) at Chapel Hill.

More than 3,100 UNC students – nearly half of whom were athletes – enrolled in a range of African and African American studies “no-show” classes or classes that never met and received unearned grades, keeping them eligible to play (see Berkowitz 2015). Situations like this raise important questions about whether athletes’ best interests are being served by the current system.

Given the vulnerability of athletes to competing obligations, schemes to keep them eligible for play, and general pressures surrounding athletic participation, it is essential that campus leaders explore the policies and procedures ostensibly put in place to protect them. In particular, they must determine whether formal NCAA and member institution policies and rules designed to protect athletes’ best interests are actually working. Likewise, we must have greater clarity concerning the effectiveness of intervention strategies designed to support their academic and personal well-being. And, given the racial demographics of athletes in revenue generating sports, we must understand the effects of a hostile campus racial climate on their experiences (Comeaux 2013a, 2017; Huma and Staurowsky 2012; Knight Commission 2010; Simons et al. 2007; Zimbalist and Sack 2013).

The goal of this chapter is to explore the literature on the range of issues that affect Division I athletes in US higher education. Athletes in Division I schools have high visibility in the athletic enterprise, and there is often a heavy push for Division I programs to generate revenue, win games, and successfully compete in post-season football bowls and other sports’ tournaments. As I discuss in the next section, compared to those in other divisional classifications, Division I athletes tend to experience the strongest internal and external pressures, and they are arguably in the crosshairs of major problems plaguing intercollegiate athletics (Nocera and Strauss 2016). Through a thorough exploration of the literature, I reveal knowledge gaps in our understanding of Division I athletes’ experiences – both as students and as athletes – and, in turn, highlight deficiencies in NCAA and member institution policies designed to ensure their inclusion, safety, and well-being. First, however, we need a better understanding of the students who participate in intercollegiate athletics. In the next section, I provide a broad description of this unique group.

Profile of Division I Athletes in US Higher Education

College athletes are a unique subset of the US higher education student population. Roughly half a million students on 19,750 teams at 1,120 4-year public and private colleges and universities compete in 24 sports each year across three NCAA classifications: Divisions I, II, and III (see NCAA 2019). My focus here is on Division I schools, which tend to be larger with more students and larger athletic

³The NCAA designed the GSR metric to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing. In the Federal Graduation Rate (FGR), these same athletes are considered non-graduates. The GSR generally is about 20 percentage points higher at most schools than the rate reported by the FGR (see Southall et al. (2012).

Table 1 Average graduation success rates (GSRs) for Division I athletes in 2015–2018 cohorts

	2015–2018 Cohorts (%)
Division I overall	87
Division I men	82
Division I women	93
Division I football bowl subdivision	87
Division I football championship	86
Division I (no football)	89

Source: 2018 NCAA Trends in Graduation Success Rates at NCAA Division I Institutions, <http://www.ncaa.org/about/resources/research/graduation-rates>

Note: GSR is a metric designed to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing

operating budgets than Division II and III schools. Division I schools generally offer a wider range of sport participation opportunities and have more athletic scholarships as well as more stringent recruitment policies and academic requirements. Division II schools do offer athletic scholarships, but the vast majority cover only a portion of tuition and expenses; Division III schools do not offer athletic-related financial aid.

All schools in Division I are divided into groups based on football affiliation (see Shannon 2017). Football Bowl Subdivision (FBS) schools, which comprise about 10 conferences and 130 member schools, participate in bowl games; each can offer up to 85 full athletic scholarships to football players in any given year. In addition, there are about 124 Football Championship Subdivision (FCS) schools participating in NCAA-run football championships. These institutions can award up to 63 full scholarships to football players each year with the exception of the Ivy League, which does not offer athletic scholarships. A third group of Division I schools – with about 90 members – does not sponsor football at all; they are simply known as Division I (no football). Table 1 highlights the average Graduation Success Rates (GSRs)³ for Division I athletes in 2015–2018 cohorts.

In NCAA Division I institutions, differences between college athletes and their nonathlete peers can be subtle. Both groups tend to enroll in full course loads and, at times, are faced with stresses and expectations of the academic and social environment. Unlike students in the general population, however, college athletes have many demands outside the classroom as a result of their participation in sport, creating, at times, substantial challenges to student life (Comeaux and Harrison 2011). Within highly commercialized, big-time athletic departments, coaches expect a great deal of their athletes' time for practices, travel, team meetings, and competitions. On average, Division I college athletes devote more than 40 hours a week to sport-related activities (Wolverton 2008), despite the fact that under current NCAA rules, athletes are supposed to spend no more than 20 hours a week on required athletic activities during a playing season and while school is in session, and 8 hours during the offseason (NCAA 2012–2013a).

Table 2 2018 Graduation success rates (GSRs) for Division I athletes by race and gender

Athlete group	2018 GSRs (%)
Overall	88
White	92
Black	79
White males	88
Black males	75
White females	95
Black females	86

Source: 2018 NCAA Trends in Graduation Success Rates at NCAA Division I Institutions, <http://www.ncaa.org/about/resources/research/graduation-rates>

Note: GSR is a metric designed to better reflect the enrollment and transfer patterns of Division I athletes. The GSR accounts for athletes who depart or transfer to another school in good academic standing

Division I athletes endure mental fatigue, physical exhaustion, and nagging injuries, leaving them considerably less time for academic pursuits and other educationally sound activities. Moreover, whether by choice or as the result of influence from the business-like structure of athletics, college athletes often live, eat, study, and socialize together, and they are often tracked into the same majors, which can lead to academic and social isolation from the rest of the campus community (Fountain and Finley 2009; Jayakumar and Comeaux 2016). Division I athletes generally do not perform as well in the classroom as their nonathlete counterparts (Eitzen 2016; Pascarella et al. 1999).

Demographic factors, such as race, gender, and sport, also impact Division I athletes' campus experiences. Table 2 highlights the GSRs for Division I athletes by race and gender. It is well documented that Black men and women who compete on Division I teams experience some of the most detrimental stereotypes and negative labels on campus (Bruening et al. 2005; Comeaux 2018; Simons et al. 2007; Singer 2005). In particular, these athletes tend to be the objects of low academic expectations. Scholars have raised important questions about graduation rates and whether the most highly publicized Division I athletes in the revenue sports of football and men's basketball – who are disproportionately Black – are being educationally reimbursed or even receiving a meaningful education for their athletic labor (Eitzen 2016; Jayakumar and Comeaux 2016; Shropshire and Williams 2017).

Harper (2018) reported that only 55.2% of Black male athletes graduated within 6 years, compared to 69.3% of athletes overall. The lower average completion rates for Black athletes than for others are perhaps in part because the commercialism of athletics emphasizes a business model, superseding academic goals. Lack of care and investment in the quality of athletes' academic experiences is tied to race and inequity in complicated ways, as White supremacy has long been the bedrock of American identity and culture (Hawkins 2010). Black athletes, unlike their white counterparts, tend to be viewed as a disposable commodity, possessing value only relative to the interests of primarily White athletics stakeholders, while their academic talents are ignored (Gayles et al. 2018). For reasons of racial equity – broadly

defined as fair and just academic experiences, opportunities, and outcomes for students of color at predominantly White institutions (Harvey 2003) – athletic stakeholders must do more to improve the educational experience and school-to-career transitions of Black athletes and to strike a proper balance between their athletic pursuits and their academic achievement. At present, colleges and universities have done very little to address this exploitive structural arrangement.

Division I male athletes tend to have more challenges to their academic and athletic lives than their female athlete counterparts. Female athletes exhibit, on average, academic performance similar to that of their nonathletic peers and considerably better than that of male athletes (Simons et al. 1999). For Division I athletes entering college in 2010 and tracked over a 6-year period, female athletes graduated at a rate of 75%, compared to only 61% of their male counterparts (NCAA 2018a). These gender differences might be related to male athletes' over-identification with and strong commitment to the athletic role at the expense of their academic goals (Melendez 2007). Moreover, the values and organizational culture of male and female programs may help to explain why female athletes are more successful academically than male athletes (Southall et al. 2005). I expand on this unique group of Division I male and female athletes in the sections that follow. First, however, it is instructive to explore the history and guiding principles of the NCAA, which regulates so much of what happens in college athletics.

The NCAA Amateurism Model

In 1906, the NCAA assumed the core role of adopting and enforcing rules and policies in intercollegiate athletics, and it now serves as the governing and organizing body. The NCAA's stated purpose is "to maintain intercollegiate athletics as an integral part of the educational program and the athlete as an integral part of the student body and, by so doing, retain a clear line of demarcation between intercollegiate athletics and professional sports" (NCAA 2012–2013a, p. 1). As such, the policies and principles of the NCAA and its member institutions are at the heart of debates about whether Division I athletes are being treated fairly and justly. The NCAA's principle of amateurism has been considered a bedrock principle of the organization; it suggests that athletes are students first and foremost, and that they participate largely for quality educational benefits. NCAA amateurism ideal's history, evolution, and application are far from straightforward, however.

History of the Amateurism Model

Amateurism is the cornerstone of college athletics (Lemons 2017). The NCAA amateurism model originated from the nineteenth-century British aristocratic belief that amateurs who played sports purely for pleasure should not be competing against working class opponents who were financially compensated to play. Supporters of amateur ideals despised the idea of "pay for play" because they believed it would

lead to unscrupulous behaviors. Following this model, the NCAA's principle of amateurism states that college athletes "should be motivated primarily by education and by the physical, mental, and social benefits to be derived. Student participation in intercollegiate athletics is an avocation, and student-athletes should be protected from exploitation by professional and commercial enterprises" (NCAA 2012–2013a, p. 4). The evolution of the NCAA's definition of amateurism from its origins to the present reveals the complexity of this principle.

The NCAA's 1906 bylaws were consistent with the British ideal of sport for intrinsic reward, but boosters, alumni, and even athletic departments violated the rules – such as by providing illegal payments to athletes – to gain competitive advantage (Savage et al. 1929). For example, in 1929, Savage and colleagues looked at 112 colleges and universities and found that 81 had violated NCAA amateur rules. To ensure compliance with the rules, the NCAA developed a code of ethics and passed the 1948 Sanity Code, which enabled financial need-based aid (not on the basis of athletic ability) to athletes for tuition and meals. This move, some critics have argued, contradicted the British amateur sport model and served as the first step toward professionalism (Sack and Staurowsky 1998). After a lack of support and a repeal of the Sanity Code from participating schools, the NCAA eliminated the code altogether in 1952.

In 1956, roughly 50 years after adopting the British model, the NCAA changed its position on athletic scholarships and approved new legislation awarding 4-year grants-in-aid based on athletic ability. It argued that awarding this aid to athletes did not constitute "pay for play," and as such did not violate amateurism principles (Muenzen 2002; Southall and Staurowsky 2013). During that period, to avoid workers compensation claims from athletes, the NCAA mandated that "financial aid could not be reduced or canceled due to injury, canceled on the basis of an athlete's contribution to team success, injury, or decision not to participate" (Zimbalist and Sack 2013, p. 4). To remain consistent with the British model, the NCAA asserted that financial aid was not payment, and instead considered it a full cost-of-attendance allowance (or help to further the education of athletes).

Walter Byers – in 1964, while in his role as NCAA executive director – deliberately invented and mandated the use of the term "student-athlete" for the organization's own political and economic interests and to protect its amateur principles. One goal of this calculated ploy was to persuade lawmakers, courts, and the public that athletes were ordinary students rather than professionals or employees (Sack and Staurowsky 1998). In his memoir, Byers (1995) reported, "We crafted the term student-athlete, and soon it was embedded in all NCAA rules and interpretations as a mandated substitute for such words as players and athletes." This was done to avoid "the dreaded notion that NCAA athletes could be identified as *employees*" (p. 69). This public relations campaign served to protect the NCAA's monopolistic practices and amateurism ideals while allowing the organization to enrich itself. It should be noted that the NCAA also pushes the narrative that more than 90% of their athletics revenue supports its member institutions. However, direct financial support for academics is limited at many NCAA member institutions. According to Wolverton and Kambhampati (2017), "less than \$1 of every \$100 in revenue generated by

major college athletic departments at public colleges is directed to academic programs” (para. 1).

In 1973, the NCAA drifted further away from the amateurism model, approving legislation that replaced 4-year scholarships with 1-year renewable grants, giving coaches the power to cancel scholarships for almost any reason (e.g., injury, athletic performance, and change in coaching staff). This approach more closely resembles an employment relationship, where compensation is directly connected to athletic performance (McCormick and McCormick 2006). Nevertheless, the NCAA has continued to argue that college athletes are not employees (see Patterson 2013).

Over the past two decades, numerous criticisms of the NCAA amateurism model have been raised (Branch 2011; Huma and Staurowsky 2011; McCormick and McCormick 2006; Muenzen 2002; Zimbalist and Sack 2013). Scholars have questioned: (a) the varying NCAA definitions of amateurism, which may be self-serving; (b) whether college athletes should still be considered “amateurs”; (c) why amateurism applies to college athletes but not the multibillion-dollar NCAA enterprise; and (d) whether the NCAA can defend its amateur sport ideals in antitrust claims made against the NCAA and member institutions. Taylor Branch (2011), for example, argued:

[T]wo of the noble principles on which the NCAA justifies its existence—“amateurism” and the “student-athlete”—are cynical hoaxes, legalistic confections propagated by the universities so they can exploit the skills and fame of young athletes. (p. 82)

Current literature has documented that the stated definition of amateurism has not changed in the NCAA manual, but its application has evolved over time as the NCAA and member institutions have responded to external pressures and demands from constituents and the public (Allison 2001; Byers 1995; Crowley 2006; Pierce et al. 2010; Sack and Staurowsky 1998; Thelin 1996). Given the various iterations over the years, the NCAA has been criticized for what many see as an ever-changing, self-serving notion of amateurism (Huma and Staurowsky 2011; Muenzen 2002). In a report endorsed by The Drake Group, Zimbalist and Sack (2013) concluded that “The NCAA maintains its own, idiosyncratic, changing, frequently arbitrary, and often illogical definition of amateurism [that is] constantly changing to meet industry needs” (p. 7).

The current NCAA manual (2012–2013a) states that a “student-athlete may receive athletically related financial aid administered by the institution without violating the principle of amateurism, provided the amount does not exceed the cost of education authorized by [the NCAA]” (p. 5). Huma and Staurowsky (2012) argued that this constitutes “pay for play,” and “only under the terms and conditions most favorable to NCAA leadership” (p. 6). They noted that if college sports revenue were distributed as in professional sports, the average Division I FBS player would be worth \$137,357 per year, while the average basketball player at that level would be worth \$289,031.

These and other authors have made compelling cases that the most highly publicized athletes in the revenue generating sports of football and men’s basketball

– athletes who are disproportionately Black – are denied their fair market value and, moreover, are not receiving adequate health benefits for their contributions to athletic programs (Branch 2011; Donnor 2005; Hawkins 2010; Huma and Staurowsky 2012). Meanwhile, the NCAA and member institutions, including primarily White coaches and athletic directors, reap the material benefits from this athletic enterprise (Sack 2009). The Ohio State athletic director, for example, received an \$18,000 bonus when one of the university’s wrestlers won the NCAA championship. (The particular irony here is that most college wrestlers generally do not receive full athletic scholarships.) It seems clear that the NCAA, and its member institutions, continue to maximize its profits while athletes – particularly those in the revenue-generating sports of football and men’s basketball – are undercompensated for their athletic labor.

Literature and Case Law on NCAA Amateurism

To date, the vast majority of literature on NCAA amateurism model NCAA amateurism has provided broad theoretical and conceptual guidance, but not empirical analysis. There has been little extant empirical research on the issue, even though we have witnessed a recent wave of court cases and ongoing antitrust claims – for example, *O’Bannon v. NCAA* (2009, 2015), *Agnew v. NCAA* (2011), *Alston v. NCAA* (McCann 2018), *Jenkins v. NCAA* (2014) – from current and former college athletes as well as other advocates for athletes. Some research has shown that external pressures have affected how the notion of amateurism has been applied (Allison 2001; Byers 1995; Crowley 2006; Pierce et al. 2010; Sack and Staurowsky 1998; Thelin 1996). For example, the NCAA has put a priority on advancing public perception that college athletes are amateurs or like other students rather than like paid professional athletes (Lemons 2017; Sack and Staurowsky 1998).

One notable study came from Pierce et al. (2010), who drew from the Eligibility and Secondary Infractions database within the Legislative Services Database for the Internet (LSDBi) to identify reinstatement cases involving amateurism violations. They examined NCAA actions from 1999 to 2006 to understand their application of amateurism, and they identified several influential factors. They discovered that the contemporary application of amateurism was influenced by the autonomy of NCAA member institutions in decision-making associated with their athletic programs. For example, in 1956, member institutions violated established NCAA amateur principles when they disregarded them and offered 4-year grants-in-aid based on athletic ability (Sack and Staurowsky 1998; Thelin 1996). As well, the authors found there has been an economic incentive for major athletic stakeholders – for example, successful coaches, athletic directors, and corporate sponsors – to convince the public and the athletic community that athletes are amateur to avoid fairly compensating those in revenue-generating sports for their labor (Lumpkin 2017). The great majority of coaches, senior-level administrators, and executives in athletics have upheld this long-standing project of collecting the benefits of undercompensated athletic labor (Gayles et al. 2018).

Pierce et al. (2010) revealed that the winning-at-all-costs college athletics movement adopted by NCAA member institutions has altered the application of amateurism. Big-time athletic programs, for example, have struck massive deals with the highest bidders for naming rights on mega-football stadiums, basketball courts, and practice facilities while securing additional revenue streams for the purposes of increasing athletic expenditures to remain competitive in the “athletic arms race” and to enhance their chances of winning championships (Comeaux 2015a; Edwards 1984a). The irony is that additional spending in athletics does not equate to athletic success for many big-time athletic programs, which raises questions about reasons for the rampant spending spree (Hoffer and Pincin 2016). Zimbalist (1999) concluded: “the common arguments frequently made to justify committing large resources to college athletics—that they directly or indirectly support the school’s educational mission or its finances—do not stand up to empirical scrutiny” (p. 171). Too often, the increasing emphasis on and quest for winning games and championships and securing corporate sponsorships trumps NCAA amateur sport ideals (Thelin 1996).

Recent Court Cases Against the NCAA

The validity of the NCAA’s amateurism defense has weakened over time, primarily because of the undeniable existence of economic and commercial interests (e.g., athletic television contracts, bowl game revenue, conference realignment, etc.) that conflict with amateurism ideals (Lemons 2017). A number of high profile and important lawsuits have been brought against the NCAA by athletes over the past decade, alleging violation of US anti-trust laws because NCAA rules restrict what athletes can receive while playing sports. In *O’Bannon v. NCAA* (2009), for example, former football and men’s basketball players noted that athletes are not able to profit off their own names, images, or likenesses in games, NCAA video games, television, or advertising and argued that this violates federal anti-trust laws by limiting their compensation. In August 2014, District Judge Claudia Wilken ruled the NCAA’s restrictions violated antitrust laws. The ruling required the NCAA to permit member institutions to compensate athletes (a) up to the full cost of attendance and (b) up to \$5,000 per year in deferred compensation for commercial use of their images and likenesses after they leave school (*O’Bannon v. NCAA* 2009).

The NCAA appealed Wilken’s verdict to the United States Court of Appeals for the Ninth Circuit. In December 2015, the Ninth Circuit (in a 2–1 vote) affirmed that NCAA member institutions should provide athletes up to the full cost of attending college (*O’Bannon v. NCAA* 2015). However, the injunction that Judge Wilken imposed to pay athletes up to \$5,000 per year was reversed. The Ninth Circuit explained that the “district court ignored that not paying student-athletes is *precisely what makes them amateurs*” and that cash payments beyond the cost of attending college and educational expenses represent “a quantum leap” (*O’Bannon v. NCAA* 2015; emphasis added). College athletes can claim partial victory for the Ninth Circuit antitrust ruling and the *O’Bannon* case.

Several other cases further demonstrate the struggle between college athletes and the NCAA and member institutions over the NCAA's actions and the impact of amateurism ideals on college athletes. In *White v. NCAA* (2006), former NCAA Division I football and men's basketball players filed a class action antitrust lawsuit challenging the NCAA's rule limiting the maximum value of athletic scholarships to the value of tuition, fees, room and board, and books, which amounts to less than the true cost of attendance. In 2008, the NCAA agreed to a settlement that made, among other things, \$218 million available to athletes for those expenses through the end of the 2012–2013 season and allowed schools to give athletes healthcare coverage.

In October 2010, Joseph Agnew, a former Rice University football player, filed a class action lawsuit against the NCAA over its 1-year athletic scholarship policy (*Agnew v. NCAA* 2011). After Agnew sustained injuries during his sophomore season, his athletic scholarship was not renewed by the newly hired head football coach. In this case, Agnew appealed the university's decision and retained an athletic scholarship for his junior year, but his scholarship was not renewed for the following year (for other notable antitrust lawsuits, see *NCAA v. Board of Regents of University of Oklahoma* [1984]; *Banks v. NCAA* [1992]; *Jenkins v. NCAA* 2014).

The Challenges of Amateurism

In light of previous work (e.g., Hawkins et al. 2015; Huma and Staurowsky 2012; Pierce et al. 2010), it appears that the NCAA and member institutions act in ways that are inconsistent with the concept of amateurism and that athletes are not fairly treated or compensated for their athletic labor. Finding a balance between commercialism and the academic interests and well-being of students who participate in collegiate athletics is far from straightforward, yet a number of recommendations have been proposed. For example, students would benefit from keeping the playing season to a single academic term in all sports to reduce unnecessary academic pressures (Knight Commission 2010; Lumpkin 2012). To restore balance between athletics and academics, the Knight Commission (2010) recommended: (a) greater transparency, including better measures to compare spending on athletics to spending on academics; (b) rewards for practices and policies that make academic values a priority; and (c) treatment of college athletes first and foremost as students, rather than as professionals.

Even with changes such as these, public scrutiny of the NCAA's amateurism model from researchers, reformers, and other college athlete advocates – coupled with recent court rulings and pending antitrust claims – demonstrates that the current model does not fairly compensate athletes for their labor and forbids them from earning money on their name, image, and likeness. The current amateurism model can and should be reevaluated, and an equitable, evidence-based model considered (Branch 2011; Lemons 2017; Sack and Staurowsky 1998). Such a model must take into account the full range of issues that affect the experiences of athletes, particularly those in high-profile, revenue-generating sports. With all of this in mind, in this chapter I explore what we know about the experiences of Division I athletes – both

as students and as athletes – to identify areas in need of additional research and build a foundation for further work that ensures their academic and personal well-being. To do so, I draw from more than 30 years of published studies, compiled through a systemic review of the literature, which I describe next.

Review Method

To enhance the well-being of college athletes within the context of NCAA and member institution policies and priorities, we need to pay closer attention to their experiences – both on and off the playing field – from enrollment through graduation. There is an expanding body of literature on the topic of college athletes’ financial, legal, and academic rights, as well as their personal and academic well-being (Berkowitz 2013; Comeaux 2017; Comeaux and Harrison 2011; Gayles and Hu 2009; Huma and Staurowsky 2011, 2012; Konsky 2003; McCormick and McCormick 2008; McCormick and McCormick 2006; Sack 2008; Sack and Staurowsky 1998; Snyder 2013). This work addresses topics that range from equity and fairness under NCAA rules (Comeaux 2017; Huma and Staurowsky 2012) to brain function in college football players who have experienced head injuries (Marchi et al. 2013). These issues and concerns have gained increased attention in recent years – perhaps in part because of ongoing antitrust litigation against the NCAA regarding concussions and compensation, as well as pressures from internal and external stakeholders of athletics about athletes’ rights and collective well-being (Comeaux 2017). Policymakers, college and university leaders, and attorneys are searching for evidence to guide policy development and best practices (Staurowsky 2015). There is perhaps no better time to explore what we know and to highlight what has yet to be explored in the research.

To this end, I systematically reviewed more than 30 years of the extant research literature related to college athletes’ experiences in US higher education. I restricted my search to works published between 1985 and 2018. I selected 1985 as the year to begin the search because, during that time, college athletics was becoming increasingly commercialized. Some scholars have argued that this is the year when college athletics began to drift away from both its amateur principles and the overall well-being of college athletes (Eitzen 2016; Sack and Staurowsky 1998).

I conducted a broad search of key databases, including Educational Resources Information Center (ERIC), Academic Search Premier, Sociological Collection, Google Scholar, JSTOR, and PsycINFO. I selected these databases because they catalog the highest quality research. I used a combination of two key terms – *college athlete* and *student-athlete experience* – with several other terms and phrases: *rights*, *financial rights*, *legal rights*, *NCAA amateurism*, *policy*, *compensation*, *campus climate*, *academic support*, *commercialism*, *racism*, *academic rights*, and *Title IX*. I chose these search terms after an initial scan of the literature on the college athlete experience, and based on Comeaux’s (2017) anthology. This earlier volume discussed NCAA bylaws and legal decisions that have influenced college athletes’ abilities to pursue higher education and how formal policies of the NCAA and

member institutions often leave athletes vulnerable and exploitable. I included peer-reviewed journal articles, dissertations, scholarly books, book chapters, essays, and research reports. I consulted the reference lists in these identified works to ensure that other important studies were not overlooked.

I also examined NCAA manuals for policy discussions and to offer additional context for this review. I used the Google search engine to identify and review the work of leading advocacy groups for college athletes' legal rights and their social, emotional, and academic well-being – for example, the Knight Commission on Intercollegiate Athletics, The Drake Group and the National College Players Association. These groups have developed and contributed comprehensive reports, and in some cases relevant athletics-related discussions, that help inform how we think about the Division I athlete experience. Lastly, several experts on college athletes reviewed the list of scholarly works that emerged from these methods and recommended additional sources for inclusion. Based on their recommendations, I reviewed a foundational Carnegie Foundation report by Savage and colleagues, published in 1929, because it informed current understandings of the college athlete experience and raised considerable concerns about commercialism and integrity in athletics.

Because of the relatively limited research on college athletes' experiences in US higher education, eligibility for inclusion in the review was necessarily broad. I first reviewed the title and abstract for each work to gauge its relevance and to determine whether it should be included in this study. I included large-scale quantitative studies and qualitative studies as well as case law. I also included relevant information on diverse expert opinions on college athletes' experiences, protections, and supports. After I culled the more than 1,380 works produced by my search to identify those associated with the athlete experience, I filtered the resulting list to approximately 260 studies that addressed particular aspects of the college athlete experience. I specifically looked for issues related to amateurism, well-being, equity, academic support, commercialism, campus climate, and rights – issues that all emerged as important in my earlier foundational work on the rights and well-being of college athletes (Comeaux 2017). Studies on campus climate tended to be associated with the quality of experience (or lack thereof) for college athletes, and specifically the influence of institutional characteristics, as mediated by climate, on athletes' academic success; studies on equity tended to be associated with Title IX and gender equity as well as racial inequities among athletes; case law studies tended to be related to NCAA amateurism ideals and athletes' rights. I then filtered the list to approximately 205 that addressed NCAA Division I college athletes, specifically those in Division I schools. The final list was further culled based on breadth and depth of empirical engagement to include studies in which characteristics of the Division I athlete experience were explicitly examined. This approach excluded some theoretical and conceptual analyses. For example, Orleans (2013) was excluded because it was limited to a conceptual discussion of the effects of the current economic model in college athletics on the athlete experience, and further research is needed to confirm the proposed hypothesis.

In the sections that follow, I review the research on the wide range of issues that affect the academic and personal well-being of intercollegiate athletes. I begin with a discussion of formal NCAA and member institution policies, including Title IX, transfer rules, policies designed to protect athletes from long-lasting concussive injuries, and recently enacted social media guidelines. I then turn my attention to athletes' engagement in the academic experience and the types of supports that have been put in place to facilitate academic success. Finally, I discuss the effects of the campus racial climate on athletes' experiences – an especially important issue given the racial demographics of many Division I revenue-producing teams. In each section, I highlight implications for researchers as we move forward.

Formal Policies for College Athletes

In this section, I review the research on formal policies, including those created by the NCAA and member institutions. I begin with a discussion of the effects of Title IX legislation on women's participation in intercollegiate athletics. I then explore the NCAA's restrictions on athletes' ability to transfer between institutions and the potential effects on their academic interests. Next, I turn to concussions and how institutions and the NCAA can and do attempt to protect students from long-lasting harm. Finally, I describe policies and rules concerning athletes' social media usage and discuss whether these restrictions infringe on their individual rights.

Title IX: Opportunities for Women

Title IX of the Education Amendments of 1972 bars sex discrimination in all aspects of federally funded education programs, perhaps most notably intercollegiate athletics. The 1979 Policy Interpretation described three standards with which athletic programs must comply: (a) financial assistance (athletic scholarships) must be available proportional to the number of male and female participants in an institution's athletic program; (b) men and women must receive equivalent treatment, benefits, and opportunities, including equipment and supplies, facilities, games and practice times, and per diem; and (c) athletic interest and ability of male and female participants must be equally effectively accommodated (Johnson 1994). The third standard is evaluated based on a three-part test – athletic departments must: (a) provide participation opportunities for male and female students substantially proportionate to their respective undergraduate enrollment; (b) demonstrate a history and continuing practice of program expansion for the underrepresented sex; *or* (c) demonstrate that the interest and abilities of the underrepresented sex are fully and effectively accommodated (Anderson and Cheslock 2004).

Despite these requirements and the NCAA's gender equity principle for member schools, Title IX's goal has not been achieved (Acosta and Carpenter 2012; Anderson and Cheslock 2004; Carroll and Humphreys 2000; Riske 1999; Sigelman and Wahlbeck 1999; Staurowsky 1998). The NCAA's own data showed that, in

2004–2005, Division I men made up 47.4% of the undergraduate enrollment and 54.4% of intercollegiate athletes, while women made up 52.6% of undergraduates and 45.6% of athletes (NCAA 2012a). Division I member institutions have since made some gains, but female athletes still receive fewer participation opportunities; in 2010, Division I women's teams received approximately 28% of the total money spent on athletics, 36% of recruiting dollars, and 45% of athletic scholarship dollars. Acosta and Carpenter (2012), in a longitudinal national study, explored the impact of Title IX and the changing levels of women's participation, coaches, and athletic administrators for women's NCAA sports between 1977 and 1998. The authors discovered that while women's participation had steadily increased over the two-decade period, the numbers of female coaches in women's sports and female administrators for women's athletic programs had declined since the passage of Title IX.

Empirical research studies – typically quantitative studies – shed light on this participation and equity gap as well as level of compliance with regard to Title IX, although the findings do not paint a consistent picture. In 2004, Anderson and Cheslock examined equity between men and women in college sports at 703 institutions across all three divisional classifications. The authors discovered that institutions increased women's sports teams and the number of female athletes between 1995–1996 and 2001–2002, while there was virtually no change in men's teams, and the number of male athletes increased slightly. Findings differed by divisional classification. For example, Division I institutions added almost twice as many female athletes as their Division II and III counterparts. Anderson and Cheslock (2004) concluded that “in an era of rising higher education costs and unstable revenue sources, it is unrealistic to expect institutions to make all adjustments toward greater gender equity by adding female athletes; the cost of such leveling up would be prohibitive” (p. 310).

Certain institutional characteristics are negatively correlated with Title IX compliance, including having a large football program (Carroll and Humphreys 2000; Rische 1999; Sigelman and Wahlbeck 1999). For example, Rische (1999), using 1995–1996 data from 308 schools that were competing at the Division I level, found that the presence and profitability of a school's football program had a negative effect on the proportion of all expenditures for women athletes. Moreover, the presence of a large football program made it more challenging for schools to achieve financial gender equity when compared to schools without football programs. Similarly, Carroll and Humphreys (2000), employing multinomial logistic regression, developed a behavioral model of athletic directors' behavior under Title IX in a nonprofit college or university. Their theoretical model predicted that athletic departments would eliminate men's sports in order to comply with Title IX. The authors also revealed that the athletic program's size and prestige were inversely associated with the decision to drop men's sports.

Other studies (Anderson et al. 2006; Sigelman and Wahlbeck 1999; Stafford 2004) have explored the determinants of Title IX compliance in a regression model. Stafford (2004), for example, examined the factors that determine whether an athletic program is in compliance with Title IX. Conducting a series of econometric

regressions on the 2000–2001 compliance status of Division I institutions, she found that schools with a lower enrollment of women undergraduates were more likely to comply with Title IX, and schools with a football team were more likely to violate Title IX. Stafford concluded that the NCAA had not used its influence to encourage Title IX compliance from its NCAA member institutions. Sigelman and Wahlbeck (1999) found similar patterns. Analyzing data on more than 300 Division I athletic programs, they discovered that most schools – particularly those with football teams – were not in compliance. They also found that Title IX compliance was more common for schools with smaller athletic programs and those without football teams.

Anderson et al. (2006) examined the level of compliance with the substantial proportionality prong of Title IX across NCAA schools in the 2001–2002 academic year. Using a cross-sectional regression model, the authors in part found that, at schools where women represented 48–52% of the undergraduate student body, noncompliance rates were as high as 68–83%. Their findings also revealed that less selective, less wealthy, smaller schools with larger percentages of female students were less likely to be in compliance with substantial proportionality. As well, they noted regional differences: The gender proportionality gap in intercollegiate athletics was larger in schools in the Midwest and South, lending support to the work of Stafford (2004), who found that schools in the southern United States and Historically Black Colleges and Universities (HBCUs) were less likely to be in compliance.

Almost 50 years after the enactment of Title IX, women have greater opportunities to participate in intercollegiate athletics. However, the evidence demonstrates that the fight for gender equity in college athletics is far from over (Anderson et al. 2006). In recent years, formal complaints have been filed with the Department of Education’s Office for Civil Rights, and several legal cases have been brought to courts (Samsel 2017). Given the potential public pressures of these actions, it would be instructive for additional studies, using complementary approaches such as case studies and surveys, to gauge how schools have improved Title IX compliance rates. Where they have failed to do so, we need a better understanding of both where the obstacles exist and how they can be addressed.

Future studies should continue to investigate positive and negative institutional characteristics associated with Title IX compliance as well as the relationship between the elimination of Division I men’s sports and institutional policies and practices related to athletic spending. Colleges and universities should explore whether reducing budgetary excesses (e.g., coaching staff, travel distance, recruitment expenses, and travel staff) in football and men’s basketball would allow for additional funds to be allocated to both women’s and other men’s sports (Knight Commission 2010; Lumpkin 2012). These steps would better enable colleges and universities to comply with Title IX requirements, achieve gender equity, and enhance participation opportunities for all athletes. Because schools in the South and Midwest tend to perform far worse in term of Title IX compliance than schools in the West, future studies designed to understand sources of regional differences would be worthwhile.

Further, we do not know enough about the impact of Title IX on women's participation opportunities in college sports – particularly for women of color as athletes and administrators – or on male athletes. Future research should examine the influence of the Senior Woman Administrator (SWA) role, the highest-ranking woman in athletic administration among NCAA member schools, on the advancement of women of color leaders in intercollegiate athletics (Hoffman 2010). Under Title IX, sexual harassment and sexual violence are prohibited forms of gender discrimination. Yet these forms of gender discrimination are widely perpetuated (Acosta and Carpenter 2012). As such, to what degree are campus climate issues – including rape culture, sexual harassment, and discrimination on the basis of gender and other forms of identity – accounted for in determining Title IX compliance? Little qualitative work has investigated these issues or the quality of the educational environment the institution provides. Focus group discussions and semistructured interviews, for example, would allow more in-depth investigation into female college athletes' attitudes about and experiences with access to participation opportunities, gender equity, and gender discrimination. Through a feminist theory lens, with particular attention to race, we can better understand how athletes' experiences are gendered, as well as how sexism, racism, and other forms of oppression can be challenged. For example, we can document and explain the ways that women athletes have been marginalized and alienated because they do not meet the standards related to a specific form of hegemonic masculinity.

The discourse on gender equity tends to be framed around the idea that Title IX takes opportunities from male participants in athletics, which creates an adversarial road to gender equity and justice (Anderson and Cheslock 2004). As Staurowsky (1998) suggested, we need to reframe the conversation: "Once student education is again discussed with a fundamental respect for human dignity and the essential worth of every human being, there will be no need to discuss gender equity at all" (p. 23). This notion is very much in keeping with the idea that athletes' rights must be paramount, even in the context of a commercialized enterprise.

NCAA 4–4 Transfer Rules

The NCAA has restrictions on the process by which Division I college athletes can transfer from one 4-year institution to another, referred to as "4–4 transfer rules." Under NCAA Bylaw 14.5.1, unless exempted, athletes are required to complete one full academic year of residence at a certifying institution before they are eligible to compete (NCAA 2012–2013b). The transfer rules apply most stringently to Division I college athletes in baseball, football, men's ice hockey, and men's and women's basketball; these athletes are unlikely to be granted exceptions, waivers, or one-time transfers without penalty because they have, according to the NCAA, historically underperformed academically (Cali 2014).

In *McHale v. Cornell University* (1985), the NCAA argued that its transfer rules were designed to prevent transfers solely for athletic reasons, avoid the exploitation of student athletes, and allow students time to adjust to their environments. Scholars

have questioned these stated goals, however (Jenkins 2006; Konsky 2003; Yasser and Fees 2005), and the extent to which NCAA regulations support the academic goals of college athletes is unclear. For instance, the rules do not provide an “academic exception” unless an athlete’s program of study is discontinued. As such, athletes who wish to transfer in order to change academic program or to acquire a higher quality educational experience are not allowed to do so without sitting out for a season. And the NCAA’s assertion that the transfer rules allow athletes to adjust to new environments is questionable. As Konsky (2003) argued, “These same restrictive rules. . .do not apply to student-athletes transferring from junior colleges to 4-year institutions. Arguably, junior college transfer students need as much, if not more, time to adjust” (p. 1598).

In the only empirical study on NCAA transfer rules to date, Heller et al. (2016) interviewed 47 Division I athletes from 20 schools about their views on NCAA transfer rules. The authors found that most participants believed that NCAA transfer rules are unfair because they are more restrictive for athletes than for head coaches. They concluded that the NCAA should “give athletes a greater voice in the governing process of intercollegiate athletics” (para. 49).

The current strict (and perhaps self-serving) NCAA transfer rules call into question the NCAA and member institutions’ motives and likewise their concern for athletes’ personal and academic well-being. As Konsky (2003) argued, the NCAA is motivated by commercial and economic interests, and thus their regulations should “come under the same scrutiny as those of other commercial organizations” and perhaps “be accomplished by less restrictive means” (p. 1607). It is worth noting that the NCAA is considering several proposals to reform the transfer rules, including head coaching change transfers and postgraduate transfers (Connelly 2018).

The research literature on NCAA 4–4 transfer rules has, to date, focused primarily on the protocol that college athletes must follow in order to transfer (Cali 2014). We know little about athletes’ actual transitions to other institutions – academic, athletic, or social – to know whether these rules ultimately benefit or hurt them. Future studies should explore qualitatively, through individual and focus group interviews and case studies, *why* athletes transfer and *how* transfer athletes adjust to their new environments after a full year of residency. Such an approach would offer a more robust understanding of athletes’ views about transferring, how transfer athletes adjust to their new environments, and how best their institutions and the NCAA can protect their academic and personal well-being. NCAA and athletic stakeholders – e.g., coaches, athletic directors, and conference commissioners – have been unwilling, at times, to grant transfer waivers to athletes (The Associated Press 2019). Future studies should examine qualitatively, through interviews, athletic stakeholders’ perspectives on NCAA transfer rules.

NCAA Concussion Policy

Over the past decade, sport-related concussions – particularly in sports like football, soccer, and hockey – have generated much public attention. A concussion, recognized by medical experts as a mild traumatic brain injury, was defined by the Congress of Neurological Surgeons (1996) as “a clinical syndrome characterized by immediate and transient posttraumatic impairment of neural functions, such as alteration of consciousness, disturbance of vision, equilibrium, etc., due to biomechanical forces” (p. 388). Concussions can vary widely in severity and may be caused by direct or indirect force to the head or elsewhere on the body that is transmitted to the head (Cantu 1996).

This type of injury is concerning for any athlete, but arguably especially for athletes who put their trust in colleges and universities to look out for their best interests. There is a good deal of recent empirical research on sport-related concussions over the past decade, due in part to the increased frequency of concussions in athletics (Duma and Rowson 2014), ongoing litigations (Axon 2014), and uncertainty surrounding concussion recovery (McClincy et al. 2006).

Concussions in College Athletics. The NCAA has come under scrutiny in recent years because of the high number of traumatic brain injuries in college sports. According to the organization’s own data, concussive injuries represent 5–18% of all reported injuries, depending on the sport. Between 2004 and 2009, college athletes suffered a total of 29,255 concussions, 16,277 (56%) of which were among football players. These numbers maybe understated because athletes may play through concussive injuries or may not report symptoms to avoid interruption in their playing time. Davies and Bird (2015) surveyed 193 Division I athletes and found that 45% did not report their suspected concussions, because they did not think the injury was serious enough, they did not want to have to leave a practice or game, or they did not know they had sustained a concussion.

Sport-related concussions are particularly a concern for football players, who have the highest concussion rates of any contact sport (Gessel et al. 2007). Crisco et al. (2010), in a study of 188 NCAA Division I football players from three teams, examined the frequency and location of head impacts that individual players received during a season. The authors revealed that a football player can receive as many as 1,400 head impacts during a single season, with the average number per game almost three times greater than the average number per practice. Moreover, they reported that most of the impacts occurred to the front of the helmet for all player positions with the exception of quarterbacks, who had a higher percentage of impact to the back of the helmet. These findings suggest that most players are likely to initiate and control the location of head impact, whereas quarterbacks are likely to have impacts to the back of the helmet, or fall backwards and hit the backs of their head on the playing surface (Crisco et al. 2010).

In a study of 4,251 NCAA football players who suffered concussive injuries, Guskiewicz et al. (2003) found that the risk of sustaining a concussion is associated with the number of previously self-reported concussive injuries. In particular, the authors reported, athletes who had a history of three or more previous concussions

were three times more likely to have an incident of concussion than athletes with no concussion history. In addition, athletes with a concussion history experienced slower recovery of neurological function. Headaches were the most commonly reported symptom at the time of a concussive injury, followed by balance issues or dizziness; most symptoms lasted roughly 3.5 days.

Covassin et al. (2008) examined the neurocognitive performance of 263 college athletes with a history of zero to three or more concussions. Each participant was administered the ImpACT test battery to determine neurocognitive performance. The authors found that college athletes who reported a history of multiple concussions tended to take longer to recover on verbal memory and reaction time as compared to athletes with no previous concussions. These findings are consistent with the work of Covassin et al. (2013), who discovered that college athletes with multiple concussions had prolonged recovery on verbal memory compared to those with no history of concussions. And, in line with other studies, Marchi et al. (2013) found that frequent and routine impacts to the head can have a cumulative effect on football players' cognitive function over time.

NCAA Responses. In 1995, under the principle of student-athlete well-being, Article 2.2.3 was included in the NCAA Constitution: "It is the responsibility of each member institution to protect the health of, and provide a safe environment for, each of its participating student athletes" (NCAA 2012–2013a, article 2.2.3). Clearly, this puts the onus on member institutions to ensure the health of their athletes. In April 2010, the NCAA more specifically addressed concussive injury when it enacted a concussion management policy to diagnose and treat concussed athletes, requiring each member institution to develop and maintain its own concussion management plan. The policy stipulates that (a) all college athletes diagnosed with concussions shall not return to competition for at least the remainder of that day; (b) all college athletes should receive training each year on the signs and symptoms of concussions, and sign a statement in which they accept responsibility for reporting concussive injuries to the institutional medical staff; (c) any college athlete showing signs or symptoms of a concussion be evaluated by a healthcare provider with experience in the evaluation and management of concussions; and (d) those diagnosed with a concussion receive medical clearance by a physician or the physician's designee before returning to competition.

The NCAA concussion policy seems to be a promising first step. Kilcoyne et al. (2014) explored the rates of concussion diagnosis at three Division I football programs before and after it was adopted (2009–2010 and 2010–2011). The authors found a significant increase in diagnosis rates after the new policy was implemented, suggesting that it might be effective. Yet, shortly after the policy implementation, Fenno (2013) found the following:

An internal NCAA survey released in 2010 showed 50% of responding schools didn't require a concussed athlete to see a physician and around half would return an athlete to the same game after suffering a concussion. Just 66% of schools used baseline testing; of those that didn't, 70% indicated cost was a factor and 48% regarded the process as too time-consuming. (para. 12)

In 2014, the NCAA provided further concussion recommendations and guidelines, including best practices for concussion recognition, diagnosis and management, return to activity, and return to learn. In doing so, the NCAA once again delegated its legal obligation to protect the health and safety of college athletes to its member institutions. And, it appears that, despite guidelines for concussion management, the NCAA does not enforce its mandated concussion management policy or penalize athletic programs that do not comply with it (Fenno 2013). In addition, in the concussion lawsuit of former Frostburg State football player Derek Sheely, a 30-page court filing in part stated: “The NCAA denies that it has a legal duty to protect student-athletes” (Fenno 2013, para. 1). The NCAA and its member institutions are also under no obligation to cover medical expenses incurred from an athlete’s concussive injuries (Comeaux 2017).

Advocates for the collective well-being of college athletes believe the NCAA should be more actively engaged in preventing and addressing head trauma in college sports (see Graham et al. 2013). Indeed, as a result of their stance on the health and safety of college athletes, the NCAA has been hit with a number of concussion lawsuits, alleging that they were negligent in the protection of athletes (see Axon 2014). To date, more than 10 concussion lawsuits by former college athletes have been filed against the NCAA. Pending lawsuits, coupled with pressures from members of Congress, are likely to pose a major threat to the NCAA (see Waldron 2013).

Institutional and Other Responses. Recent studies have found that most NCAA member schools have concussion management plans in place (Baugh et al. 2015). Many athletic leaders have reported, however, that their schools need to improve these plans because they do not have formal processes for educating athletes about concussions (Baugh et al. 2015; Donaldson et al. 2015). Kaut et al. (2003) conducted a retrospective survey of 461 college athletes to identify symptoms of head injuries, asserting that this is one of the greatest challenges facing athletic personnel in college sports. They reported that recognition can be rather difficult; however, because some concussions have subtle symptoms – including headache, momentary confusion, and poor concentration – that might be resolved in short order. Thus, concussion education is essential because it can help improve recognition, management, and prevention of concussive injuries. Based on the findings of their survey of Division I athletes, Davies and Bird (2015) concluded that “the University may benefit from a formal education program for their student athletes and athletic staff about concussions, a program with information on prevention, the signs and symptoms, and proper management on and off the athletic field” (p. 110).

Although not universally implemented, concussion education programs for college athletes have the potential to serve as an important prevention method. Kroshus and Baugh (2016), in a study of 789 athletic trainers from 276 schools and 325 athletes from four schools, explored the content and delivery modalities of the concussion education provided to college athletes. The authors found that the source and delivery modalities varied from formal meetings or lectures (77%), written materials (75%), and video presentations (31%) to online materials (21%) and posters on a wall (20%). They also discovered that, at most schools, concussion

education was provided to athletes by the team's athletic trainers. Athlete participants reported that they preferred concussion education information from sources such as coaches and physicians who could create a culture of safety within their athletic programs.

Researchers continue to search for ways to manage concussions in order for athletes to return to participation and learning after a head injury (Broglia et al. 2007; Ferrara et al. 2001; Griffin 2017; Guskiewicz et al. 2004; Lynall et al. 2013; McCrory et al. 2009; Notebaert and Guskiewicz 2005). For example, Lynall et al. (2013) surveyed 1,053 National Athletic Trainers' Association members about their concussion diagnostic and return-to-participation practices. They found that athletic trainers use objective tools, such as balance testing and neuropsychological testing, to assess and manage concussed athletes; the use of clinical examinations and symptom evaluations has greatly decreased. The authors concluded that the athletic trainer "needs to remember that the most effective concussion management appears to come from the use of multiple tools" (p. 850).

Similarly, Kelly et al. (2014) surveyed a cross-sectional sample of college athletic trainers about their concussion management practices. They found that the majority of participants used a multifaceted approach at baseline, acute post-injury, and return to participation. Balance, symptom assessment, and neuropsychological testing were used to reduce the risk for additional injury by prematurely returning an athlete to participation. And Majerske et al. (2008), in a retrospective study, examined the neurocognitive test results of 95 athletes before and after concussion. Although there were no statistically significant relationships between symptom scores and levels of activity following injury of an athlete, their results suggest that all activity levels – low, moderate, and high – might be counterproductive for some concussed athletes. The authors recommended that, during the recovery process, athletes reduce coursework and physical activity, reschedule exams, shorten school days, and engage in one-on-one learning sessions. The researchers concluded that we need more research on the impact of concussion on return to play and return to learn. Indeed, we need to better understand the neurological effects of repeated concussions and subconcussive head impacts on college football players, especially their influence on short- and long-term cognitive function. More longitudinal studies and advanced quantitative research should carefully explore these issues, while considering differences by sport and level of competition. As well, Kroshus and Baugh (2016) found that college athletes prefer concussion education information from their coaches. Although coaches are less likely to be medical experts, future research should explore coaches' knowledge about concussions and how they make decisions about concussed athletes, as well as the ways, if any, they create a culture of safety within their athletic program. Relatedly, because multiple concussions can have a cumulative effect on the brain, future survey research and case studies should examine youth sport stakeholder's knowledge of concussion education, including coaches, parents/guardians, and game officials.

Researchers and athletic leaders have begun to take action not only to recognize and manage concussions but also to lower concussion rates in college athletics. For example, Rowson et al. (2014) conducted a study of eight collegiate football teams

to understand whether helmet design can reduce the risk of concussions. Accounting for the number of football players' head impacts, the authors compared two helmet designs. They found a 54% reduction in concussion risks for players wearing the helmet with 40% thicker foam. They concluded that "helmet design may never prevent all concussions from occurring in football, but the evidence illustrates that it can reduce the incidence of this injury" (p. 3). This is promising, but further research is needed to fully understand whether advances in equipment can sufficiently protect athletes from harm. We need a deeper understanding of concussive injuries in all respects. Future longitudinal, large-scale studies should track college athletes, collecting demographics, frequency, and nature of concussive injuries, protective equipment usage, and educational training. These studies should also investigate the effectiveness of concussion legislation to better understand, explain, and support the need for enhanced regulatory or legislative efforts for athletes.

Freedom of Expression: Social Media Policies

Social media has become increasingly popular among college athletes, fans, recruits, and other athletic stakeholders (Sanderson 2011). Fieldhouse Media conducted a 2015 study on social media usage by athletes across divisional classifications, and discovered that 73% of surveyed participants had a Twitter account, 94% had a Facebook account, and 81% had an Instagram account (DeShazo 2015). With growing demand for and interest in social media, the online activity of college athletes has created public relations issues and concerns about potential NCAA rules violations. Schools also understand that risky behavior on social media such as posting inappropriate or racy photos can threaten their reputation and profitability (Hawley 2014). For example, at UNC Chapel Hill, a football player posted information to his Twitter account about his relationship with a sports agent, which suggested he received improper benefits and violated NCAA amateurism rules (Epstein 2011). At Ohio State, a third-string quarterback was suspended for tweeting, "Why should we have to go to class if we came here to play FOOTBALL, we ain't come to play SCHOOL classes are POINTLESS" (Jones 2014). These and other incidents have pressured NCAA member institutions to develop social media policies for their athletes (Sanderson 2011; Snyder 2013). But questions remain about whether these policies are fair for athletes, who may feel their individual freedom of expression is being stifled.

A handful of studies have explored social media usage among athletes as well as athletic department social media policies. Based on semistructured interviews with 20 Division I athletes, one study found that players used Twitter primarily to maintain contact with family and friends, communicate with followers and read about their games and athletic performance. The authors concluded, "Twitter's rise in prominence corresponds to a need for sports organizations to proactively monitor and address its influence, particularly in the realm of college athletics" (Browning and Sanderson 2012, p. 517).

Beyond its Bylaw 13.10.2, which states that “a member institution shall not publicize (or arrange for publicity of) a prospective student-athlete’s visit to the institution’s campus” (NCAA 2012–2013a), the NCAA has not developed or enacted a social media policy; rather, institutions have created and maintained their own. In a content analysis of social media policies in student-athlete handbooks from 159 NCAA Division I institutions, Sanderson (2011) found the majority of policies were generally negative and content-restrictive, underscoring risk and punishment; some required athletes to provide athletic personnel with access to their social networking profiles or accounts. More recently, Snyder (2013) found that the majority of athlete participants believed it was unacceptable to have a complete ban on social media use (93%), a ban on social media while in season (82%), or a ban on game day (59%). They were accepting of social media policies monitored by the coach (75%), athletic department staff (72%), athletic director (68%), and team captain (62%).

A fundamental question is whether a formal college and university social media usage and monitoring policy infringes on constitutional free speech or social media privacy rights (LoMonte 2014). There is significant legal precedent supporting the idea that participation in college athletics is a *privilege* and not a *right* (Santovec 2013). As such, college athletes are likely to have less privacy and some degree of regulation associated with their social media usage. Nonetheless, because social media is a recent phenomenon, we do not know enough about NCAA member institution social media policies or the extent to which college athletes are protected or limited in their usage.

Research on social media policies in athletics is scant. We must undertake qualitative and quantitative analyses of college and university social media policies, and precisely understand the restrictions on athletes’ social media accounts across various institutional types. Integration of rigorous qualitative and quantitative designs will generate new knowledge for athletic leaders and policymakers grounded in evidence rather than assumptions. In this way, courts can determine whether these policies place undue restrictions and whether they would pass a narrowly tailored test (Gay 2011). The views of athletes and other internal stakeholders of athletics, including policymakers, will be most useful to those who advocate for athletes’ rights and collective well-being. And, given the proliferation of social media over the past decade, it would be instructive for researchers to also explore the use of visual platforms, including Instagram and Snapchat, by college athletes.

Engagement in the Academic Experience

As commercial interests in college sports continue to grow, there are expanded game schedules, increased travel, and longer practice hours. It is increasingly difficult to ignore the effects of these changes on students who participate in college athletics. In the NCAA’s Growth, Opportunities, Aspirations, and Learning of Students in College (GOALS) study, which gathers data on the athlete experience, Brown (2011)

reported that athletes at FBS schools spend 43.3 h per week on sport-related activities, and men's and women's basketball players miss the most classes – 2.4 and 2.5 per week, respectively. Missed classes are largely the result of coaches' demands and television networks' dictation of schedules and times for games. This creates significant challenges for athletes as they strive to engage with college in the same ways that their nonathlete counterparts do. In this section, I review the related literature on the academic engagement, performance, and support of athletes on college campuses within a multibillion-dollar commercial industry. I give special attention to Division I athletes by both sport and gender.

Academic Clustering

Some athletes are restricted to certain academic majors – often majors held in low regard – because of time constraints that result from tremendous sport and coaching demands in a highly commercialized enterprise (Comeaux et al. 2016). The results of an NCAA survey completed by more than 20,000 athletes at 627 institutions representing all three divisional classifications revealed that, for one in five athletes, sport participation precluded selection of a desired major (Paskus 2006). Researchers and college sport reformers have theorized that many coaches and practitioners in academic support centers tend to steer Division I athletes into athlete-friendly majors or academic paths of least resistance in order to maintain their sport eligibility. Recently, the popular press and a small number of studies (Fountain and Finley 2009; Gurney and Southall 2013; Sanders and Hildenbrand 2010; Schneider et al. 2010) have given attention to academic major clustering among college athletes, which occurs when 25% or more of athletes on a team share the same major (Fountain and Finley 2009). Major clustering raises potential problems for athletes, including limited future opportunities because they are forced, at times, to major in undergraduate programs that do not align with their academic interests and career aspirations (Gurney and Southall 2013). Some of these studies have also examined the role of race and gender in this type of clustering.

Fountain and Finley (2009), for example, examined academic clustering and its impact on Division I football players by race. They found that White players in general were overrepresented in business programs, whereas non-White players were overrepresented in general studies and behavior sciences. Extending this research, Fountain and Finley (2011) explored how Bowl Championship Series football players' academic majors changed over a 10-year period. In their analysis of media guides, they discovered that football players, particularly non-White players, at the studied athletic program tended to cluster into fewer academic majors over time; Sanders and Hildenbrand (2010) had similar findings. Fountain and Finley (2011) concluded that “college athletics, particularly in the revenue sports, are highly competitive. These competitive behaviors drive decision-making in athletic departments and academic integrity often is one of the first casualties” (p. 39). Similarly, Schneider et al. (2010) examined academic clustering and major selection of NCAA football teams within the Big 12 Conference. They found that

nearly 37% of football players selected academic majors in either social science or communications.

Academic clustering is not limited to football or to men's team sports more broadly. Paule (2010) examined 211 Division I women's basketball programs and found that academic clustering into a single major existed at 45% of the studied programs. She reported that nine of the 14 players on the University of Connecticut women's basketball team (64%) were majoring in exploratory studies, compared to only 4.7% of the overall undergraduate student population at the same school. Indeed, with rampant commercialization surrounding athletics and the quest to win games and secure corporate sponsorships, it is not surprising that athletes are steered toward certain majors in order to maintain their athletic eligibility, such as those in the social sciences or communications – fields other than Science, Technology, Engineering, and Mathematics (STEM) (Comeaux et al. 2016; Schneider et al. 2010).

Academic Engagement and Performance

The NCAA has produced several empirical research studies on a range of topics, including the academic engagement and performance of athletes. For example, the Social Environments Study, conducted in 2012, in part examined the environments of current athletes, and specifically how these individuals engage with various campus stakeholders. Overall, the vast majority of survey findings were positive. Athletes across all divisional classifications reported feeling “extremely comfortable” with students who were not athletes (77% Men, 74% Women). More than 80% of athletes across divisional classifications reported that they felt “mostly” or “extremely” comfortable in their classes.

Some athletes reported encountering negative stereotypes about their intellectual abilities, however (NCAA 2012b). For example, highest among divisional classifications, 44% of Division I male athletes and 29% of female athletes reported that nonathlete students assumed they were not good students because they were athletes. Moreover, 23% of Division I male athletes and 11% of their female counterparts reported that professors assumed they were not good students because they were athletes.

In addition, the NCAA's ongoing GOALS study explores the experiences and well-being of current college athletes in a number of areas, including campus support, health and well-being, time management, and the academic, social, and athletics experience (NCAA 2015b). Previous versions of the study – conducted in 2006, 2010, and 2015 – were designed to provide large-scale, comprehensive data on issues associated with athletes to NCAA committees, policymakers, and member institutions. Survey responses across all study years were received from more than 21,000 athletes at nearly 600 schools across Division I, II, and III schools.

In the 2015 report, the NCAA noted that athletics continues to play an integral role in college choice across divisions, and athletes expressed satisfaction with their overall college experience (NCAA 2015b). The lowest satisfaction levels were

generally seen in revenue sports of football and basketball at the Division I level. Other 2015 findings revealed that Division I women athletes were most likely to express a preference for spending less time on athletics, and nearly two thirds of men and three quarters of women said they would have preferred to have more opportunities to visit home and family. A majority of athletes in this study reported feeling positive about their ability to keep up with their academic work during their sport's season (roughly 60% in Division I, 65% in Division II, 70% in Division III).

Regarding campus climate issues, most athletes in the 2015 GOALS study reported having a strong sense of belonging at their respective college or university, and that their coaches and teammates created a welcoming and inclusive team environment. Athletes of color, particularly women, were less likely to find the campus and team environments welcoming or inclusive, however. (I take up these issues in depth in the next section, which addresses campus racial climate.) The 2015 GOALS data revealed an increase since the 2010 study (approximately 30%) in the number of athletes across divisions who self-reported mental health issues such as anxiety and depression. Relatedly, roughly one third of athletes reported challenges to the demands and pressures of their sports. This finding was highest in Division I revenue sports such as football, and lowest in Division III schools (NCAA 2015b).

More recently, the NCAA (2018b) commissioned Gallup to conduct a study on the long-term effects of participating in intercollegiate athletics on former athletes. They interviewed 1,670 former NCAA athletes – ranging in age from 22 to 71, with a median age of 44 – about their college experiences and current well-being. The study included a comparison of former athlete interview responses to those of nearly 23,000 nonathlete students graduating from the same colleges and universities. Most of the findings revealed a positive picture of the college athlete experience during and after college. For example, the study indicated that 71% of former athletes were employed full time, compared to 68% of nonathlete students. As well, athlete graduates were just as likely to have earned their undergraduate degree within 4 years (68%), as compared to nonathlete students (66%) in this study. Former athletes reported having mentors who supported their academic and personal goals during college and professors who cared about them as people and helped to shape their excitement about learning. Overall, the Gallup study revealed that the college experience looks very similar for former athletes and their nonathlete student counterparts. Nonetheless, aggregate data reported from the Gallup study can conceal a considerable amount of information. Therefore, it would be instructive to disaggregate college athlete data by type of sport and gender to understand differences in the experiences across groups. As the 2015 GOALS study revealed, challenges to finding necessary energy because of the physical demands and time commitment of sports were highest among athletes in Division I revenue-generating sports. Moreover, women of color were less likely to have a strong sense of belonging on campus. These are important issues to explore further, if the well-being of athletes is to be secure in the commercialized intercollegiate athletics climate.

Revenue Versus Nonrevenue Sports. Shulman and Bowen (2001) used the College and Beyond database to explore athletes' experiences at 30 mostly selective

private colleges and universities in the United States. They discovered that students who participated in athletics tended to underperform academically across all divisional classifications, and this underperformance was more pronounced for those who played in the sports of football and basketball (which, at many Division I contexts, are associated with earning revenues). Athletes who participate in these revenue-earning sports – namely, Black athletes – are one of the most studied groups in this area. Scholars have found that Division I college athletes, largely those playing in revenue sports, become increasingly disengaged from their academics due to the commercialized nature of college athletics and the priorities of their coaches (Adler and Adler 1991; Eitzen 2016).

In a case study of Division I men's basketball players at one school over a 4-year period, Adler and Adler (1991) explored the nature of identities and roles during college. They found that male basketball players transitioned into college life with feelings of optimism about their desired academic goals. Within one or two semesters, however, they began to devalue the academic role because of sport requirements and demands that structurally inhibited their academic presence on campus. The authors revealed that the more the studied basketball players remained in school, the more they began to feel the commercialism or business nature of college athletics, making sport participation more of a full-time job than an avocation.

Uptegrove et al. (1999) examined the academic performance of Division I athletes in revenue sports compared to those in nonrevenue sports (e.g., softball, gymnastics, golf, and swimming) at 42 schools. Drawing from the 1987–1988 NCAA National Study of Intercollegiate Athletes, and employing OLS and logistic regression techniques, the authors found that revenue athletes were more likely than nonrevenue athletes to repeat classes and be placed on probation. Uptegrove and colleagues argued that these academic disparities were a function of institutional pressures and time management challenges due to sport participation. They concluded, “rather than simply attributing blame solely to the actors involved, our focus on institutional pressure places the responsibility on the university itself” (p. 735).

Maloney and McCormick (1993) drew from 1985 to 1988 data on course grades of undergraduate students from Clemson University and discovered that athletes in nonrevenue sports performed similarly to their nonathlete peers. Athletes competing in the revenue sports of football and men's basketball performed less well academically than their peers. The authors also found that grades for revenue athletes were lower during the sport's season than they were out of season, suggesting that sport demands contributed to these academic educational outcomes.

These structural impediments make it more challenging – and perhaps less likely – for athletes, particularly those playing in revenue sports, to fully engage in meaningful educational activities or to fully integrate into the larger campus community. As such, a number of studies have suggested that differences in academic performance are influenced by college environmental characteristics, such as educationally purposeful engagement activities (e.g., Comeaux 2005; Gayles and Hu 2009; Umbach et al. 2006). Such activities can include, but are not limited to, meaningful interactions with faculty and collaboration with nonathlete peers on problem solving tasks (see Comeaux 2010; Comeaux and Harrison 2011).

Gayles and Hu (2009), for example, used a dataset from the Basic Academic Skills Study to examine the extent to which Division I athlete engagement in educationally purposeful activities influenced a set of desired outcome variables. They found that, on average, athletes' interactions with students other than their teammates had positive impacts on personal self-concept, learning, and communication skills. Compared to nonrevenue athletes, revenue athletes had lower level of interaction with students other than their teammates. In short, the commercial emphasis on college athletics may be at odds with certain educationally purposeful activities, as athletes have too many other demands on their time.

Despite the previous work in this area, additional research is necessary to further understand the type and quality of educational activities in a range of academic settings that lead to positive gains for both revenue and nonrevenue athletes. Some types of educational activities have greater influence for some sports than others (Gayles and Hu 2009). While accounting for a highly commercialized athletic enterprise, case studies and large-scale quantitative studies on how college impact athletes – with data disaggregated by type of sport, and other background characteristics (e.g., first generation status, family income, athletic scholarship status) – would advance this line of work. There is also a tendency in studies of Division I revenue and nonrevenue athletes to highlight the challenges they encounter, or to document why these same athletes fail academically. It would be valuable, using an anti-deficit approach, to examine factors that contribute to the academic success of these athletes (see Cooper and Hawkins 2016).

Gender Differences. Several studies have explored variations in the academic performance of Division I male and female college athletes. Much of this work has attempted to relate these variations to precollege and college environmental factors. Female athletes, for example, are more likely to graduate from high school in the top 25% of their class, and they tend to outperform their male counterparts on standardized tests (Kane et al. 2008). In addition, Dilley-Knoles et al. (2010), in study of 379 male and female collegiate athletes, examined the extent to which overall college grade-point averages (GPA) differed for athletes by type of sport and gender. They found that female athletes had considerably higher overall GPAs than their male counterparts. Research has shown that female athletes routinely outperform their male counterparts academically in college (Comeaux and Harrison 2011). These gender differences might be related to male athletes' overconsumption of the athlete role, which can make it difficult to meet the demands of the student role (Jayakumar and Comeaux 2016).

Meyer (1990) examined the attitudes and feelings of Division I female athletes regarding their roles as students and as athletes. Through semistructured interviews with scholarship female athletes, Meyer found that the majority of female athletes in basketball and volleyball expressed idealistic feelings about their academic obligations and goals in the first year of college, and that their academic interests improved over time. The author concluded that a more positive environment existed among female athletes compared to their male counterparts. Female athletes were more likely to encourage each other academically, take active roles in course selection and program development, and decline special considerations from professors and

administrators. These findings contrast with Adler and Adler's (1991) study, which reported male athletes in the sport of basketball were more inclined to lose interest in their academic endeavors over time.

Other studies have looked at differences by gender on purposeful engagement activities, including involvement in campus organizations and interactions with faculty. Comeaux et al. (2006), using data from the Cooperative Institutional Research Program, found minimal differences between Division I male and female athletes in forms of contact with faculty members during college. Faculty who provided letters of recommendation, encouragement for graduate school, and help in achieving professional goals made fairly strong contributions to both male and female athletes' academic success. Likewise, in a survey of Division I athletes, Marx et al. (2008) found that male and female athletes varied in their socialization experiences. Male athletes in particular were more likely to distance themselves from the student role than were their female counterparts.

Given that we know different types of engagement activities play a significant role in the learning and personal development of students who participate in athletics (e.g., Comeaux et al. 2006; Gayles and Hu 2009), future research should employ different methods to examine ideal conditions for enhancing the academic success of male and female athletes. Large-scale quantitative studies using secondary data sources might not be able to operationalize a broad range of campus conditions; rather, in-depth interviews and other qualitative methods might be a viable way to unpack how athletes negotiate these ideal conditions, and the extent to which the institutional context, such as campus climate, might impact their interaction patterns. Further, while controlling for race/ethnicity, gender, and type of sport, it would be instructive to examine engagement variables on a broad range of outcomes in the post-college years to better understand their unique benefits to college athletes.

Academic Support for College Athletes

In 1991, the NCAA implemented Bylaw 16.3.1.1, which mandated that member colleges and universities provide general academic counseling and tutoring services to all Division I athletes. In addition to these services, practitioners in academic support centers for athletes offer specialized programs such as faculty – student mentoring and projects specific to study skills, time management, and academic scheduling (Broughton and Neyer 2001; Comeaux 2010), with the goal of enabling athletes to develop skills for academic, athletic, and personal growth and success. Nevertheless, athletes, particularly in football and men's basketball, continue to show less academic success than their nonathlete counterparts (Harper 2018; Shropshire and Williams 2017).

One of the most glaring reasons for inequitable outcomes is that practitioners in academic support centers typically rely on anecdotal information rather than empirical data to inform decisions about the needs of athletes (Comeaux 2013a). In a survey of 127 advisors and counselors in academic support centers for athletes at Division I colleges and universities, fewer than 3% had assessment plans to measure

impact on learning outcomes for athletes (Comeaux 2015b). Without data-driven practices and tools, it is almost impossible to offer feedback or identify strengths and performance gaps among athletes and, as Benson (2000) noted, practitioners are more apt to develop deficit-oriented views of athletes. Although they may care deeply about the academic well-being of their athletes, they are more likely, for example, to ascribe differences in academic performance by race/ethnicity, gender, and type of sport to cultural stereotypes or alleged internal deficiencies linked to the athletes themselves (e.g., low cognitive ability or a lack of motivation). In short, underperformance is perceived as a problem with the individual rather than an organizational learning problem, and practitioners with this orientation may cast the academic underperformance of athletes as inevitable, beyond their ability to resolve.

A small group of studies has documented the importance of research to careful, informed practice. For example, Comeaux (2010) explored the complex negotiations of first-year Division I football players' role identities in the context of a faculty–athlete mentor program. Using focus groups and pre- and post-test questionnaires, he found that the formal faculty–athlete mentoring program had a positive influence on academic and future goals of first-year athletes, despite potential role conflicts. In particular, the studied athlete participants reported having more balanced academic and athletic identities over the course of their first year. Some were even more optimistic about their future trajectories, reporting a willingness to discuss their career aspirations with their faculty mentors while receiving substantive mentor feedback. Comeaux (2010) concluded that “faculty–student mentoring programs are the kinds of educationally purposeful activities that contribute directly to desired educational outcomes” (p. 270), lending support to previous research (Comeaux 2005; Gayles and Hu 2009; Umbach et al. 2006).

More recently, in an edited volume, Comeaux (2015c) documented a range of viewpoints on and models of data-driven practices in support centers for athletes. This text offered several chapters highlighting empirical considerations, and in some cases theoretical perspectives, on college athletes and academic success. Chapters focused on anti-deficit and data-informed approaches to improving the collective well-being of Division I college athletes, including those at HBCUs. For example, in a selective review of data-driven studies, Cooper (2015) identified five effective strategies to enhance athletes' success at HBCUs: (a) early intervention programs, (b) purposefully designed study halls, (c) institution-wide academic support programs, (d) public recognition of athletes' academic accomplishments, and (e) nurturing familial campus environments.

As well, Comeaux's (2015c) volume highlighted ways to support and prepare college athletes for quality career transitions, the importance of summer bridge programs and culturally relevant pedagogy for college athletes, and the role of the physical location of athletic facilities and academic support service centers in the experience for college athletes. One study explored the impact of a 4-week intensive writing course in a summer bridge program on seven Division I athletes with low academic profiles (Browning 2015). Through interviews and participant observation, Browning found that the intervention connected athlete participants with

support personnel on the students' own terms and in a way that valued their voices. Moreover, practitioners helped to advance the writing skills athletes needed to succeed in the academic domain.

In another study, Bernhard and Bell (2015) examined the physical locations of athletic facilities and academic support centers for athletes at 125 Division I FBS schools to understand their structural impact on the quality of the athlete experience. Through semistructured interviews with seven academic support personnel at select schools, the authors discovered that participants believed centrally located academic support centers enhanced the quality of experiences for athletes, including opportunities to interact with their nonathlete peers. Moreover, the findings revealed that new and renovated athletic facilities and support centers tended to be located on the periphery of the central campus. As such, Bernhard and Bell concluded that "the competition for top recruits means it is not just having ample space for students and staff, but about how prospective students and their families perceive the look and feel of the space" (p. 137). In all, this volume provided a rich portrait of data-driven practices designed to assist practitioners and others who work closely with college athletes.

Beyond the studies described above, research on practices in academic support centers for athletes is limited. Little scholarship has sought to assess the effectiveness of the ways that practitioners by race/ethnicity and gender and other athletic stakeholders engage athletes of color academically (Comeaux 2015c). Research on the role of individual practitioners in organizational learning associated with college athletes is imperative, including the extent to which they use empirical data to inform their decision-making. This work will help to ensure that students who participate in athletics are receiving the types of support they need in the most effective ways possible. Relatedly, we must document empirically grounded practices that address the overall well-being of college athletes in different academic settings and institutional types, again with particular attention to race/ethnicity, gender, and type of sport.

The Effects of Campus Racial Climate on Athlete Experiences

To develop policies and programs that enhance the overall well-being of all students, it is essential to understand the campus racial climate of the university. A positive or healthy campus racial climate in part features an institution's commitment to racial diversity and, likewise, comfortable, inclusive, diverse environments for optimal student learning and personal development (Hurtado et al. 1998). Numerous studies have demonstrated that quality cross-racial interactions, both inside and outside the classroom, are positively associated with students' learning outcomes, including college satisfaction (Astin 1993; Chang 1999), leadership skills and cultural awareness (antonio 2001), critical thinking skills (Gurin 1999), and higher levels of positive academic and social self-concept (Gurin et al. 2002). Other studies have shown a positive relationship between cross-racial interaction and civic interest

(Gurin et al. 2002), cognitive development (Astin 1993), and pluralistic orientation (Jayakumar 2008).

It is important to explore campus climate issues affecting college athletes specifically, in part because their college experiences differ from those of the general student population (Comeaux and Harrison 2011; Watt and Moore 2001). Moreover, the racial imbalance between Division I athletes in revenue sports – who are often people of color – and their peers, coaches, and campus stakeholders – who are often White – necessitates careful, critical inquiry (Gayles et al. 2018). Yet, to date, only a few empirical studies have done so. Brown et al. (2003), for example, surveyed White athletes during their first semester at 24 predominantly White colleges and universities, and found a significant relationship between their contact with Black teammates and racial attitudes. The relationship varied by sport: White athletes who played team sports and had a higher percentage of Black teammates reported more positive attitudes toward Blacks in general, as compared to White athletes who played individual sports.

More recently, building on the work of Jayakumar (2008), Comeaux (2013b) examined the extent to which cross-racial interaction influenced post-college pluralistic orientation and leadership skills for Division I White athlete graduates, and the degree to which engagement effects were conditional on their precollege neighborhoods. Comeaux surveyed 310 White athlete college graduates representing 16 Division I FBS conferences. The findings suggest that cross-racial interaction during college has continuing benefits on pluralistic orientation and leadership skills for White athletes from racially diverse neighborhoods as well as long-term effects on leadership skills for White athletes from segregated precollege neighborhoods. In short, there may be unique benefits associated with a racially diverse student body (Allport 1954), but positive effects are contingent upon the specific nature of interactions (Chang et al. 2006).

Beyond understanding the cross-racial experiences of college athletes, it is important to comprehensively deduce elements of the broad campus climate that can shape the quality of these experiences. To explore these issues in the context of college athletics, my approach in discussing these issues in this chapter originates from the empirical framework developed by Hurtado et al. (1998), which describes four interrelated elements of the campus racial climate: *compositional diversity*,⁴ or the level of racial diversity in a student body; *psychological climate*, or perceptions and attitudes between groups; *behavioral climate*, or the quantity and quality of intergroup relations; and the institution's *historical legacy* of exclusion of racial/ethnic groups that perpetuates inequity across racial lines. Milem et al. (2004) included a fifth dimension, *organizational/structural*, which “represents the organizational and structural aspects of colleges and the ways in which benefits for some groups become embedded into these organizational and structural processes” (Milem et al. 2005, p. 18).

⁴Hurtado et al. (1998) used “structural diversity” to describe a dimension of campus climate. I use “compositional diversity,” consistent with Milem et al. (2004).

In the remainder of this section, I explore research on the racialized experiences of Division I athletes at historically White institutions. I assert that, beyond understanding the experiences of athletes, it is important to understand related research on the elements of the broad campus racial climate that can shape the quality of their experiences. In particular, I focus on compositional diversity, organizational, structural, and psychological climate, specifically as they relate to college athletics.

Compositional Diversity

It is well documented that increasing compositional diversity on college campuses is an important step toward providing students with more opportunities for interracial interactions and improving the climate (e.g., Antonio 2001; Chang et al. 2006). Hurtado et al. (1998) asserted that when campuses lack diverse environments, members of the dominant or majority student group will likely shape various forms of interaction and limit their own chances of benefiting from interactions with students of different races. They also reported that when campuses lack compositional diversity, underrepresented student groups tend to be viewed as tokens. The relevance of these findings to athletes is evident when we consider the demographics of college athletics.

According to the NCAA (2010), White athletes make up a disproportionate number of participants in certain team sports: lacrosse for men (90.2%) and women (90%); field hockey (86.5%); baseball (83.4%); swimming/diving for men (83.7%) and women (85.8%); rowing for men (82.9%) and women (81.7%); and water polo for men (79.5%) and women (77%). These students have fewer opportunities in the athletic realm to exchange views with students of other races, which is especially troubling when you realize they often devote more than 40 h weekly to sport-related activities (Wolverton 2008).

When campuses lack diversity, the majority student group shapes interactions, and underrepresented student groups tend to be viewed as tokens (Hurtado et al. 1998). On sports teams, a lack of racial diversity can heighten racial tension among teammates (and across teams), lending support to the aforementioned work of Brown et al. (2003). Thus, increasing the racial diversity of athletic participants can enhance opportunities for intergroup contact and, importantly, for desirable outcomes.

Organizational/Structural Dimension

Coaches are central figures in the lives of athletes, shaping their academic, social, and athletic priorities (Jayakumar and Comeaux 2016). In the 2016–2017 season, however, Black men made up roughly half of college football players at Division I FBS schools, yet they made up just 11% of head coaches in this sport (Johnson 2017). And, according to Lynch (2013), “only 312 of 1,018 of college football assistant coaches are Black, and only 31 of 255 offensive and defensive coordinators

are African-American” (para. 4). FBS schools have historically hired a disproportionate number of White coaches, denying access and opportunities to deserving Black coaches (Agyemang and DeLorme 2010; Sagas and Cunningham 2005). Given these demographics, we can surmise that the college experiences of non-White football athletes at FBS schools are influenced to a significant degree by White males (see Lapchick et al. 2012). When racial/ethnic minority football coaches are not appropriately represented at these schools, it may give non-White athletes the impression that the campus climate is not supportive or inclusive of these racial/ethnic groups, and also limits white athletes’ abilities to benefit from having a racial/ethnic minority coaching role model.

Psychological Climate

Students from different racial/ethnic backgrounds tend to view intergroup relations on campus and instances of racism differently (Hurtado et al. 1998). Those who perceive a hostile and discriminatory racial climate are less likely to feel connected to the institution (Locks et al. 2008). Black athletes, in particular, may perceive the climate as quite hostile (Benson 2000; Bruening et al. 2005; Comeaux 2012, 2018; Simons et al. 2007; Singer 2005). Through document analysis and interviews, Bruening et al. (2005) examined the collective experiences of 12 Division I African American female athletes at a large Midwestern University. The researchers employed an ideological standpoint developed by Collins (1990) to understand the effects of intersectionality on the “silencing” of African American female athletes. They discovered that the mass media, coaches, athletic administrators, and other athletes played a role in virtually ignoring their experiences and concerns. As such, the concept of intersectionality revealed how challenges encountered by African American female athletes might differ in some cases from other women and their Black male counterparts.

Singer (2005), using critical race theory as an analytical lens, examined four Division I, African American male football players at predominantly White institutions to understand their views of racism and the potential impact that racism might have on the quality of their college experience. Through focus groups and in-depth interviews, Singer discovered that these African American participants believed they were treated differently than their White counterparts in scheduling of classes, random drug tests, and consequences for poor behavior off the field that could be detrimental to the team.

These long-standing negative perceptions are not held only by faculty, coaches, and advisors. Sailes (1993), in a survey of 869 graduate and undergraduate students, found that White college student participants believed that Black athletes were not academically prepared to attend college, were not as intelligent, and did not receive high grades as compared to White athletes. These findings are consistent with the literature on the unappealing “dumb jock” image, which suggests Black athletes have limited intellectual abilities, lack motivation, and do not perform well academically (Edwards 1984b; Simons et al. 2007).

More recently, Comeaux (2012) explored 122 athletes' perceptions of discriminatory acts by professors and other students at a Division I university. Through a qualitative survey, the majority of respondents reported positive or neutral experiences with other campus community members, but a small number described instances where professors and other students questioned their intellectual abilities, academic motivation, or treatment by the university. Drawing from the work of Pierce et al. (1978), Comeaux (2012) employed the term *athlete microaggressions* to characterize these demeaning and negative messages. In brief, it appears that for athletes generally – and Black male and female athletes more specifically – the campus environment can be unwelcoming, unsupportive, alienating, and even racially hostile. These findings highlight how Black athletes – already vulnerable as a result of the commercialization of intercollegiate sports – are at times left unprotected in a hostile campus racial climate.

Implications for Research

While some insights have been gained about the nature and influence of campus racial climate for athletes, there remains a dearth of research in this area. Climate studies provide useful baseline data on experiences of and views about college athletes, but a concerted effort to conduct campus climate studies on athletes (and athletics generally) – including developing and administering large-scale campus climate surveys – is necessary for unpacking persistent, systemic disadvantages and for measuring and building on potential strengths. For example, few empirical studies (e.g., Brown et al. 2003; Comeaux 2013b) have examined the behavioral dimension of racial climate or the nature of cross-racial interaction among athletes; we must undertake this work with a diversity of theoretical perspectives and methodological techniques.

Future efforts should examine a wider spectrum of stakeholders, including coaches, administrators, and international athletes. Future studies, using critical race theory as an interpretive framework, should also consider athletes of various racial/ethnic groups such as Latinos and Asian and Pacific Islanders (see Kukahiko and Chang 2017; Oseguera et al. 2018). Critical race theory will help explain and operationalize the role of race and racism in discourses on racialized bodies as well as to understand their experiences in different institutional contexts. Questions should include: Do athletes of color feel a sense of belonging at historically white institutions? Do athletes of color have more positive campus experiences with the presence of more administrators and coaches of color? To what extent does racism play a role in the experiences of college athletes? Is there a level of anti-Blackness toward Black players and coaches? Do stakeholders, including athletes, believe their campus genuinely values racial/ethnic diversity? Future studies should also employ critical theoretical perspectives that resist oppressive social constructions to explore the experiences of gay, bisexual, lesbian, and transgender college athletes (particularly students of color). A multidimensional understanding of the experiences of

athletes and athletic stakeholders can offer a unique perspective on campus diversity that helps to prepare all students for life and work in a pluralistic society.

Few, if any, athletic departments hire personnel or independent researchers to assess the racial climates of their teams, departments, and broader campus communities, but this is an important first step in any intervention strategy designed to improve the campus experiences of athletes. Drawing from the framework developed by Hurtado et al. (1998), departments can use focus groups and/or targeted interviews with various campus stakeholders (including athletes) to identify strengths and problem areas and to increase their own and others' awareness about specific campus conditions that affect athletes.

New Directions for Future Research

Over the past couple of decades, empirical studies on college athlete experiences have steadily increased, but this area of inquiry as a whole remains underdeveloped. Many of the aforementioned studies focused on a narrow range of issues or on only one dimension of the college athlete experience. Too often, they failed to reference the potential influence of the institutional climate, the organizational culture of athletic departments, or NCAA and member institution policies in the lives of college athletes – particularly when it comes to negotiating the dual roles of student and athlete in a highly commercialized enterprise (Comeaux 2017; Jayakumar and Comeaux 2016). While the work done so far has advanced our understanding of some facets of the big-time college and university athlete experience, we are left with an incomplete picture and a lack of interconnectedness across the literature. In this section, I summarize the work that remains.

Large-Scale Data Sources

This review raised questions and concerns about the experiences of Division I athletes in the context of NCAA and member institution pressures – particularly the commercialization of intercollegiate sports. These questions are grounded in theoretical and conceptual frameworks and a body of empirical research, and they open new lines of inquiry and allow for new questions to be examined. As well, in light of the considerable amount of data the NCAA collects from member institutions (as outlined in a previous section), large-scale data would provide a unique opportunity to comprehensively study the college athlete experience. It would provide the necessary flexibility to disaggregate by race/ethnicity, gender, and type of sport and to generalize to the larger athlete population. Data from the National Study of Student Engagement (NSSE) and the Cooperative Institutional Research Program (CIRP) would also be useful for examining the experiences of college students, including those who participate in athletics. An important feature of any future large-scale data collection efforts might also be to ensure they are longitudinal in nature and allow for nested-design studies (so that the impact of structure and

systems can also be examined). Any longitudinal studies of athletes should be ambitious, following these individuals for a substantial period of time both during and after their participation in college athletics.

This is not to suggest that single-institutional and other small-scale studies do not have the potential to inform researchers and policymakers and to provide useful and valuable information at the individual and institutional levels. However, large-scale data sources, with a range of contextual and student characteristic variables, can allow researchers to address more complex problems and acute concerns associated with the college athlete experience. Quantitative studies undoubtedly could be enhanced by the use of complementary qualitative studies to elucidate organizational issues related to the athletic enterprise and the athlete specifically.

An Academic Capitalism Approach

Researchers and educators (e.g., Bowen and Levin 2003; Eitzen 2016; Gerdy 2006; Jayakumar and Comeaux 2016) agree that improving the quality of campus experiences for college athletes should be a top educational priority. The multifaceted approaches to fundamental research questions and the language employed to frame research questions about college athletes will largely be contingent upon our own frames of reference or “schemata.” For instance, a basic assumption of the academic capitalist model outlined by Sack (2009) and described at the start of this chapter is that commercialism is important to the athletic enterprise because it creates more participation opportunities for men and women college athletes and provides them with much-needed academic resources. Rather than focusing squarely on the academic performance of athletes, academic capitalists raise research questions about the role of the athletic enterprise in shaping consumer behavior, and the relationship of athletics and college or university brand building (Bruening and Lee 2007; Sierra et al. 2010). For instance, to what extent do successful athletic programs across all divisional classifications impact the quality and quantity of future applicants to the college or university or to what extent do successful athletic programs impact donor giving to universities and colleges, both directly to athletics and also to other parts of the institutional mission? From an academic capitalist perspective, it is important for schools to draw external constituents and to understand their value for athletics in order to generate revenue streams.

Additionally, practitioners in academic support centers tend to rely on anecdotal information rather than empirical data when they make decisions about the needs and futures of college athletes (Comeaux 2013a). Given the assumption that there is an investment in academic support for athletes, do schools with larger operating budgets tend to have more success at using evidence-based practices to engage or reengage students who participate in athletics? Such empirical research has the potential to make a strong contribution to the literature on the complex relationship between athletics, commercialism, and effective evidence-based strategies to support the academic success of athletes in higher education.

The significant investment in and impact of new, large state-of-the-art collegiate athletic facilities, and the economic impact of conference realignment, would fit under academic capitalism assumptions (Greenberg 2004; Hoffer and Pincin 2015; Suggs 2005). As such, it would be instructive for future research to examine financial data across institutions, institutional types, and athletic departments of varying sizes to understand whether financing new academic and athletic facilities for athletic departments is a sound investment, while considering both the tangible and intangible costs and benefits. Proponents of academic capitalism might also consider examining the financial impact of conference realignment on athletic department revenue, expenditures, and institutional subsidy. This research would provide university decision makers with more insight and depth about the current financial state of their athletic programs, as well as the opportunity to make sound financial decisions.

An Intellectual Elitism Approach

Intellectual elitists raise questions about excessive expenditures, lower admissions for athletes, and overemphases on revenue generation, as well as about whether intercollegiate athletics complement or threaten the mission and values of higher education. Several studies have documented the role that athletics play in shaping the identities of students who participate (Adler and Adler 1991; Harrison et al. 2009; Jayakumar and Comeaux 2016). Much of this work has primarily captured the role conflicts of athletes in Division I football and men's basketball. It would be wise to consider whether these role combinations influence, positively or negatively, the desired outcomes of athletes across divisional classifications, other sport types, and gender.

Other scholarly research should explore intellectual elitism assumptions related to the effects of conference realignment on the academic and personal goals of athletes by race, gender, and type of sport. This work would help us to better understand whether the quest for revenue in athletics through conference realignment makes it more challenging for athletes to negotiate the often-competing roles of both student and athlete, particularly for women and students of color. Relatedly, we can and must build on work related to special admit athletes (Barker 2012; Bowen and Levin 2003; Phillips 2008). Empirical studies are needed to address the extent to which special admissions programs are driven by commercial interests and the rate at which special admit athletes by race, gender, and sport (particularly revenue verses non-revenue) matriculate and eventually graduate. In light of recent nationwide undergraduate admission scandals involving athletic programs (see Jaschik 2019), it would be instructive to understand the special admissions process, which can allow students to gain entrance even if they do not meet the minimum academic and/or athletic talent requirements of a university. In this way, we can begin to understand whether the current business-like practices of athletics may be undermining academic integrity and harming the college or university reputation.

Further, we lack empirical documentation of cases where athletic scholarships were not renewed for reasons other than academic ineligibility or athlete behavior. Case studies with data disaggregated by race, gender, and type of sport would shed light on these topics, including highlighting the experience of vulnerable groups. In all, such suggested studies would advance our understanding of the relationship between the commercialization of athletics and university values as well as their commitment to high standards of academic excellence and integrity.

An Athletes' Rights Approach

There has been little extant empirical research on the athletes' rights model. Athletes' rights advocates view college sport as a highly commercialized business and argue that athletes are in an exploitive structural arrangement. This arrangement means that they are not sufficiently protected or fairly compensated – educationally, medically, or financially – for their athletic labor. The athletes' rights model raises questions about the fair treatment and well-being of athletes within the context of NCAA and member institution policies and priorities. For instance, as Zimbalist and Sack (2013) noted, “The NCAA has claimed that its restrictions on income from the use of athletes' images, likenesses and names are necessary to promote balance in competitive outcomes and financial solvency for athletic programs” (p. 7).

Additional empirical research should explore the validity of competitive balance and financial solvency arguments (see Schwarz and Rascher 2017). As well, it would be worthwhile to continue to examine NCAA and member institution policies and rules – for example, amateurism, 4–4 transfer, Title IX, social media, concussion management, and 1-year renewal scholarships – to advance our understanding of fairness issues and their impact on the well-being, health, and academic progress of Division I men and women athletes.

Future longitudinal, large-scale studies should track college athletes throughout their athletic careers, providing more definitive knowledge about their complicated and cumulative campus experiences. It would be especially instructive to document, through both large-scale surveys and in-depth interviews, the views of primarily White athletic stakeholders – e.g., coaches, athletic directors, conference commissioners, and sponsors – about compensating college athletes under the guise of amateurism, particularly those in the revenue-generating sports of football and men's basketball. For example, is there a kind of racial resentment or anti-Blackness toward the most highly publicized and disproportionately Black players? Future studies should consider critical theory as a framework to understand this phenomenon and to explore how athletic departments (and universities) are proficient at producing and reproducing whiteness. Researchers can and should be interdisciplinary in nature, cutting across the various disciplines that contribute to a robust understanding of the college athlete experience, rather than operate in silos with narrow scopes. Drawing upon critical whiteness studies (e.g., Cabrera 2014; Leonardo 2009), for example, would enable researchers and scholars to interrogate

how white athletic stakeholders often rely upon the reproduction of whiteness and white privilege.

Conclusion

Recent empirical work demonstrates that college athletes' experiences may be impaired by the commercialism of college sports. Too often, priorities such as winning games and generating revenue streams can supersede their physical well-being, academic obligations, and career goals. For reasons of social justice – broadly defined in this context as “improving the learning of all pupils and enhancing their life chances” (Mitescu et al. 2009, p. 18) – athletic stakeholders must do more to improve the quality of the educational experience for all college athletes. The consolidation of knowledge about college athletes' experiences in this chapter offers a solid foundation for future work. By pursuing the avenues of inquiry identified above, we can help ensure that college athletes, who are among the most vulnerable institutional actors on campus, receive the quality educational experience they deserve.

References

- Acosta, R. V., & Carpenter, L. (2012). *Women in intercollegiate sport: A longitudinal national study thirty-five year update: 1977–2012*. West Brookfield: Acosta/Carpenter. Retrieved from <https://files.eric.ed.gov/fulltext/ED570883.pdf>
- Adler, P., & Adler, P. A. (1991). *Backboards and blackboards: College athletes and role engulfment*. New York: Columbia University Press.
- Agnew v. National Collegiate Athletic Association, No. 1:11-cv-0293-JMS-MJD, 2011 WL3878200, at *1 (S.D.Ind.2011).
- Agyemang, K., & DeLorme, J. (2010). Examining the dearth of black head coaches at the NCAA football bowl subdivision level: A critical race theory and social dominance theory analysis. *Journal of Issues in Intercollegiate Athletics*, 3, 35–52.
- Allison, L. (2001). *Amateurism in sport: An analysis and a defence*. Portland: Frank Cass.
- Allport, G. (1954). *The nature of prejudice*. Cambridge, MA: Addison-Wesley.
- Anderson, D. J., & Cheslock, J. J. (2004). Institutional strategies to achieve gender equity in intercollegiate athletics: Does Title IX harm male athletes? *American Economic Review*, 94, 307–311.
- Anderson, D. J., Cheslock, J. J., & Ehrenberg, R. G. (2006). Gender equity in intercollegiate athletics: Determinants of Title IX compliance. *Journal of Higher Education*, 77, 225–250.
- antonio, a. l. (2001). The role of interracial interaction in the development of leadership skills and cultural knowledge and understanding. *Research in Higher Education*, 42, 593–617.
- Astin, A. W. (1993). *What matters in college: Four years revisited*. San Francisco: Jossey-Bass.
- Axon, R. (2014, January 2). NCAA concussion lawsuits consolidated. *USA Today*. Retrieved from <http://www.usatoday.com/story/sports/college/2014/01/02/concussion-lawsuits-ncaa-consolidated-adrian-arrington/4293867/>
- Banks v. National Collegiate Athletic Association, 977 F.2d 1081 (7th Cir. 1992).
- Barker, J. (2012). “Special admissions” bring colleges top athletes, educational challenges. *The Baltimore Sun*. Retrieved from <http://www.baltimoresun.com/sports/terps/bs-xpm-2012-12-22-bs-sp-acc-sports-special-admits-20121222-story.html>

- Baugh, C. M., Kroshus, E., Daneshvar, D. H., Filali, N. A., Hiscox, M. J., & Glantz, L. H. (2015). Concussion management in United States college sports: Compliance with National Collegiate Athletic Association concussion policy and areas for improvement. *American Journal of Sports Medicine*, 43, 47–56.
- Benson, K. F. (2000). Constructing academic inadequacy: African American athletes' stories of schooling. *Journal of Higher Education*, 71, 223–246.
- Berkowitz, S. (2013, September 26). NCAA vows to fight O'Bannon suit to the Supreme Court. *USA Today*. Retrieved from <http://www.usatoday.com/story/sports/ncaab/2013/09/26/ncaa-ed-obannon-ea-sports-lawsuit-supreme-court/2877579/>
- Berkowitz, S. (2015, January 22). North Carolina, NCAA sued for academic scandal. *USA Today Sports*. Retrieved from <https://www.usatoday.com/story/sports/college/2015/01/22/lawsuit-filed-against-north-carolina-ncaa-on-academic-scandal/22173755>
- Bernhard, L. M., & Bell, L. F. (2015). Location, location, location: Placing athletic academic support offices. In E. Comeaux (Ed.), *Making the connection: Data informed practices in academic support centers for college athletes* (pp. 125–141). Charlotte: Information Age.
- Borden, S., Grondahl, M., & Ward, J. (2017, January 9). What happened within this players skull. *The New York Times*. Retrieved from <https://www.nytimes.com/interactive/2017/01/09/sports/football/what-happened-within-this-players-skull-football-concussions.html>
- Bowen, W. G., & Levin, S. A. (2003). *Reclaiming the game: College sports and educational values*. Princeton: Princeton University Press. <https://doi.org/10.1353/jhe.2005.0009>.
- Branch, T. (2011). The shame of college sports. *Atlantic Monthly*, 308(3), 80–110. Retrieved from <http://www.theatlantic.com/magazine/archive/2011/10/the-shame-of-college-sports/308643/>
- Broglio, S. P., Macciocchi, S. N., & Ferrara, M. S. (2007). Sensitivity of the concussion assessment battery. *Neurosurgery*, 60, 1050–1057.
- Broughton, E., & Neyer, M. (2001). Advising and counseling student athletes. In M. F. Howard-Hamilton & S. K. Watt (Eds.), *Student services for athletes: Vol. 93. New directions for student services* (pp. 47–53). San Francisco: Wiley.
- Brown, G. (2011). *Second GOALS study emphasizes coach influence*. Indianapolis: National Collegiate Athletic Association. Retrieved from <http://www.ncaa.org/about/resources/research/2010-goals-study-archive>
- Brown, K. T., Brown, T. N., Jackson, J. S., Sellers, R. M., & Manuel, W. J. (2003). Team mates on and off the field? Contact with black teammates and the racial attitudes of White student athletes. *Journal of Applied Social Psychology*, 33, 1379–1403.
- Browning, A. (2015). Bridging the gap: Academic support for entering special-admit college athletes. In E. Comeaux (Ed.), *Making the connection: Data informed practices in academic support centers for college athletes* (pp. 109–123). Charlotte: Information Age.
- Browning, B., & Sanderson, J. (2012). The positives and negatives of Twitter: Exploring how student-athletes use Twitter and respond to critical tweets. *International Journal of Sport Communication*, 5, 503–521.
- Bruening, J. E., & Lee, M. Y. (2007). The University of Notre Dame: An examination of the impact and evaluation of brand equity in NCAA Division IA football. *Sport Marketing Quarterly*, 16(1), 38.
- Bruening, J., Armstrong, K., & Pastore, D. (2005). Listening to the voices: The experiences of African American female athletes. *Research Quarterly for Exercise and Sport*, 76, 82–100.
- Byers, W. (1995). *Unsportsmanlike conduct: Exploiting college athletes*. Ann Arbor: University of Michigan Press.
- Cabrera, N. L. (2014). Exposing whiteness in higher education: White male college students minimizing racism, claiming victimization, and recreating White supremacy. *Race Ethnicity and Education*, 17(1), 30–55.
- Cali, M. R. (2014). The NCAA's transfer of power: An analysis of the future implications the proposed NCAA transfer rules will have on the landscape of college sports. *Jeffrey S. Moorad Sports Law Journal*, 21, 217–217.
- Cantu, R. C. (1996). Head injuries in sport. *British Journal of Sports Medicine*, 30, 289–296.

- Carroll, K., & Humphreys, B. (2000). Nonprofit decision making and social regulation: The intended and unintended consequences of Title IX. *Journal of Economic Behavior and Organization*, 43, 359–376.
- Chang, M. J. (1999). Does racial diversity matter? The educational impact of a racially diverse undergraduate population. *Journal of College Student Development*, 40, 377–394.
- Chang, M. J., Denson, N., Saenz, V., & Misa, K. (2006). The educational benefits of sustaining cross-racial interaction among undergraduates. *Journal of Higher Education*, 77, 430–455.
- Clotfelter, C. T. (2011). *Big-time sports in American universities*. New York: Cambridge University Press.
- Collins, P. H. (1990). Gender, Black feminism, and Black political economy. *Annals of the American Academy of Political and Social Science*, 568, 41–53.
- Comeaux, E. (2005). Environmental predictors of academic achievement among student-athletes in the revenue-producing sports of men's basketball and football. *The Sport Journal*, 8(3). Retrieved from <http://thesportjournal.org/article/predictors-of-academic-achievement-among-student-athletes-in-the-revenue-producing-sports-of-mens-basketball-and-football/>
- Comeaux, E. (2010). Mentoring as an intervention strategy: Toward a (re)negotiation of first year student-athlete role identities. *Journal for the Study of Sports and Athletes in Education*, 4, 257–275.
- Comeaux, E. (2012). Unmasking athlete micro aggressions: Division I student-athletes' engagement with members of the campus community. *Journal of Intercollegiate Sport*, 5, 189–198.
- Comeaux, E. (2013a). Rethinking academic reform and encouraging organizational innovation: Implications for stakeholder management in college sports. *Innovative Higher Education*, 38, 281–293.
- Comeaux, E. (2013b). The long-term benefits of cross-racial engagement on workforce competencies for Division I White student-athletes. *Journal of Student Affairs Research and Practice*, 50, 37–55.
- Comeaux, E. (Ed.). (2015a). *Introduction to intercollegiate athletics*. Baltimore: Johns Hopkins University Press.
- Comeaux, E. (2015b). Practitioner views of college head coaches: A stakeholder management perspective. *Journal for the Study of Sports and Athletes in Education*, 9, 102–116.
- Comeaux, E. (Ed.). (2015c). *Making the connection: Data informed practices in academic support centers for college athletes*. Charlotte: Information Age.
- Comeaux, E. (Ed.). (2017). *College athletes' rights and well-being: Critical perspectives on policy and practice*. Baltimore: Johns Hopkins University Press.
- Comeaux, E. (2018). Stereotypes, control, hyper-surveillance, and disposability of NCAA Division I black male athletes. In J. G. Gayles (Ed.), *Critical issues for student athletes: Going behind the invisible wall: Vol. 163. New directions for student services* (pp. 33–42). San Francisco: Wiley.
- Comeaux, E., & Harrison, C. K. (2011). A conceptual model of academic success for student-athletes. *Educational Researcher*, 40, 235–245. <https://doi.org/10.3102/0013189X11415260>.
- Comeaux, E., Harrison, C. K., & Plecha, M. (2006). Gender, sport and higher education: The impact of student–faculty interactions on academic achievement. *Academic Athletic Journal*, 19(1), 38–55.
- Comeaux, E., Bachman, T., Burton, R. M., & Aliyeva, A. (2016). Undergraduate experiences of Division I athlete science, technology, engineering, and mathematics (STEM) graduates. *Journal of Science Education and Technology*, 26, 24–32. <https://doi.org/10.1007/s10956-016-9648-y>.
- Congress of Neurological Surgeons. (1996). Proceedings of the Congress of Neurological Surgeons: Report of the Ad Hoc Committee to Study Head Injury Nomenclature. *Clinical Neurosurgery*, 16, 386–394.
- Connelly, B. (2018). The NCAA might ease transfer restrictions for players whose head coaches leave. That's a long overdue change. *SB Nation*. Retrieved from <https://www.sbnation.com/2018/1/30/16950794/ncaa-transfer-rules-changes-coaches>

- Cooper, J. N. (2015). Strategies for athlete success at Historically Black Colleges and Universities (HBCUs). In E. Comeaux (Ed.), *Making the connection: Data informed practices in academic support centers for college athletes* (pp. 63–77). Charlotte: Information Age.
- Cooper, J. N., & Hawkins, B. (2016). An anti-deficit perspective on black male student athletes' educational experiences at a historically black college/university. *Race Ethnicity and Education, 19*(5), 950–979.
- Covassin, T., Stearne, D., & Elbin, R., III. (2008). Concussion history and post concussion neurocognitive performance and symptoms in collegiate athletes. *Journal of Athletic Training, 43*, 119–124.
- Covassin, T., Moran, R., & Wilhelm, K. (2013). Concussion symptoms and neurocognitive performance of high school and college athletes who incur multiple concussions. *American Journal of Sports Medicine, 41*, 2885–2889.
- Crisco, J. J., Fiore, R., Beckwith, J. G., Chu, J. J., Brolinson, P. G., Duma, S., et al. (2010). Frequency and location of head impact exposures in individual collegiate football players. *Journal of Athletic Training, 45*, 549–559. <https://doi.org/10.4085/1062-6050-45.6.549>.
- Crowley, J. (2006). *In the arena: The NCAA's first century*. Indianapolis: National Collegiate Athletic Association.
- Davies, S. C., & Bird, B. M. (2015). Motivations for underreporting suspected concussion in college athletics. *Journal of Clinical Sport Psychology, 9*, 101–115.
- DeShazo, K. (2015, March 2). *Social media use of student athletes [survey results]*. Retrieved from Fieldhouse Media: <http://www.fieldhousemedia.net/social-media-use-of-student-athletes-2015/>
- Desrochers, D. M. (2013). *Academic spending versus athletic spending: Who wins?* Washington, DC: Delta Cost Project of the American Institutes for Research.
- Dilley-Knoles, J., Burnett, J. S., & Peak, K. W. (2010). Making the grade: Academic success in today's athlete. *The Sport Journal, 13*(1).
- Donaldson, A., Newton, J., McCrory, P., White, P., Davis, G., Makdissi, M., & Finch, C. F. (2015). Translating guidelines for the diagnosis and management of sports related concussion into practice. *American Journal of Lifestyle Medicine, 43*, 47–56.
- Donnor, J. K. (2005). Towards an interest-convergence in the education of African American football student-athletes in major college sports. *Race Ethnicity and Education, 8*, 45–67.
- Duderstadt, J. J. (2000). *Intercollegiate athletics and the American university: A university president's perspective*. Ann Arbor: University of Michigan Press.
- Duma, S., & Rowson, S. (2014). The biomechanics of concussion: Sixty years of experimental research. In S. M. Slobounov & W. J. Sebatianelli (Eds.), *Concussions in athletics: From brain to behavior* (pp. 115–137). New York: Springer. https://doi.org/10.1007/978-1-4939-0295-8_7.
- Edwards, H. (1984a). The collegiate athletic arms race: Origins and implications of the “Rule 48” controversy. *Journal of Sport and Social Issues, 8*, 4–22.
- Edwards, H. (1984b). The Black “dumb jock”: An American sports tragedy. *College Board Review, 131*, 8–13.
- Eitzen, D. S. (2016). *Fair and foul: Beyond the myths and paradoxes of sport* (5th ed.). New York: Rowman & Littlefield. <https://doi.org/10.2307/2655394>.
- Epstein, T. (2011). Regulation of a student athletes' social media use: A guide to avoiding NCAA sanctions and related litigation. *Mississippi Sports Law Review, 1*, 1–35.
- Fenno, N. (2013, December 18). In court filing, the NCAA denies legal duty to protect athletes. *The Washington Times*. Retrieved from <http://www.washingtontimes.com/news/2013/dec/18/court-filing-ncaa-denies-legal-duty-protect-athlet/>
- Ferrara, M. S., McCreary, M., Peterson, C. L., & Guskiewicz, K. M. (2001). A survey of practice patterns in concussion assessment and management. *Journal of Athletic Training, 36*, 145–149.
- Fountain, J. J., & Finley, P. S. (2009). Academic majors of upperclassmen football players in the Atlantic Coast Conference: An analysis of academic clustering comparing White and minority players. *Journal of Issues in Intercollegiate Athletics, 2*, 1–13.
- Fountain, J. J., & Finley, P. S. (2011). Academic clustering: A longitudinal analysis of a Division I football program. *Journal of Issues in Intercollegiate Athletics, 4*, 24–41.

- Gay, J. (2011). Hands off twitter: Are NCAA student-athlete social media bans unconstitutional. *Florida State University Law Review*, 39, 781–806.
- Gayles, J. G., & Hu, S. (2009). The influence of student engagement and sport participation on college outcomes among Division I student athletes. *Journal of Higher Education*, 80, 315–333. <https://doi.org/10.1353/jhe.0.0051>.
- Gayles, J. G., Comeaux, E., Ofoegbu, E., & Grummert, S. (2018). Neoliberal capitalism and racism in college athletics: Critical approaches for supporting student-athletes. In J. G. Gayles (Ed.), *Critical issues for student athletes: Going behind the invisible wall: Vol. 163. New directions for student services* (pp. 11–21). San Francisco: Wiley.
- Gerdy, J. (2006). *Air ball: American education's failed experiment with elite athletics*. Jackson: University Press of Mississippi.
- Gessel, L. M., Fields, S. K., Collins, C. L., Dick, R. W., & Comstock, D. (2007). Concussions among United States high school and collegiate athletes. *Journal of Athletic Training*, 42, 495–503. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2140075/>
- Graham, R., Rivara, F. P., & Ford, M. A. (Eds.). (2013). *Sports-related concussions in youth: Improving the science, changing the culture*. Washington, DC: National Academies Press. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK169016/pdf/Bookshelf_NBK169016.pdf
- Greenberg, M. J. (2004). Sports facility financing and development trends in the United States. *Marquette Sports Law Review*, 15, 93–173.
- Griffin, W. (2017). The state of concussion protocols: Paperwork or policies? In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 54–64). Baltimore: Johns Hopkins University Press.
- Gurin, P. (1999). *Expert report*. “Gratz et al. v. Bollinger et al.,” No. 97-75321 (E.D. Mich.) “Grutter et al. v. Bollinger et al.,” No. 97-75928 (E.D. Mich.). Ann Arbor: University of Michigan.
- Gurin, P., Dey, E. L., Hurtado, S., & Gurin, G. (2002). Diversity in higher education: Theory and impact on educational outcomes. *Harvard Educational Review*, 72, 330–366.
- Gurney, G., & Southall, R. M. (2013, February 14). NCAA reform gone wrong. *Inside Higher Ed*. Retrieved from <https://www.insidehighered.com/views/2013/02/14/ncaa-academic-reform-has-hurt-higher-eds-integrity-essay>
- Gurney, G., Lopiano, D., & Zimbalist, A. (2017). *Unwinding madness: What went wrong with college sports and how to fix it*. Washington, DC: Brookings Institution Press.
- Guskiewicz, K. M., McCrea, M., Marshall, S. W., Cantu, R. C., Randolph, C., Barr, W., Onate, J. A., & Kelly, J. P. (2003). Cumulative effects associated with recurrent concussion in collegiate football players: The NCAA concussion study. *Journal of the American Medical Association*, 290, 2549–2555.
- Guskiewicz, K. M., Bruce, S. L., Cantu, R. C., Ferrara, M. S., Kelly, J. P., McCrea, M., Putukian, M., & Valovich McLeod, T. C. (2004). National Athletic Trainers' Association position statement: Management of sport related concussion. *Journal of Athletic Training*, 39, 280–297.
- Harper, S. R. (2018). *Black male student-athletes and racial inequities in NCAA Division I college sports*. Los Angeles: Race and Equity Center, University of Southern California.
- Harrison, C. K., Stone, J., Shapiro, J., Yee, S., Boyd, J. A., & Rullan, V. (2009). The role of gender identities and stereotype salience with the academic performance of male and female college athletes. *Journal of Sport & Social Issues*, 33, 78–96.
- Harvey, W. B. (2003). *Minorities in higher education: 20th anniversary annual status report*. Washington, DC: American Council on Education.
- Hawkins, B. (2010). *The new plantation: Black athletes, college sport, and predominantly White institutions*. New York: St. Martin's Press.
- Hawkins, B., Baker, A. R., & Brackebusch, V. B. (2015). Intercollegiate athletics and amateurism. In E. Comeaux (Ed.), *Introduction to intercollegiate athletics* (pp. 312–325). Baltimore: Johns Hopkins University Press.
- Hawley, R. (2014, October 24). Social media and the college athlete. Retrieved from <https://www.noodle.com/articles/social-media-and-the-college-athlete>

- Heller, E. A., Gilson, T. A., & Paule-Koba, A. (2016). "So, who's our new coach?": NCAA student athletes' perceptions after a head coaching change. *The Sport Journal*, 19, 1–16.
- Hoffer, A., & Pincin, J. A. (2015). The effects of conference realignment on NCAA athletic departments. *Applied Economics Letters*, 22, 1209–1223.
- Hoffer, A., & Pincin, J. A. (2016). The effects of revenue changes on NCAA athletic departments' expenditures. *Journal of Sport and Social Issues*, 40(1), 82–102.
- Hoffman, J. (2010). The dilemma of the Senior Woman Administrator role in intercollegiate athletics. *Journal of Issues in Intercollegiate Athletics*, 3, 53–75.
- Huma, R., & Staurowsky, E. J. (2011). *The price of poverty: A comparison of big-time college athletes' fair market value, their current compensation, and the U.S. federal poverty line*. Riverside: National College Players Association.
- Huma, R., & Staurowsky, E. J. (2012). *The \$6 billion heist: Robbing college athletes under the guise of amateurism*. Riverside/Philadelphia: National College Players Association and Drexel University Sport.
- Hurtado, S., Milem, J. F., Clayton-Pedersen, A. R., & Allen, W. R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *Review of Higher Education*, 21, 279–302. <https://doi.org/10.1353/rhe.1998.0003>.
- Jaschik, S. (2019, May 6). The \$6.5 million parents, a video and more guilty pleas. *Insider Higher Ed*. Retrieved from <https://www.insidehighered.com/admissions/article/2019/05/06/updates-admission-scandal-65-million-parents-identified-and-two-more>
- Jayakumar, U. M. (2008). Can higher education meet the needs of an increasingly diverse and global society? Campus diversity and cross-cultural workforce competencies. *Harvard Educational Review*, 78, 615–651.
- Jayakumar, U. M., & Comeaux, E. (2016). The cultural cover-up of college athletics: How organizational culture perpetuates an unrealistic and idealized balancing act. *Journal of Higher Education*, 87, 488–515.
- Jenkins, J. (2006). A need for heightened scrutiny: Aligning the NCAA transfer rule with its rationale. *Vanderbilt Journal of Entertainment & Technology Law*, 9, 439–446.
- Jenkins v. NCAA, No. 14-cv-02758-CW (D.N.J. 2014).
- Johnson, J. K. (1994). Title IX and intercollegiate athletics: Current judicial interpretation of the standards for compliance. *Boston University Law Review*, 74, 553–589.
- Johnson, R. (2017). College football's lack of black head coaches is the result of a flawed pipeline. *SB Nation*. Retrieved from <https://www.sbnation.com/college-football/2017/8/9/15959410/black-coaches-rooney-rule-assistants-quarterbacks>
- Jones, C. (2014, November 29). Why should we have to go to class if we came here to play FOOTBALL, we ain't come to play SCHOOL, classes are POINTLESS [Tweet]. Retrieved from <https://twitter.com/cordale10/status/538798414985973760?lang=en>
- Kane, M. J., Leo, P., & Holleran, L. (2008). Issues related to academic support and performance of Division I student-athletes: A case study at the University of Minnesota. *Journal of Intercollegiate Sport*, 1, 98–129.
- Kaut, K. P., DePompei, R., Kerr, J., & Congeni, J. (2003). Reports of head injury and symptom knowledge among college athletes: Implications for assessment and educational intervention. *Clinical Journal of Sport Medicine*, 13, 213–221.
- Kelly, K. C., Jordan, E. M., Joyner, A. B., Burdette, G. T., & Buckley, T. A. (2014). National Collegiate Athletic Association Division I athletic trainers' concussion-management practice patterns. *Journal of Athletic Training*, 49, 665–673.
- Kilcoyne, K. G., Dickens, J. F., Svoboda, S. J., Owens, B. D., Cameron, K. L., Sullivan, R. T., & Rue, J.-P. (2014). Reported concussion rates for three Division I football programs: An evaluation of the new NCAA concussion policy. *Sports Health*, 6, 402–405.
- Knight Commission on Intercollegiate Athletics. (2010). *Restoring the balance: Dollars, values, and the future of college sports*. Miami: Author.
- Konsky, S. M. (2003). An antitrust challenge to the NCAA transfer rules. *University of Chicago Law Review*, 70, 1581–1607.

- Kroshus, E., & Baugh, C. M. (2016). Concussion education in U.S. collegiate sport: What is happening and what do athletes want? *Health Education & Behavior, 43*, 182–190.
- Kukahiko, K. T., & Chang, M. J. (2017). Athletic scholarship arrangement: Maximizing educational opportunities for Pacific Islanders in college football. In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 156–167). Baltimore: Johns Hopkins University Press.
- Lapchick, R., Anjorin, R., & Nickerson, B. (2012). *Striving for sustained positive change: The Black coaches and administrators (BCA) hiring report card for NCAA FBS and FCS football head coaching positions*. Indianapolis: Black Coaches & Administrators. Retrieved from https://www.sportandsocialjustice.org/wp-content/uploads/2011/11/BCA_FB_Hiring_FINALSENT1.pdf
- Lemons, R. S. (2017). Amateurism and the NCAA cartel. In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 32–42). Baltimore: Johns Hopkins University Press.
- Leonardo, Z. (2009). *Race, whiteness, and education*. New York: Routledge.
- Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extending notions of campus climate and diversity to students' transition to college. *Review of Higher Education, 31*, 257–285.
- LoMonte, F. D. (2014). Fouling the first amendment: Why colleges can't, and shouldn't, control student athletes' speech on social media. *Journal of Business & Technology Law, 9*, 1–50.
- Lumpkin, A. (2012). Athletics in institutions competing in the Football Bowl Subdivision: Positives, negatives, and recommendations for change. *Journal for the Study of Sports and Athletes in Education, 6*, 219–244.
- Lumpkin, A. (2017). Commercialism in college sports undermines athletes' educational opportunities and rights. In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 101–112). Baltimore: Johns Hopkins University Press.
- Lynall, R. C., Laudner, K. G., Mihalik, J. P., & Stanek, J. M. (2013). Concussion-assessment and management techniques used by athletic trainers. *Journal of Athletic Training, 48*, 844–850.
- Lynch, M. (2013). Missing men: The lack of African-American head coaches in college football. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/matthew-lynch-edd/missing-men-the-lack-of-a_b_2439944.html
- Majerske, C. W., Mihalik, J. P., Ren, D., Collins, M. W., Reddy, C. C., Lovell, M. R., & Wagner, K. (2008). Concussion in sports: Postconcussive activity levels, symptoms, and neurocognitive performance. *Journal of Athletic Training, 43*, 265–274.
- Maloney, M. T., & McCormick, R. C. (1993). An examination of the role that intercollegiate athletic participation plays in academic achievement: Athletes' feats in the classroom. *Journal of Human Resources, 28*, 555–571.
- Marchi, N., Bazarian, J. J., Puvanna, V., Janigro, M., Ghosh, C., Zhong, J., et al. (2013). Consequences of repeated blood-brain barrier disruption in football players. *PLoS One, 8*(3). <https://doi.org/10.1371/journal.pone.0056805>.
- Marx, J., Huffmon, S., & Doyle, A. (2008). The student-athlete model and the socialization of intercollegiate athletes. *Athletic Insight, 10*(1). Retrieved from <http://www.athleticinsight.com/Vol10Iss1/StudentAthleteModel.htm>
- McCann, M. (2018, September 4). Stakes and stakeholders in Alston v. NCAA, the latest college sports antitrust case. *Sports Illustrated*. Retrieved from <https://www.si.com/college-football/2018/09/04/alston-v-ncaa-trial-news-updates-ncaa-cost-attendance>
- McClincy, M. P., Lovell, M. R., Pardini, J., Collins, M. W., & Spore, M. K. (2006). Recovery from sports concussion in high school and collegiate athletes. *Brain Injury, 20*, 33–39.
- McCormick, R. A., & McCormick, A. C. (2006). The myth of the student-athlete: The college athlete as employee. *Washington Law Review, 81*(71). Retrieved from <http://digitalcommons.law.msu.edu/facpubs/280/>
- McCormick, A. C., & McCormick, R. A. (2008). The emperor's new clothes: Lifting the NCAA's veil of amateurism. *San Diego Law Review, 45*, 495–545.

- McCrory, P., Meeuwisse, W., Johnston, K., Dvorak, J., Aubry, M., Molloy, M., & Cantu, R. (2009). Consensus statement on concussion in sport: The 3rd international conference on concussion in sport held in Zurich, November 2008. *Clinical Journal of Sport Medicine, 19*, 185–200.
- McHale v. Cornell University, 620 F. Supp. 67, 68 (N.D.N.Y. 1985).
- Melendez, M. C. (2007). The influence of athletic participation on the college adjustment of freshman and sophomore student athletes. *College Student Retention, 8*, 39–55.
- Meyer, B. (1990). From idealism to actualization: The academic performance of female collegiate athletes. *Sociology of Sport Journal, 7*, 44–57.
- Milem, J. F., Dey, E. L., & White, C. B. (2004). Diversity considerations in health professions education. In B. D. Smedley, A. S. Butler, & L. R. Bristow (Eds.), *In the nation's compelling interest: Ensuring diversity in the health care workforce* (pp. 345–390). Washington, DC: National Academies Press.
- Milem, J. F., Chang, M. J., & Antonio, A. I. (2005). *Making diversity work on campus: A research-based perspective*. Washington, DC: Association American Colleges and Universities.
- Mitescu, E., Ludlow, L., Pedulla, J., Cochran-Smith, M., Cannady, M., Chappe, S., Hu, J., Enterline, S., Loftus, F., & Cantor, D. (2009). *Building an institution-specific higher education accountability system*. Paper presented at the Annual Meeting of the American Educational Research Association, San Diego.
- Muenzen, K. R. (2002). Weakening its own defense? The NCAA's version of amateurism. *Marquette Sports Law Review, 13*, 257–288.
- National Collegiate Athletic Association v. Board of Regents, 468 U.S. 85(1984).
- National Collegiate Athletic Association. (2010). *1999–2000 – 2009–2010 NCAA student-athlete ethnicity report*. Indianapolis: NCAA Research. Retrieved from http://fs.ncaa.org/Docs/library/research/ethnicity_report/2001-02/2001-02_ethnicity_report.pdf
- National Collegiate Athletic Association. (2012a). *NCAA gender equity report, 2004–2010*. Indianapolis: National Collegiate Athletic Association.
- National Collegiate Athletic Association. (2012b). *Social environments study*. Indianapolis: NCAA Research. Retrieved from <http://www.ncaa.org/about/resources/research/ncaa-social-environments-study>
- National Collegiate Athletic Association. (2012–2013a). Division I manual. Indianapolis: Author.
- National Collegiate Athletic Association. (2012–2013b). NCAA transfer guide. Indianapolis: Author.
- National Collegiate Athletic Association. (2015a). *NCAA finance*. Retrieved from <http://www.ncaa.org>
- National Collegiate Athletic Association. (2015b). *Growth, opportunities, aspirations and learning of students (GOALS) study*. Indianapolis: NCAA Research. Retrieved from <http://www.ncaa.org/about/resources/research/ncaa-goals-study>
- National Collegiate Athletic Association. (2018a). *Division I graduation rate dashboard*. Indianapolis: NCAA Research. Retrieved from <http://www.ncaa.org/about/resources/research/division-i-graduation-rates-database>
- National Collegiate Athletic Association. (2018b). *Gallup study: Life outcomes of former student-athletes*. Retrieved from <http://www.ncaa.org/about/resources/research/gallup-study-life-outcomes-former-student-athletes>
- National Collegiate Athletic Association. (2019). *What is the NCAA*. Retrieved from <http://www.ncaa.org/about/resources/media-center/ncaa-101/what-ncaa>
- Nocera, J., & Strauss, B. (2016). *Indentured: The inside story of the rebellion against the NCAA*. New York: Portfolio/Penguin Random House.
- Notebaert, A. J., & Guskiewicz, K. M. (2005). Current trends in athletic training practice for concussion assessment and management. *Journal of Athletic Training, 40*, 320–325.
- O'Bannon v. National Collegiate Athletic Association, No. CV-09-3329 (N.D. Cal. 2009).
- O'Bannon v. National Collegiate Athletic Association, No. 14-16601 (9th Cir. 2015).
- Orleans, J. H. (2013). The effects of the economic model of college sport on athlete educational experience. *Journal of Intercollegiate Sport, 6*(1), 79–85.

- Oseguera, L., Merson, D., Harrison, C. K., & Rankin, S. (2018). Beyond the Black/White binary: A multi-institutional study of campus climate and the academic success of college athletes of different racial backgrounds. *Sociology of Sport Journal*, 35(2), 119–131.
- Pascarella, E. T., Truckenmiller, R., Nora, A., Terenzini, P. T., Edison, M., & Hagedorn, L. S. (1999). Cognitive impacts of intercollegiate athletic participation: Some further evidence. *Journal of Higher Education*, 70, 1–26.
- Paskus, T. (2006). *Growth, opportunity, aspirations and learning of students in college*. Ann Arbor: Inter-university Consortium for Political and Social Research. <https://doi.org/10.3886/ICPSR35031.v1>.
- Patterson, C. (2013). Emmert: No one wants to convert student-athletes into employees. *CBS Sports*. Retrieved from <http://www.cbssports.com/collegefootball/eye-on-college-football/23697765/emmert-no-one-wants-to-convert-studentathletes-into-employees>
- Paule, A. (2010, April). *Gaining equity in all the wrong areas: An analysis of academic clustering in women's Division I basketball*. Paper presented at the Scholarly Conference on College Sport, Chapel Hill.
- Phillips, M. T. (2008). Un-equal protection: Preferential admissions treatment for student athletes. *Alabama Law Review*, 60, 751–782.
- Pierce, C., Carew, J., Pierce-Gonzalez, D., & Willis, D. (1978). An experiment in racism: TV commercials. In C. Pierce (Ed.), *Television and education* (pp. 62–88). Beverly Hills: Sage.
- Pierce, D. A., Kaburakis, A., & Fielding, L. (2010). The new amateurs: The National Collegiate Athletic Association's application of amateurism in a global sports arena. *International Journal of Sport Management*, 11, 304–327.
- Rishe, P. J. (1999). Gender gaps and the presence and profitability of college football. *Social Science Quarterly*, 80, 702–717.
- Rosenberg, M. (2011). University of Texas' TV network is a lucrative web of conflict. *Sports Illustrated*. Retrieved from http://sportsillustrated.cnn.com/2011/writers/michael_rosenberg/01/20/texas.tv/
- Rowson, S., Duma, S. M., Greenwald, R. M., Beckwith, J. G., et al. (2014). Can helmet design reduce the risk of concussion in football? Technical note. *Journal of Neurosurgery*, 120, 791–1014. <https://doi.org/10.3171/2014.1.JNS13916>.
- Sack, A. L. (2008). *Counterfeit amateurs: An athlete's journey through the sixties to the age of academic capitalism*. University Park: Pennsylvania State University Press.
- Sack, A. L. (2009). Clashing models of commercial sport in higher education: Implications for reform and scholarly research. *Journal of Issues in Intercollegiate Athletics*, 2, 76–92.
- Sack, A. L., & Staurowsky, E. J. (1998). *College athletes for hire: The evolution and legacy of the NCAA's amateur myth*. Westport: Praeger. <https://doi.org/10.2307/369741>.
- Sagas, M., & Cunningham, G. B. (2005). Racial differences in the career success of assistant football coaches: The role of discrimination, human capital, and social capital. *Journal of Applied Social Psychology*, 35, 773–797.
- Sailes, G. (1993). An investigation of campus stereotypes: The myth of Black athletic superiority and the dumb jock stereotype. *Sociology of Sport Journal*, 10, 88–97.
- Sallee, B. (2019, April 26). Clemson, coach Dabo Swinney agree to massive 10-year, \$93 million contract extension. *CBSSports.com*. Retrieved from <https://www.cbssports.com/college-football/news/clemson-coach-dabo-swinney-agree-to-massive-10-year-93-million-contract-extension/>
- Samsel, H. (2017). Title IX turns 45 today. Its impact goes beyond women playing sports. *USA Today*. Retrieved from <https://www.usatoday.com/story/college/2017/06/23/title-ix-turns-45-today-its-impact-goes-beyond-women-playing-sports/37433427/>
- Sanders, J. P., & Hildenbrand, K. (2010). Major concerns? A longitudinal analysis of student-athletes' academic majors in comparative perspective. *Journal of Intercollegiate Sport*, 3, 213–234.
- Sanderson, J. (2011). To tweet or not to tweet: Exploring Division I athletic departments' social media policies. *International Journal of Sport Communication*, 4, 492–513.

- Santovec, M. L. (2013). Social media and student athletes: Legal issues are quirky. *Women in Higher Education*, 22(12), 25–26.
- Savage, H. W., Bentley, J. T., McGovern, D. F., & Smiley, M. D. (1929). *American College Athletics* (Bulletin No. 26). New York: Carnegie Foundation for the Advancement of Teaching.
- Schneider, R. G., Ross, S. R., & Fisher, M. (2010). Academic clustering and major selection of intercollegiate student-athletes. *College Student Journal*, 44, 64–70.
- Schwarz, A., & Rascher, D. A. (2017). Competitive equity: Can there be a balance between athletes' rights and a level playing field? In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 128–142). Baltimore: Johns Hopkins University Press.
- Shannon, B. D. (2017). The revised NCAA Division I governance structure after three years: A scorecard. *Texas A&M Law Review*, 5, 65–103.
- Shropshire, K. L., & Williams, C. D., Jr. (2017). *The miseducation of the student athlete: How to fix college sports*. Philadelphia: Wharton Digital Press.
- Shulman, J. L., & Bowen, W. G. (2001). *The game of life: College sports and educational values*. Princeton: Princeton University Press.
- Sierra, J. J., Taute, H. A., & Heiser, R. S. (2010). Personal opinions and beliefs as determinants of collegiate football consumption for revered and hated teams. *Sport Marketing Quarterly*, 19(3), 143–154.
- Sigelman, L., & Wahlbeck, P. J. (1999). Gender proportionality in intercollegiate athletics: The mathematics of Title IX compliance. *Social Science Quarterly*, 80, 518–538.
- Simons, H. D., Van Rheenen, D., & Covington, M. V. (1999). Academic motivation and the student athlete. *Journal of College Student Development*, 40, 151–161.
- Simons, H. D., Bosworth, C., Fujita, S., & Jensen, M. (2007). The athlete stigma in higher education. *College Student Journal*, 41, 251–273.
- Singer, J. N. (2005). Understanding racism through the eyes of African American male student-athletes. *Race Ethnicity and Education*, 8, 365–386.
- Smith, E., & Hattery, A. J. (2017). Conference realignment and the evolution of new organizational forms. In E. Comeaux (Ed.), *College athletes' rights and well-being: Critical perspectives on policy and practice* (pp. 113–127). Baltimore: Johns Hopkins University Press.
- Snyder, E. M. (2013). *An analysis of NCAA Division I student athlete social media use, privacy management, and perceptions of social media policies* (Unpublished doctoral dissertation). Retrieved from <https://eric.ed.gov/?id=ED556874>
- Southall, R. M., & Staurowsky, E. J. (2013). Cheering on the collegiate model: Creating, disseminating, and imbedding the NCAA's redefinition of amateurism. *Journal of Sport and Social Issues*, 37, 403–429.
- Southall, R. M., Wells, D. E., & Nagel, M. S. (2005). Organizational culture perceptions of intercollegiate athletics department members. *Applied Research in Coaching and Athletics Annual*, 20, 65. <https://doi.org/10.1123/jis.2014-0134>
- Southall, R. M., Eckard, E. W., Nagel, M. S., & Hale, J. M. (2012). *Adjusted graduation gap report: NCAA Division-I football*. Chapel Hill: College Sport Research Institute.
- Sperber, M., & Minjares, V. (2015). Millionaire college coaches and the schools that pay them. In E. Comeaux (Ed.), *Introduction to intercollegiate athletics* (pp. 163–175). Baltimore: Johns Hopkins University Press.
- Stafford, S. L. (2004). Progress toward Title IX compliance: The effect of formal and informal enforcement mechanisms. *Social Science Quarterly*, 85, 1469–1486. <https://doi.org/10.1111/j.0038-4941.2004.00286.x>.
- Staurowsky, E. J. (1998). Critiquing the language of the gender gap equity debate. *Journal of Sport & Social Issues*, 22, 7–26.
- Staurowsky, E. J. (2015). College athletes' rights. In E. Comeaux (Ed.), *Introduction to intercollegiate athletics* (pp. 287–300). Baltimore: Johns Hopkins University Press.
- Suggs, W. (2005). *A place on the team: The triumph and tragedy of Title IX*. Princeton: Princeton University Press.

- The Associated Press. (2019, May 29). Transfer, play right away? Don't bank on it, NCAA cases show. *The New York Times*. Retrieved from <https://www.nytimes.com/aponline/2019/05/29/us/ap-fbc-ncaa-transfer-waivers.html>
- Thelin, J. R. (1996). *Games colleges play: Scandal and reform in intercollegiate athletics*. Baltimore: Johns Hopkins University Press.
- Umbach, P. D., Palmer, M. M., Kuh, G. D., & Hannah, S. J. (2006). Intercollegiate athletes and effective educational practices: Winning combination or losing effort? *Research in Higher Education*, 47, 709–733. <https://doi.org/10.1007/s11162-006-9012-9>.
- Upthegrove, T. R., Roscigno, V. J., & Charles, C. Z. (1999). Big money collegiate sports: Racial concentration, contradictory pressures, and academic performance. *Social Science Quarterly*, 80, 718–737.
- Waldron, T. (2013). [Congresswoman challenges NCAA over its handling of concussions](http://thinkprogress.org/sports/2013/11/20/2972731/congresswoman-challenges-ncaa-handling-concussions/). *Think Progress*. Retrieved from <http://thinkprogress.org/sports/2013/11/20/2972731/congresswoman-challenges-ncaa-handling-concussions/>
- Watt, S. K., & Moore, J. L. (2001). Who are student athletes? In M. F. Howard-Hamilton & S. K. Watt (Eds.), *Student services for athletes: Vol. 93. New directions for student services* (pp. 7–18). San Francisco: Wiley.
- White v. National Collegiate Athletic Association, Second Amended Complaint for Plaintiff, No. CV-06-0999 RGK (C.D. Cal. 2006).
- Wolverton, B. (2008, January 25). Athletes' hours renew debate over college sports. *Chronicle of Higher Education*. Retrieved from <http://chronicle.com/article/Athletes-Hours-Renew-Debate/22003>
- Wolverton, B. (2010). NCAA agrees to \$10.8-billion deal to broadcast its men's basketball tournament. *Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/NCAA-Signs-108-Billion-Deal/65219>
- Wolverton, B. & Kambhampati, S. (2017, January 24). As sports programs get bigger, few give much for academics. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/As-Sports-Programs-Get-Richer/235026>
- Yasser, R., & Fees, C. (2005). Attacking the NCAA's anti-transfer rules as covenants not to compete. *Seton Hall Journal of Sports Law*, 15, 221–252.
- Zimbalist, A. (1999). *Unpaid professionals: Commercialism and conflict in big-time college sports*. Princeton: Princeton University Press.
- Zimbalist, A., & Sack, A. (2013). *Thoughts on amateurism, the O'Bannon case and the viability of college sport*. New Haven: The Drake Group. Retrieved from <http://thedrakegroup.org/2013/04/10/drake-group-report-obannon-amateurism-and-the-viability-of-college-sport/>

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