College Athletes' Views on Academics: A Qualitative Assessment of Perceptions of Academic Success

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A B S T R A C T

The primary purpose of the current study was to give "voice" to college athletes regarding their views on academics. Given their perspectives, means of promoting their academic achievement were suggested. Research describing athletes' experiences and the impact of socio-emotional stressors on academic success, especially for those not at a Division I school, is needed. Therefore, a qualitative study exploring the academic experiences of college athletes was conducted. Twelve focus groups of college athletes (N = 62) from six teams were held. Results revealed that college athletes are motivated to achieve by external factors and see grades as an external evaluation of performance. Athletes communicate with one another about grades, but generally this is limited to specific assignments rather than semester-long evaluations. Reaching out to academic support staff early in one's career was reported as helpful, and academic performance could be improved with better communication with professors and more time management skills. The findings provide tools to develop more effective and tailored support programs for college athletes.
Keywords: academics, academic advising, college student athlete, motivation

Historically, college athletes have been viewed as a unique subpopulation among college students, sometimes referred to as being "at risk" for academic and psychosocial problems (Clift & Mower, 2013; Huml et al., 2019; Watson & Kissinger, 2007; Wilson & Pritchard, 2005). They are a highly visible and heavily scrutinized portion of the student population who may need additional support to ensure their academic and personal success. College athletes encounter a unique set of challenges as they balance the roles of student and athlete. These challenges range from managing the stress of performance, injury, and maintaining optimal physical conditioning (Simon & Docherty, 2014), to developing social and leisure activities outside their roles as college athletes (Giacobbi et al., 2004). They also experience the need to cope with stress from coaches and other performance-related expectations (Anderson & Dixon, 2019; Huml et al., 2019; Raabe et al., 2017). These roles are quite different from non-athletes and have potential to differentially affect their overall sense of well-being and academic achievement. To intervene positively on their behalf, one must understand college athletes' own beliefs and experiences and work within those boundaries. The goal of current study is to provide access to these beliefs and experiences.

The degree to which college athlete-related experiences influence academic achievement has long been studied and debated. Some have proposed that because college athletes may not be held to the same admission standards as their non-athlete peers, they are comparatively underprepared and consequently perform more poorly academically (Bowen & Levin, 2003; Shulman & Bowen, 2001). Umbach and colleagues (2006) found that among Division III athletes, male athletes had lower self-reported grades than did non-athletes. Furthermore, the College Sports Project (2009, as cited in Barlow & Hickey, 2014), a longitudinal study of athletes and non-athletes in Division III schools, reported a similar finding — male athletes performed more poorly academically than did male non-athletes. The differences among female athletes and non-athletes also existed, but the difference in self-reported grades was not as large as for males (Emerson et al., 2009). Others have found conflicting results, stating that college athletes generally are satisfied with their college experiences, have similar educational practices, and perform similarly as those who are not athletes (Aries et al., 2004; Pascarella et al., 1999; Potuto & O'Hanlon, 2006; Robst & Keil, 2010; Umbach

et al., 2006). Others report that college athletes are more likely to graduate and have higher grade point averages than non-athletes (Hildenbrand et al., 2009).

Regardless of these inconsistent findings, college athletes have unique social and psychological stressors that can interfere with academic achievement. For example, athletes have higher stress than non-athletes (Demirel, 2016), and the experience of such stressors has been linked with poorer academic outcomes (Heelis & Shield, 2015; Hwang & Choi, 2016; Papanikolaou et al., 2003; Perry et al., 2001). College athletes often report stress due to the extra time demands of athletic responsibilities, pressure from coaches to achieve athletically and academically, and conflicts with teammates and coaches (Huml et al., 2019; Hwang & Choi, 2016; Paule & Gilson, 2010; Vargas et al., 2015). Athletes also have reported increased stress because of reduced sleep and increased demands from extracurricular activities (Hwang & Choi, 2016; Wilson & Pritchard, 2005). Overall, research demonstrates that the culmination of responsibilities unique to the college athlete in addition to those of a normal college student can overwhelm college athletes and lead to poor academic performance and increased risk of adjustment problems and psychological distress (Huml, et al., 2019; Watson & Kissinger, 2007).

To better understand and integrate the myriad of factors that affect college athletes' academic success, Comeaux and Harrison (2011) proposed a theoretical model that emphasizes the integration of individual factors and social and academic systems that may affect academic performance. Individual attributes within this model include academic motivation, family background, and previous educational experiences. These attributes are proposed to have an indirect effect on academic success in college. For example, parent education and family socioeconomic status positively predict academic success (Eason-Brooks & Davis, 2007; Higdem et al., 2016; von Stumm et al., 2020). Likewise, students who maintain growth mindsets and intrinsic motivation toward academics tend to have higher GPAs than those with external motivation and fixed mindsets (Deci et al., 1999; Guiffrida et al., 2013; Nichols et al., 2019; Taylor et al., 2014). Comeaux and Harrison (2011) label this first stage "precollege characteristics" and argue that these characteristics influence other personal factors such as college athletes' commitments to their sport, the institution, and personal goals. These commitments are important then in predicting how college athletes will interact in the college environment and eventually obtain academic success. For example, a college athlete with clearly specified career goals or graduate school aspirations may be more committed to academic success than one attending college merely because of social (parents, peers, coaches, etc.) expectations or perceived obligation.

The second stage of this model purports that college athletes' academic success is a product of their integration into both academic and social systems within the college environment (Comeaux & Harrison, 2011). That is, the ability for college athletes to establish successful peer relationships and develop intellectually is linked with academic success. In support of this theory, Gaston-Gayles and Hu (2009) have found that peer interaction, especially with non-teammates, is positively associated with personal development and academic success. Others have found that interacting with faculty predicts academic success (Rankin et al., 2016). In the model proposed by Comeaux and Harrison (2011), academic integration is defined in terms of both external, explicit standards (i.e., institution grades) and personal, intrinsic intellectual development (Comeaux & Harrison, 2011). In support of this theory, researchers have found that athletic participation in general is positively associated with GPA (Dyer et al., 2017) and that college athletes often outperform non-athletes in academic arenas (Hildenbrand et al., 2009). Compared to non-athletes, college athletes have higher emotional intelligence and better mentoring skills in their post-college careers (Sauer et al., 2013) and have reported added social and cognitive benefits in transitioning into life after graduation (Foster & Lally, 2021; Ofoegbu et al., 2021).

Overall, the theoretical model proposed by Comeaux and Harrison (2011) presents a college athlete-specific model to explore a diverse set of factors that affect academic achievement. It has been used with some success (Comeaux et al., 2017; Grandy et al., 2016) but is limited to research on Division I college athletes. Most college athletes (i.e., 64%; NCAA, 2020a) do not play for Division I teams and those playing at the Division II level are less likely to play professional sports after college (NCAA, 2020b). As such, the importance of successful educational integration and achieving post-college career goals among Division II and Division III athletes may be different from college athletes who play for Division I schools. Furthermore, a greater percentage of students are college athletes at Division II and Division III schools (NCAA, 2020c), but may be less visible

to faculty than athletes at a Division I school. Consequently, the academic experiences and a need for academic support among athletes from Division II and III schools may be different from that of athletes from Division I schools, but this has yet to be captured fully by existing research.

Comeaux and Harrison (2011) also argue that there is a paucity of research specifically on college athletes' intellectual development and therefore have called for "additional research that delineates individual characteristics to account for the variations in effects of intellectual development on academic success" (Comeaux & Harrison, 2011, pg. 242). Moreover, the work that has been done examining the relationship between academic achievement and athletic participation lacks the athlete's perspective and what they believe benefits them academically. Many have noted that research should give them a greater "voice" in what contributes to their academic success and intellectual development (Benson, 2000; Martin et al., 2010).

Given the need to further explore factors that influence college athletes' intellectual development and to hear the college athletes' "voice" in these investigations, a qualitative study exploring the academic experience and intellectual development of college athletes was conducted. The primary research aims were to understand the experiences and perceptions of college athletes' grades, academic motivation, and factors that might affect their success. We also explored what college athletes found helpful and what recommendations they have for greater academic success.

Method

Participants

Participants were 62 (32 men and 30 women) college athletes from a midsized public university (i.e., approximately 7,600 students) in the Midwestern United States. Participants came from six Division II collegiate sports teams, including football, soccer, basketball, golf, cross country, and track. Most athletes were sophomores (33%), 16% were freshmen, 24% were juniors, and 19% were seniors. Four (6%) athletes did not provide their class year. See Table 1 for the number of athletes in each sport, academic year, and gender. Age and ethnicity were not collected in these focus groups, but participants were representative of students at the university in which the study took place. Most participants were white and between the ages of 18–22 years. The average age of students at the university is 20.65 years (SD = 4.2) and 83% are white.

Procedures and Materials

After approval from the Institutional Review Board, participants received an email from the Athletic Department's Academic Advisor inviting them to volunteer to participate in a focus group with their teammates. When enough athletes (four or more) within a given sport volunteered, the academic advisor scheduled a focus group when most or all of them could meet with the researchers. Although an attempt was made to form groups representing a variety of teams at the university, recruitment was conducted during the spring sports season and athletes in sports that currently were in season volunteered less frequently. Thus, approximately half the university's teams were included, and most (but not all) were fall or winter sports teams.

Twelve focus groups of 4–8 college athletes were conducted, each lasting between 60 and 90 minutes. Focus groups were held at the academic resource center for athletes on campus and were moderated by the first two authors of the study. At the beginning of the focus group, participants were provided with a description of the study and written informed consent was garnered. An author-generated, semi-structured interview was developed based on the theoretical model guiding the study (i.e., Comeaux & Harrison, 2011) and questions of interest from the authors. Questions included topics that would generate discussion about various factors that would influence intellectual development. These included the experience of being an athlete, academic and athletic priorities, the benefits and disadvantages to being an athlete, perspectives and motivations for earning good grades, communication about grades, and what helps them succeed academically.

Table 1

Number of Men and Women Participants by Class Year and Sports Team

	Football	Soccer	Cross Country	Track	Basketball		Golf		
	Men	Women	Men	Women	Men	Women	Men	Women	**Total**
Freshmen	1	0	0	0	3	2	0	4	10
Sophomore	4	3	4	4	3	1	1	1	21
Junior	3	1	2	4	0	1	3	1	15
Senior	1	2	1	4	2	2	0	0	12
Total Men/Women*	11	6	7	12	9	6	5	6	Men: 32 Women: 30
Total in Sport	11	6	7	12	15		11		62

Note. *Total may not sum because some participants did not provide their class year.

Data Analysis

Data from the interviews were transcribed and uploaded into NVivo 10 to assist with coding analysis. Interviews were analyzed using Consensual Qualitative Research Methodology (CQR; Hill, 2012; Hill et al., 2005; Hill et al., 1997). CQR methodology is a replicable and scientifically rigorous methodology used to analyze qualitative data thematically (Hill et al., 2005). It employs a three-step procedure wherein researchers first independently code or give a representative label to each line of data in the transcripts and then come to a consensus as a team about themes expressed in the data. Researchers then create core ideas by analyzing the raw data from each theme. In the final step, researchers compare themes across all participants and develop sub-themes as needed (Hill et al., 2005). In the current study, researchers independently reviewed transcripts and then met as a team to discuss identified themes. Once consensus was reached, changes were applied to all transcripts. Saturation, or the stability of the data, was achieved when no new themes emerged (Williams & Hill, 2012). Reliability was maintained by continually referring to previously coded interviews after developing themes to ensure the data supported the generated themes (Smith et al., 1999). To strengthen validity and reduce bias, an auditor reviewed the codes throughout the data analysis process. Most concerns from the auditor reflected the need to clarify theme definitions. The coding team accepted most of the auditor's comments. Coders in the current study were three men and four women. All coders underwent training in CQR methodology prior to data analysis.

Results

After analyzing participants' responses, four primary themes emerged (sub-themes are listed in parentheses): *Perceptions of grades* (self-assessment, external evaluation, intellectual ability versus effort), *Motivation for grades* (external, internal), *Communication about grades*, and *Strategies and recommendations for successful academic achievement* (strategies that are helping athletes succeed, ways to improve academic success).

Perceptions of Grades

Participants described how grades can serve as a self-assessment of learning as well as an external evaluation; a representation of something other than learning. They also discussed the degree to which grades measure intellectual ability versus effort put into a class.

Self-Assessment

Participants viewed grades as a means of self-assessment, a way for the student to measure how much was learned in the class. Participants also noted that grades were a way to self-evaluate their learning, helping them decide the degree to which they were able to attain personal success (e.g., I wanted a "B" and I got a "B," therefore I achieved my goal). For example, one participant described the purpose of grades as, "A scale to let you know where you're at [in the class], not so much for the teacher. [. . .] It's [grades are] more of a thing to let you know how *you're* doing."

Participants also noted that grades are an "assessment of what you learn," a "personal standard," and a way to "show your strengths," primarily reflecting on the value that it holds for the individual, rather than for others. Thus, these college athletes were able to surmise that academic achievement in the form of grades served to help them determine their success in a class, providing a self-evaluative measure of what they learned.

External Evaluation

Participants also described how grades provided an external, tangible evaluation that goes beyond the function of measuring how much was learned in a class. One participant said:

> I don't think they're [grades] very important at all, but it's just like the tangible thing that you can hand in to an employer some day and say, "This is what I got in that class," or if you're trying to go to post graduate school, "This is what I did here."

Participants also described grades as a way to differentiate students in the classroom. One participant said, "It's just a competition, [a] way to gauge against other people, based on numbers and letters."

For college athletes in this study, grades served not only as an evaluation of learning, but also a measure to compare their performance to other students and a tangible criterion to help them move beyond their college experience.

Intellectual Ability Versus Effort

College athletes often debated the degree to which grades measured intellectual ability or effort put into a class. Some noted that certain measures of academic achievement were solely for the purpose of measuring intellectual ability, such as the ACTs. On the other hand, class grades might instead represent the effort one put into the class and not intellectual ability alone. One participant described how students can be intelligent, but not complete their homework. Consequently, their grades represent how much effort they put into the class rather than their actual intelligence. The participant said:

> There's just some people that are naturally smart who cannot study for anything. They'll take a test and get A's, but they don't do homework. So that might be a reason why their grades are lower.

Another participant summarized it like this:

> I feel like grades don't represent [. . .] what people actually have going on. Freshman year I didn't do well at all in classes and now, once they [teachers, coaches, etc.] get on you [. . .] it's easier to motivate yourself to get those things done. But I mean I was no better. [. . .] I had the same thoughts and could still do the same stuff, but [it was] just because I studied a little more, or just memorizing some words or terms, that I [did better].

For many college athletes, grades were not always a measure of intellectual ability. Rather, they measured the effort that one was willing to put into the class.

Motivation for Grades

When discussing their experiences as college athletes, participants described that they would engage in certain behaviors related to academic achievement for both external and internal reasons. However, participants more frequently described external sources of motivations for academic achievement than internal sources.

External

External motivation for grades was defined as a standard or criteria that is outside the desires of the individual that drives academic achievement. The motivation for getting certain grades is

motivated by external events or rewards including getting to compete in one's sport, getting into graduate school, getting a job and/or "making lots of money." One participant described it like this:

> [The purpose of grades is] To graduate. [. . .] That's basically all it comes down to. I think [it] is to get your degree and go on, because statistics show that if you go to college, you'll earn more. So go to college. And to pass college, you need good grades.

Another participant described his motivation as, "For me, personally it's for graduate school, I guess. The only reason that I really care about my grades right now is so I can further my education to do what I want to do." Others described how the minimum academic requirements to compete on their athletic teams motivated them to achieve good grades:

> There are certain standards you have to meet to compete. They still have to get a certain GPA or they can't compete. So if they care about sports, they have to do at least a certain point in both. Whereas I think if you didn't have that sport you cared about then you probably just wouldn't do very well. So, it [the sport] gives you an extra factor to motivate you.

The shared identity of team also motivated students to academically achieve; participants did not want to be the player on the team with the lowest GPA or to be the one who brings down the team GPA:

> I think being a freshman last year with [the] cross country [team] having a team GPA of number one or number two overall [motivated me]. [. . .] It was like, "Holy crap! I better get my GPA up. I don't want to be the one to make it [the team's GPA] fall down."

Another college athlete described how being part of a team made her want to be more academically successful:

> In high school I wasn't my best [at] times. [. . .] but being on the [college soccer] team definitely pushes me to do well in my academics. [. . .] I don't want to let down the team and I don't want to drop the [team] GPA, 'cause our GPA of our team is so high. [. . .] So it's definitely a big aspect of how I push myself in school.

Other participants described how successful upperclassmen on their team served as a motivation for them to achieve too. One participant summarized her sentiment like this:

> I think it's definitely helpful to look up to upperclassmen [. . .]. There was another girl who was a year ahead of me who was in the nursing program, just being able to kind of see that, "OK, well she did it," you know, I can do it [too]. [. . .] Like kind of as an extra motivation and [. . .] a good source of encouragement to be able to bounce questions off of, and kind of follow in their footsteps.

College athletes described several external factors that drove their pursuit of better academic achievement. These included personal goals such as getting a good job, going to graduate school and factors associated with being a college athlete such as earning a high enough GPA to compete and having others serve as role models.

Internal

Although not as frequently mentioned as external motivators, college athletes also were motived by internal factors such as self-fulfillment and self-enjoyment. They described how achieving good grades was personally rewarding and how there is value in being a good student. One participant said:

> Grades mean almost nothing to me, but learning is a lot higher on the pole, like if I go to this class and can legit at the end of the night tell myself that I learned something today, I go to bed happy. Whether my grade reflects it or not is a lot less important to me.

Another noted, "I would say giving your all effort and making sure that you get something out of the class is more important than taking an easy class and getting an A." Another participant described how good grades are rewarding because they give you a sense of pride and accomplishment:

> I feel like sometimes in the moment it's just the fact of like being able to say like you achieved it and it's kinda just the [. . .] pride in yourself, [. . .], the satisfaction of having earn[ed] that grade.

Although less frequently mentioned than external factors, participants described how academic achievement and earning good grades was internally rewarding and that learning itself, regardless of the letter grade, was of value.

Communication about Grades

From discussions regarding grade communication, participants noted that grades often are discussed within a specific context, such as related to an exam or a specific grade on an assignment, rather than overall achievement, such as a semester-long grade or one's overall GPA. One participant said:

> We [team members] don't talk about overall grades that much. We might talk about, [how] I got an 82 on this test, [but] you know I'm not going to add up all of my test scores [and say] you got a B in the class. At the end of the semester we don't just all stand in the locker room, [and say] "A" [points to one teammate], "B" [points to another teammate], "B" [points to a third teammate], but I mean we all talk about it [grades].

Participants did note, however, that often there was communication about specific good and poor grades on exams or assignments. Many college athletes were willing to share with their teammates when they did well on an exam or an assignment. It was not their intention to brag about their academic success, but rather to share with their teammates an achievement, especially if others were aware that the exam or assignment was coming up. One participant describes his experience by saying, "If someone had a test coming up, that they've been studying for a lot and they did good on it, they're going to tell people, 'Yeah I did good on that.'" Poor grades were shared similarly, with participants noting that they would talk about performing poorly on a specific exam or class project. One participant noted:

> We do talk [about bad grades] [. . .] like if I don't do good, I'm more willing to tell you. Like I'll walk in [to the locker room] and be like, "Damn man." [And he will say] "Why, what's wrong?" "I'm like, *shhhh*, I just failed my final bro. I got a 48 out of 100, like what, damn."

Several participants commented that it often was the coach that addressed poor grades among teammates. One participant said, "Coaches hold us accountable. They aren't afraid to call you out if you're not doing well, in front of everyone." Another said, "If you end up getting into problems [with your grades], the coach will address it. He'll talk to us."

Poor grades also were communicated with the team's academic success in mind. Team members did not want their teams' GPAs to suffer and often would seek out the teammate who was doing poorly to talk about the bad grade. One participant said: *"*I think, as far as the team goes, [. . .] if someone was close to failing a class, I think we'd [the team] hear about it." One participant noted that the team's comments about a poor grade can motivate the individual to do better next time: "If someone does bad in the class, we give the person crap and that usually motivates the person to do better the next time." Others offered that talking about their grades provided the opportunity for them to offer help:

> But I think another good thing with our team is that we are open about it [grades]. I have tutored multiple people in math, and they'll tell me, "Hey, I didn't do good on this test like can you come help me?" And I'll be like, "Yeah I'll come help you."

Another noted that communicating about grades allowed teammates to help with good decision making. One participant said:

> I think it's also holding people accountable to like [what] you said. If people are doing bad and you know about it and then they are like, "Oh yeah like I really want to go out this weekend" and we kind of are like, "That's not really a good idea and maybe you should stay and study."

Participants' typical communication about grades reflected specific exams or assignments rather than overall, semester-long achievement. College athletes reported that communication about grades with their teammates and coaches provided resources for assistance and grade accountability.

Strategies and Recommendations for Successful Academic Achievement

Strategies that are Helping College Athletes Succeed

College athletes described a variety of resources and strategies that were helping them achieve their academic goals. These resources and strategies were further grouped into categories of academic support staff, external resources, and time management.

Academic Support Staff. College athletes emphasized that getting help was an important part of being successful and referenced several sources of support. One participant commented, "The worst I've done is because I thought I could do it myself and get out of a hole without any help and obviously I can't, but there are a lot of people here to help us." Another shared this sentiment, "You just have got to utilize the resources that we have, and we have a lot, and if you're doing poorly in school there are a lot of people here that can help us, and have helped me." Finding a *tutor* was highly recommended, even if it was a behavior that some found to be potentially stigmatizing. One participant described it like this:

> Go get extra help. [. . .] I was struggling for a little bit last year and I went and got [help]. I had a couple of tutor sessions and that really helped. [. . .] In high school I think you could say like the kids that get tutored maybe look bad or get judged, but here nobody cares.

Communication with *professors* also was evaluated favorably:

> Most of the faculty are pretty supportive of athletics [. . .] when you go [to] another class [for the] first time you introduce yourself and just say what sport you're in and then you give them like a schedule and they're really, like supportive of that.

Participants also discussed the value of having an *athletic advisor* to help them with academic needs. The athletic advisor's support ranged from finding tutors, helping college athletes register for classes, and providing reminders and resources to students who were struggling in classes. One participant said:

> I talked to [athletic advisor] and said this class is hard. He said, "Alright here's how you sign up for a tutor," and I did, and I don't think on my own I would have found [one] [. . .], but he mentioned it as a possibility. He said here's how you do it and I did it. And otherwise I don't know if would have done it. [. . .] It's [athletic advisor's help] just awesome.

External Resources. In addition to academic support staff, participants also described how certain environmental supports helped them achieve academically. At the university where these students resided, they were provided with an academic resources center specifically designated for study. It included individual and group study rooms, meeting rooms, and access to an academic advisor. Students valued these environmental supports, commenting, "because you come here [athletic academic center], and you know you're going to do your work, so, I definitely think this place helps a lot." Part of this system included "study tables" where students had assigned time to study, and if their GPAs were low they would have increased required time at the study tables. There were mixed reviews about this required system. Some college athletes found them helpful:

> I thought study tables was good, that was good that we had to be here. Just four hours of being here, at least. Like when you walk all the way over here, you're going to bring your homework over, you're not distracted by a TV. I mean you can still be by your computer, but you're at least going to try to do something while you're here. I think that's always good.

Others noted that study tables were not helpful, especially when there were many other college athletes in the study table spaces:

> Study tables did nothing for me. I need complete silence when I do my homework and when I read and there were so many athletes here and everyone [was distracting].

Others found this environment was not the right type of learning space for them. For example, one participant said:

> I'm a person where [when] I get homework I do [it] literally after class. So I never had homework [for study tables], and I literally came just for the hours, just to get it done. So I mean if I could have done study tables [on the] 3rd floor of the library I would have been so much more productive, but I mean I'd come here and I would just like sit here and be like [. . .] "I'm gonna watch Netflix," but then I'd get in trouble. So, I don't know what to do except distract other people.

Time Management. Participants also discussed how time management was essential for their academic success. Having additional responsibilities of managing practices, travel, and events in addition to normal student activities was challenging and they noted that the best way to succeed was to be organized and to find a balance between being an athlete and a student. One participant described how to be successful in academics and athletics as this:

> Just putting the amount of time in that you need to and being able to balance your time between all of your classes and during the season. Finding the good balance between your sport and academics, so you're not putting more time into one or the other and, giving your full potential in both of them.

Another noted that organization was key to academic success:

> Definitely be as organized as you can because especially with sports, there is so much going on all the time and you will forget, I mean you forget a lot unless you write it down or put it in your phone calendar or do something because tests, practice, yeah everything, there's just a lot.

Overall, college athletes identified that reaching out to academic support staff (e.g., tutors, athletic advisors, professors) and using resources provided to them and other students are important for achieving their academic goals. Likewise, successfully managing their responsibilities of both being a student and an athlete can lead to greater academic success.

Ways to Improve Academic Success

Participants also described several ways in which institutions and academic support staff could help them continue to meet their academic goals. Although many noted that they felt the current resources at the university were sufficiently assisting them in achieving their academic goals, they discussed a few improvements or modifications.

Communication with Professors. Participants stressed that open communication with professors about the expectations of their college athlete role (e.g., travel, missed classes, exam make-ups) was important to helping them succeed and should continue to be improved. Better, more frequent communication often was described as a successful strategy, and college athletes consequently offered suggestions related to improving communication with professors. One student said:

> I actually sat down with all of my professors and went to their office hours and just talked to them or sent them an e-mail and said, hey, like I've been putting in a lot of effort into your class and in my free time, like I don't want you to, I don't want to make it seem like I'm not trying in your class, I am. And ever since then I've actually noticed a difference where they're all like now they're like trying to help me. And not special, like not special treatment but they're just checking in on you more and they want to make sure that you're doing well.

Another participant noted:

> Better communication and students or professors being understanding of the fact that we do have this job that we have to go to and even though it's a game, it can be looked at as a job. And the same page as the players being respectful and understanding that the professor is allowing you to miss classes and just like, it's a lot of give and take, I guess.

Another participant suggested that better communication between the university and professors about the responsibilities and demands of being college athletes also would improve their academic success:

> I think that for the school, maybe the professors need to get on the same page as the athletic department. [. . .] I'm sure all of us have had issues with leaving and the professor doesn't want us to leave, or the professor's pissed because we're missing but we can't help it.

In general, it seemed that college athletes were the most frustrated with lack of flexibility with professors but knew that open communication was the key to their success in the class.

Structured Environment. Some participants also discussed that there could be changes to their learning environment. For example, the building where college athletes were required to complete their study hours and meet with advisors was located off campus and students preferred to study in the library. One participant said:

> The athletes' access center not being on campus is a big thing [to improve upon]. I've talked to a lot of athletes in different sports and if study tables were in the library, like it is in most schools, I mean we would all get our required hours and we would all be there and the advisors [would be] there. [If] that's just where we met, [. . .] just dropping in to ask some questions would just be so much easier. This [the academic center] is just so out of the way and it kind of brings down your motivation to go. [. . .] Just it being on campus would just be so much more helpful I think.

Self-changes. A few participants noted that academic success was dependent on the actions of the individual. Although there were many resources in place to help college athletes succeed, there were many participants who believed that the individual needed to go to class, to do his/her homework, and learn. One participant summarized it by saying, "Well I think no matter what, it's [learning] going to be more than you're used to and there's really no substitute for just learning it." Another participant noted a similar sentiment when asked about ways to improve learning for college athletes:

> Setting time for studying and getting their homework done and everything. [. . .] Just to get on that road of starting, just getting the habit of it so that they stick with it and that it doesn't fall out of place at all so…just get them started.

Another participant noted that academic success required changes from his previous learning experiences:

> In high school I didn't have to study at all, and I'd get good grades. I actually learned after my first semester [in college], first couple of tests, like alright, I'm not going to get by just listening to the teacher. I've got to go put in a little extra work.

In summary, participants seemed to find that improving academic success included promoting better communication with professors, having a convenient, structured learning environment, and making the individual effort to perform behaviors (e.g., going to class, studying for exams) associated with learning.

Discussion

The purpose of the current study was to give "voice" to college athletes regarding their perspectives on academic achievement, the challenges they face in their dual roles as students and athletes, and how to support them in their academic progress. In a qualitative assessment of both men and women college athletes from multiple sport teams at a Division II school, four themes emerged related to their perceptions of grades, motivations for achieving academic success, communication about grades, and the strategies and resources used and needed to achieve academic success.

College athletes perceive grades as a measure of their learning and as an objective indicator of achievement. They had differing perspectives on the degree to which grades measure actual intellectual ability or measure the effort one puts into a class. We also found that the college athletes' motivations for academic achievement varied, but the majority expressed being motivated by external factors or rewards such as going to graduate school or getting a good job. There were, however, a few who were motivated to achieve because of the internal value that a good grade provided; it was a measure of self-fulfillment and reward. Results support previous research identifying intrinsic and extrinsic motivators for students' academic achievement (Bailey & Bhattacharyya, 2017; Davis et al., 2006) and further demonstrate that college athletes tend to be especially motivated to perform well academically by extrinsic factors such as a good job, getting into graduate school, or even just getting to participate on the team. Although most research shows a positive relationship between intrinsic motivation and academic achievement, Taylor et al. (2014) found that external regulation was positively associated with academic achievement and argued that external rewards (i.e., graduation, future jobs) might be especially motivating for those who were about to graduate. As such, reminding college athletes of these extrinsic goals may be a way to uniquely motivate college athletes, especially for those who are at a stage in their academic or athletic development where external goals (e.g., graduation, extended/reduced playing time) are personally significant.

Results of the study also demonstrated that college athletes do communicate with one another about their grades, but that it is related to a specific assignment or exam. Some reported that they were held accountable to academic achievement by their teammates, but that it was primarily coaches who would respond if they were not achieving at the expected level. Many participants shared that being on a team was a motivator for academic success, noting that without their participation in sports they may not have done as well academically. Similar results have been demonstrated with non-athletes. Thompson and Mazer (2009) found that having peers to motivate and encourage one to do well in the classroom was an important factor in academic success. The findings of the current study go beyond previous research to demonstrate that the team provides a

social motive for athletes. Coaches also play an important role, especially when grades are low and encouragement for greater achievement is needed. Perhaps developing programs wherein academic success among teammates (e.g., team GPA) is shared regularly would encourage individual college athletes to achieve. Likewise, as has been demonstrated in previous research (Beron & Piquero, 2016), coaches may encourage students to seek out help when grades are low as an effective means of assisting those who are not achieving.

In the current study, college athletes also appreciated the resources provided to them but noted that they struggled with accessing them early in their academic career. This sentiment is similar to what others have found (Cliff & Mower, 2013; Huml et al., 2019). Many participants said that reaching out to academic support staff like tutors, professors, and their athletic adviser were key steps in being academically successful. They also described how having designated support systems like an academic center just for athletes provided them with a unique space to support their academic work. These are resources that many, though not all, universities already have in place. Those without such resources, especially institutions with Division II and III athletes, may consider adding them. Those with such resources may consider strengthening them. Given that many noted these resources were especially helpful in their freshmen year, even amid the stigma of using such resources, it might be especially advantageous to highlight academic assistance programs early in a student's career and work to reduce the stigma of using such programs. Overall, universities should ensure that college athletes are aware of all the resources available to them and are encouraged to use them.

College athletes offered several recommendations for helping them achieve academically. A primary recommendation was having more support or better communication with professors that their role as college athletes is a legitimate, school-honored role and should require appropriate accommodations (e.g., make-up exams, flexibility with assignments, etc.). As such, universities might consider working with faculty to develop common communication practices or approaches for how to accommodate college athletes and their academic needs. This may be especially true for Division II universities where the athletic participation of some students may be less visible to faculty, but the time demands of the sport upon the student may still be great. These suggestions also support Huml et al.'s (2019) recommendations that college athletes more directly connect with the academic side of the university to enhance academic achievement.

Participants also offered suggestions for making changes in their own approach to academics, suggesting that having effective time management and a focus on learning (e.g., going to classes, completing assignments, taking advantage of academic resources) can help them achieve better success. These are malleable skills, and they can be learned to improve academic performance. Time management is a relatively obvious skill that college athletes need, but developing this skill and confidence in communication with faculty might be commonly overlooked. Classes or information about time management and effective communication with professors could be offered to college athletes to assist them with the development of these skills.

Implications and Recommendations for Coaches and Athletic Administrators

Findings from the current study, in conjunction with previous research, suggests several opportunities for coaches and athletic administrations to promote academic achievement among college athletes.

1. ***Capitalize upon external rewards as motivators for academic achievement.*** Although intrinsic motives typically are found to be more impactful (Deci et al., 1999), extrinsic factors may offer a more direct means of motivation. Coaches and academic support staff may wish to frequently remind students of such external rewards (ranging from athletic eligibility to later career opportunities), genuinely reward students for their academic efforts, and capitalize upon successful alumni as role models for current students.

2. ***Utilize social environments and influencers, including teammates and coaches.*** Both peers and coaches affect college athletes' social environments and academic beliefs. Coaches are a primary source of team norms and expectations (Beron & Piquero, 2016; Poux & Fry, 2015). As such, coaches could create norms of high academic performance and act upon those expectations by monitoring, communicating, and acting upon the grades of the athletes. Coaches also could serve as a gatekeeper to other academic resources and invite athletes to communicate with them when they

are struggling academically. The expectations of peers within the team also set the academic standards for individuals on the teams (Levine et al., 2014). As such, team leaders (both formal and informal) should be encouraged by coaches and administrators to set, convey, and uphold high standards. Formal peer mentoring programs also could be instituted whereby academically successful upperclassmen could be paired with new teammates or given responsibilities to form or monitor study groups.

3. ***Enhance communications with academic faculty.*** Given the expressed value of student-faculty interactions on academic achievement both in this study and in previous research (Fraina & Hodge, 2020; Ortagus & Merson, 2015; Woods et al., 2019), efforts could be made to improve communication between athletes and the academic faculty. College athletes should be taught and encouraged to communicate often and openly with professors, viewing them as resources rather than obstacles. The athletic department also may need to better communicate with faculty who, especially in non-Division I institutions, may not fully recognize the role of college athletes as formal representatives of the university. The expectations and demands placed upon college athletes by the university should be fully communicated to the faculty by the administration. Frequent and ongoing communication between the athletes and faculty should be encouraged. Likewise, frequent and ongoing communication between the athletic department and the leadership of the academic faculty should be developed and implemented, depending upon the administrative and faculty structures of the specific university.

4. ***Provide persistent, on-going reminders about access to and the benefits of using academic support services.*** Athletic departments likely provide incoming college athletes with academic resources and try to teach time management strategies and study skills. However, participants in the current study noted that their academic needs and concerns vary across time. They highlighted the value of having and using these resources early in their career. Students new to campus may be overwhelmed with information and unlikely to retain much of it. Likewise, students who do not struggle in high school may not consider using academic resources until they absolutely need them, if then. One-time presentations on study skills or academic resources likely will have little benefit for these students. Instead, ongoing encouragement, easy access to resources, and tailored support is more likely to be effective (McCullough et al., 2019). Furthermore, college athletes' perceived barriers to the use of university resources should be sought out and removed. Focus groups, like those used in this study, may be an effective strategy to learn of which resources the students are aware, why they might hesitate to use them, and what might reduce that hesitancy.

Limitations and Conclusions

College athletes are a small but highly visible segment of the college student population. Because they are representatives of their university, their academic performance often is scrutinized by people both inside and outside the university. Past researchers have been able to identify individual differences among college athletes that relate to academic performance. For example, Johnson et al. (2013) found admission scores, distance from home, high school GPA, playing time, and type of sport all relate to academic success. These are not, however, malleable variables that colleges simply can alter to improve athletes' academic performance. To intervene positively, one must understand the athletes' own beliefs and experiences and work within those confines. The current study provides access to these beliefs and experiences.

Although we collected perspectives of college athletes of both genders across multiple sports, they all were from a public Division II university in the Midwest and the majority were white. Focus groups were conducted within team cohorts, which may have influenced individual responses. Experiences and beliefs may be different among more diverse athletes, those competing in other athletic divisions, those in other parts of the country, or even those at private universities. Future researchers should explore the perspectives of students from different backgrounds and athletic divisions. Comparisons of experiences between divisions could be made, as academic resource allocations often are different depending on division. Additionally, comparisons could be made between revenue and non-revenue sports. Future researchers might consider individual interviews with athletes to reduce the potential for group influence and social pressures on responses. They also may consider comparisons across teams and gender. It is possible that different teams and genders may have different experiences.

Overall, the current study provides a voice for the academic experiences and beliefs of college athletes from a Division II school. Students from non-Division I schools are not well represented in the literature and may have different experiences and academic needs than those from a Division I school. The current study provides insight into the academic experiences and motivators for academic achievement among this group of college athletes. Knowing, for example, that students are motived to achieve by external factors and that coaches and academic support staff play a significant role in supporting athletes' academic development can elicit specific strategies for academic success specifically designed for these athletes. Furthermore, the findings contribute to Comeaux and Harrison's (2011) college athlete-specific theoretical model by providing a better understanding of some of the individual characteristics and experiences that affect intellectual development. Armed with this understanding, administrators, advisors, and coaches may be able to develop more effective, tailored support programs for college athletes.

References

Anderson, A. J., & Dixon, M. A. (2019). How contextual factors influence athlete experiences of team cohesion: An in-depth exploration. *European Sport Management Quarterly*, *19*(3), 353–372. https://doi.org/10.1080/16184742.2018.1527381

Aries, E., McCarthy, D., Salovey, P., & Banaji, M. R. (2004). A comparison of athletes and non-athletes at highly selective colleges: academic performance and personal development. *Research in Higher Education*, *45*(6), 577–602. https://doi.org/10.1023/B:RIHE.0000040264.76846.E9

Bailey, S., & Bhattacharyya, M. (2017). A comparison of academic and athletic performance in the NCAA. *College Student Journal*, *51*(2), 173–182. https://eric.ed.gov/?id=EJ1144147

Barlow, K. A., & Hickey, A. (2014). Academic achievement of NCAA division III athletes. *Journal of Research in Education, 24*(2), 116–123. https://files.eric.ed.gov/fulltext/EJ1098178.pdf

Benson, K. (2000). Constructing academic inadequacy: African American athlete's stories of schooling. *Journal of Higher Education, 71*(2)*,* 223–246. https://doi.org/10.2307/2649249

Beron, K. J., & Piquero, A. R. (2016). Studying the determinants of student-athlete grade point average: The roles of identity, context, and academic interests. *Social Science Quarterly*, *97*(2), 142–160. https://doi.org/10.1111/ssqu.12235

Bowen, W. G., & Levin, S. A. (2003). *Reclaiming the game: College sports and educational values.* Princeton University Press.

Clift, B. C., & Mower, R. L. (2013). Transitioning to an athletic subjectivity: First-semester experiences at a corporate (sporting) university. *Sport, Education, and Society, 18*(3)*,* 349–369. https://doi.org/10.1080/13573322.2011.575129

College Sports Project (2009, March 9). *College sports project reports new findings about athletics and academics in NCAA division III* [Press release].

Comeaux, E., Bachman, T., Burton, R. M., & Aliyeva, A. (2017). Undergraduate experiences of division I athlete science, technology, engineering, and mathematics (STEM) graduates. *Journal of Science Education and Technology*, *26*(1), 24–32. https://doi.org/10.1007/s10956-016-9648-y

Comeaux, E., & Harrison, K. C. (2011). A conceptual model of academic success for student-athletes. *Educational Researcher*, *40*(5), 235–245. https://doi.org/10.3102/0013189X11415260

Davis, K. D., Winsler, A., & Middleton, M. (2006). Students' perception of rewards for academic performance by parents and teachers: Relations with achievement and motivation in college. *The Journal of Genetic Psychology, 167*(2), 211–220. https://doi.org/10.3200/GNTP.167.2.211-220

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivations. *Psychological Bulletin, 125*(6), 627–668. https://doi.org/10.1037/0033-2909.125.6.627

Demirel, H. (2016). Have university sport students higher scores depression, anxiety and psychological stress? *International Journal of Environmental and Science Education*, *11*(16), 9422–9425. http://files.eric.ed.gov/fulltext/EJ1118813.pdf

Dyer, A. M., Kristjansson, A. L., Mann, M. J., Smith, M. L., & Allegrante, J. P. (2017). Sport participation and academic achievement: A longitudinal study. *American Journal of Health Behavior*, *41*(2), 179–185. https://doi.org/10.5993/AJHB.41.2.9

Eason-Brooks, D., & Davis, A. (2007). Wealth, traditional socioeconomic indicators, and the achievement debt. *Journal of Negro Education, 76*(4), 530–541. https://www.jstor.org/stable/40037226

Emerson, J., Brooks, R. L., & McKenzie, E. C. (2009). College athletics and student achievement: The evidence at small colleges. *New Directions for Institutional Research*, *2009*(144), 65–76. https://doi.org/10.1002/ir.314

Foster, B. J. & Lally, P. S. (2021). International student-athletes' perceptions of the long-term impact of the NCAA experience. *Journal for the Study of Sports and Athletes in Education, 15*(3), 268–280. https://doi.org/10.1080/19357397.2021.1936880

Fraina, M., & Hodge, S. R. (2019). Mentoring relationships among athletes, coaches, and athletic administrators: A literature review. *Journal for the Study of Sports and Athletes in Education, 14*(2), 140–164. https://doi.org/10.1080/19357397.2020.1768033

Gaston-Gayles, J. L., & Hu, S. (2009). The influence of student engagement and sport participation on college outcomes among Division I student athletes. *Journal of Higher Education, 80*(3), 315–333. https://doi.org/10.1080/00221546.2009.11779015

Giacobbi, P. R., Jr., Lynn, T. K., Wetherington, J. M., Jenkins, J., Bodendorf, M., & Langley, B. (2004). Stress and coping during the transition to university for first-year female athletes. *The Sport Psychologist*, *18*(1), 1–20. https://doi.org/10.1123/tsp.18.1.1

Grandy, F., Lough, N., & Miller, C. (2016). Improving student-athlete academic success: Evaluation of learning support tools utilized by academic advisors for athletics. *Journal for the Study of Sports and Athletes in Education, 10*(3), 199–217. https://doi.org/10.1080/19357397.2016.1258967

Guiffrida, D. A., Lynch, M. F., Wall, A. F., & Abel, D. S. (2013). Do reasons for attending college affect academic outcomes?: A test of a motivational model from a self-determination theory perspective. *Journal of College Student Development*, *54*(2), 121–139. https://doi.org/10.1353/csd.2013.0019

Heelis, L. & Shield, C. (2015). The burden of balance: Action-research examining the stress experienced by student-athletes at Acadia. *Journal of Exercise, Movement and Sport, 47*(1), 83. https://www.scapps.org/jems/index.php/1/article/view/1091

Higdem, J. L., Kostal, J. W., Kuncel, N. R., Sackett, P. R., Shen, W., Beatty, A. S., & Kiger, T. B. (2016). The role of socioeconomic status in SAT-freshman grade relationships across gender and racial subgroups. *Educational Measurement: Issues and Practice*, *35*(1), 21–28. https://doi.org/10.1111/emip.12103

Hildenbrand, K., Sanders, J., Leslie-Toogood, A., & Benton, S. L. (2009). Athletic status and academic performance and persistence at a NCAA division I university. *Journal for the Study of Sports and Athletes in Education, 3*(1)*,* 41–59. https://doi.org/10.1179/ssa.2009.3.1.41

Hill, C. E. (2012). *Consensual qualitative research: A practical resource for investigating social science phenomena.* American Psychological Association.

Hill C. E., Thompson B. J., Hess S. A., Knox S., Williams, E. N., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology, 52*(2), 196–205. https://doi.org/10.1037/0022-0167.52.2.196

Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist, 25*(4)*,* 517–572. https://doi.org/10.1177/0011000097254001

Huml, M. R., Bergman, M. J., Newell, E. M., & Hancock, M. G. (2019). From the playing field to the classroom: The academic challenges for NCAA division I athletes. *Journal for the Study of Sports and Athletes in Education, 13*(2), 97–115. https://doi.org/10.1080/19357397.2019.1578609

Hwang, S., & Choi, Y. (2016). Data mining in the exploration of stressors among NCAA student athletes. *Psychological Reports*, *119*(3), 787–803. https://doi.org/10.1177/0033294116674776

Johnson, J. E., Wessel, R. D., & Pierce, D. A. (2013). Exploring the influence of select demographic, academic, and athletic variables on the retention of student-athletes. *Journal of College Student Retention: Research, Theory and Practice, 15*(2), 135–155. https://doi.org/10.2190/CS.15.2.a

Levine, J., Etchison, S., & Oppenheimer, D. (2014). Pluralistic ignorance among student-athlete populations: A factor in academic underperformance. *Higher Education*, *68*(4), 525–540. https://doi.org/10.1007/s10734-014-9726-0

Martin, B. E., Harrison, C. K., Stone, J., & Lawrence, S. M. (2010). Athletic voices and academic victories: African American male student-athlete experiences in the Pac-ten. *Journal of Sport & Social Issues*, *34*(2), 131–153. https://doi.org/10.1177/0193723510366541

McCullough, N., Gibb, G. S., Pennington, T., & Heath, M. (2019). Academic experiences of special admit college football athletes: Progress compared to general admits and perceptions of support services. *Journal for the Study of Sport and Athletes in Education, 13*(2), 146–170. https://doi.org/10.1080/19357397.2019.1633509

National Collegiate Athletic Association (2020a). *Executive summary: Sponsorship and participation of NCAA championship sports (2018–2019).* http://www.ncaa.org/about/resources/research/ncaa-sports-sponsorship-and-participation-rates-database

National Collegiate Athletic Association (2020b). *Estimated probability of competing in professional athletics.* https://www.ncaa.org/about/resources/research/estimated-probability-competing-professional-athletics

National Collegiate Athletic Association (2020c). *Our three divisions.*
https://ncaaorg.s3.amazonaws.com/about/ncaa/101/NCAA101_Our3Divisions.pdf

Nichols, M. K., Lough, N. L., & Corkill, A. J. (2019). Exploring success: Variations in division I
student-athlete academic and athletic performance. *Journal of Issues in Intercollegiate
Athletics*, *12,* 314–342. http://csri-jiia.org/wp-content/uploads/2019/06/RA_2019_15.pdf

Ofoegbu, E., Gaston-Gayles, J., & Weight, E. (2021). "More than an athlete": How black student-
athletes use navigational capital to transition to life after sport. *Journal for the Study of Sports
and Athletes in Education, 16*(1), 23–44. https://doi.org/10.1080/19357397.2021.1924561

Ortagus, J. C., & Merson, D. (2015). Leveling the playing field: Faculty influence on academic
success of low-income, first generation student-athletes. *Journal for the Study of Sports and
Athletes in Education, 9*(1), 29–49. https://doi.org/10.1179/1935739715Z.00000000034

Papanikolaou, Z., Nikolaidis, D., Patsiaouras, A., & Alexopoulos, P. (2003). Commentary: The
freshman experience: High stress–low grades. *Athletic Insight: The Online Journal of Sport
Psychology, 5*(4).

Pascarella, E.T., Truckenmiller, R., Nora, A., Terenzini, P.T., Edison, M., & Hagedom, L.S.
(1999). Cognitive impacts of intercollegiate athletic participation: Some further evidence. *The
Journal of Higher Education*, *70*(1), 1–26. https://doi.org/10.2307/2649116

Paule, A. L. & Gilson, T.A. (2010). Current collegiate experiences of big-time, non-revenue,
NCAA athletes. *Journal of Intercollegiate Sport, 3*(2), 333–347.
https://doi.org/10.1123/jis.3.2.333

Perry, R. P., Hladkyj, S., Pekrun, R. H., & Pelletier, S. T. (2001). Academic control and action
control in the achievement of college students: A longitudinal field study. *Journal of
Educational Psychology, 93*(4), 776–789. https://doi.org/10.1037/0022-0663.93.4.776

Potuto, J. R., & O'Hanlon, J. (2007). National study of student athletes regarding their experiences
as college students. *College Student Journal, 41*(4, Pt A), 947–966.

Poux, K. N., & Fry, M. D. (2015). Athletes' perceptions of their team motivational climate, career
exploration and engagement, and athletic identity. *Journal of Clinical Sport Psychology*, *9*(4),
360–372. https://doi.org/10.1123/jcsp.2014-0050

Raabe, J., Readdy, T., & Zakrajsek, R. A. (2017). Pathos and orchestration in elite sport: The
experiences of NCAA DI student-athletes. *The Sport Psychologist*, *31*(4), 344–355.
https://doi./10.1123/tsp.2016-0093

Rankin, S., Merson, D., Garvey, J. C., Sorgen, C. H., Menon, I., Loya, K., & Oseguera, L. (2016).
The influence of climate on the academic and athletic success of student-athletes: Results
from a multi-institutional national study. *Journal of Higher Education*, *87*(5), 701–730.
https://doi.org/10.1080/00221546.2016.11777419

Robst, J., & Keil, J. (2010). The relationship between athletic participation and academic
performance: Evidence from NCAA division III. *Applied Economics, 32*(5)*,* 547–558.
https://doi.org/10.1080/000368400322453

Sauer, S., Desmond, S., & Heintzelman, M. (2013). Beyond the playing field: The role of athletic
participation in early career success. *Personnel Review*, *42*(6), 644–661.
https://doi.org/10.1108/PR-08-2012-0149

Shulman, J. L., & Bowen, W. G. (2001). *The game of life: College sports and educational values.* Princeton University Press.

Simon, J., & Docherty, C. (2014). Current health-related quality of life is lower in former division I collegiate athletes than in non-collegiate athletes. *The American Journal of Sports Medicine*, *42*(2), 423–429. https://doi.org/10.1177/0363546513510393

Smith, J. A., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. In M. Murray & K. Chamberlain (Eds.), *Qualitative health psychology: Theories and methods* (pp. 218–240). Sage.

Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology*, *39*(4), 342–358. https://doi.org/10.1016/j.cedpsych.2014.08.002

Thompson, B., & Mazer, J. P. (2009). College student ratings of student academic support: Frequency, importance, and modes of communication. *Communication Education*, *58*(3), 433–458. https://doi.org/10.1080/03634520902930440

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*(6), 709–733. https://doi.org/10.1007/s11162-006-9012-9

Vargas, G., Rabinowitz, A., Meyer, J., & Arnett, P. (2015). Predictors and prevalence of post-concussion depression symptoms in collegiate athletes. *Journal of Athletic Training*, *50*(3), 250–255. https://doi.org/10.4085/1062-6050-50.3.02

von Stumm, S., Smith, W. E., Ayorech, Z., McMillan, A., Rimfeld, K., Dale, P. S., & Plomin, R. (2020). Predicting educational achievement from genomic measures and socioeconomic status. *Developmental Science*, *23*(3). https://doi.org/10.1111/desc.12925

Watson, J. C., & Kissinger, D. B. (2007). Athletic participation and wellness: Implications for counseling college student-athletes. *Journal of College Counseling*, *10*(2), 153–162. https://doi.org/10.1002/j.2161-1882.2007.tb00015.x

Williams, E. N., & Hill, C. E. (2012). Establishing trustworthiness in consensual qualitative research studies. In C. E. Hill (Ed.), *Consensual qualitative research: A resource for investigating social science phenomena* (pp. 175–186)*.* American Psychological Association.

Wilson, G., & Pritchard, M. (2005). Comparing sources of stress in college student athletes and non-athletes. *Athletic Insight: The Online Journal of Sport Psychology*, *7*(1).

Woods, A. D., Price, T., & Crosby, G. (2019). The impact of the student-athlete's engagement strategies on learning, development, and retention: A literary study. *College Student Journal*, *53*(3), 285–292.