



Message Received? The Effect of Academic Socialization on NCAA Athletes' Grades

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National Collegiate Athletic Association (NCAA) Division I athletes have demanding schedules that sometimes require unique academic guidance. Their interactions with athletics-affiliated personnel, such as academic support staff and coaches, creates an opportunity for athletes to receive academic socialization that contributes to divergent educational experiences and outcomes compared to other college students. The present study examines whether NCAA Division I athletes report receiving similar types of academic messages as their non-athlete peers and if this socialization predicts differences in grades. Findings from this study suggest that NCAA athletes report more direct socialization than their peers, and that these messages primarily come from athletics-provided academic support staff. However, receiving more academic socialization did not predict higher grades for collegiate athletes. This paper argues that receiving disproportionate academic support may have negative developmental consequences for these emerging adults that would outweigh the nominal academic benefits.

Keywords: NCAA athletes, academic socialization, academic advising, academic support, academic involvement, student-athlete

For National Collegiate Athletic Association (NCAA) Division I athletes, the non-academic demands of competing at the highest level of school-sponsored sports can dominate their schedules, making it challenging to focus on academic and career growth (Beamon & Bell, 2011; Harrison et al., 2011). Although NCAA sports can provide college access as compensation, scholars have questioned whether competing in collegiate sports prevents many NCAA athletes from having an educational experience similar to their peers' (Bimper et al., 2013; Cooper et al., 2017; Jayakumar & Comeaux, 2016). Differences in educational outcomes often have been attributed to the curricular and time constraints facing NCAA athletes. However, it is important to also examine unique contextual differences that may expose collegiate athletes to psychosocially impactful academic messages.

The mix of explicit and implicit academic messages, which are also referred to as academic socialization, can communicate others' level of support and expectations for athletes within the academic context. Essentially, these cultural informants provide social instruction about perceptions of athletes' individual and collective academic aptitude, as well as socially appropriate identities, goals, and aspirations for athletes. For instance, NCAA athletes may face academic stereotyping, which can communicate that they are different from other students or do not belong in college classrooms (Comeaux et al., 2017; Engstrom & Sedlacek, 1991; Simons et al., 2007). Additionally, athletes often participate in academic support structures that include advisors and tutors who may work exclusively with athletes (Comeaux & Harrison, 2011; Fountain & Finley, 2011; Hollis, 2001; Lyons et al., 2015). This unique social context might affect the types of academic messages that NCAA athletes receive and their academic outcomes.

In addition to academic growth, colleges often provide an environment where those transitioning into young adulthood can undertake essential developmental tasks such as forming their personal identities (Erikson, 1968) and developing the attitudes and skills necessary to expand social independence (Chickering, 1967). Findings from prior studies indicate that NCAA athletes' educational identities, attitudes, behaviors, and grades can be shaped by the beliefs and actions of social informants (Beamon & Bell, 2006; Feltz et al., 2013; Ishaq & Bass, 2019; Marx et al., 2008). Yet, since much of the research on academic socialization includes students in K-12 and non-NCAA athletes, it remains unclear whether college athletes report receiving academic messages that are similar to their peers and from whom these messages are being transmitted.

Also, it is unknown whether receiving certain types of academic support predicts differences in grades among this unique population. This knowledge could be valuable when addressing previously observed educational gaps between NCAA Division I athletes and their peers (Southall et al., 2015; Turner et al., 2015). Providing developmentally appropriate socialization may be critical for supporting athletes' transition to living independently after college and sports. Thus, it is crucial to reflect upon whether the potential benefits of receiving certain types of academic support outweigh the possible developmental consequences for these late adolescents and emerging adults. This study explores whether NCAA athletes report similar levels of academic socialization as their peers, the primary source of these messages, and if receiving this support predicts academic performance.

Literature Review

Academic Socialization

Academic socialization is a cultural mechanism by which academic beliefs, norms, and expectations are actively or passively transferred to students by social informants. This type of social instruction may include communicating achievement expectations, providing academic assistance and encouragement, promoting occupational and educational aspirations, and helping students make educational plans (Hill & Tyson, 2009). These academic messages can convey socializers' perceptions about ability and the importance of receiving a college education as a means of attaining future success (Wolf et al., 2009). Receiving supportive educational messages contributes to improved achievement by increasing intrinsic motivation to learn (Pomerantz et al., 2007) and cultivating academic determination (Suizzo et al., 2012). Families may be a major provider of these messages prior to college, but they often remain involved as students begin navigating universities (Dorsch et al., 2016; Wolf et al., 2009). Though, messages and sources may adapt to account for contextual and developmental differences in expectations.

Previously, academic socialization has been associated with positive academic outcomes at various school levels (Hill & Tyson, 2009; Suizzo et al., 2012; Umbach & Wawrzynski, 2005). Academic involvement is a type of academic socialization consisting mostly of actions that directly assist students with academic endeavors. Hill and Tyson (2009) suggest that some types of academic involvement, especially actions fostering academic independence, can positively affect adolescents' academic achievement. Similarly, academic informants can provide emotional support that encourages students to confront academic challenges or to persist in the face of educational struggle (Suizzo & Soon, 2006). This remains true in college. For instance, receiving autonomy-supporting messages from academic advisors may contribute to greater satisfaction and higher grades among college students (Sheldon et al., 2015). Thus, some academic socialization helps students establish and meet high academic expectations, while also helping them develop independence.

Evidence suggests that certain types of academic socialization, such as homework assistance (Hill & Tyson, 2009), can communicate negative beliefs about students' abilities and may not support academic success. Receiving such messages could stifle motivational development and academic engagement (Pomerantz et al., 2007) by discouraging students from participating in intellectually enriching activities. While some may receive short-term grade benefits from this type of involvement, their achievement and development of autonomy may suffer over time (Pomerantz et al., 2007; Suizzo & Soon, 2006). For instance, receiving help with uncomplicated assignments or grade monitoring might be perceived by students as too intrusive or controlling and can limit their ability to solve future problems independently. This may contribute to students feeling less efficacious, especially if they believe the additional assistance was unnecessary (Tan & Goldberg, 2009) or if it appears to imply a student is incapable of self-reliance. The extent to which assistance is beneficial can be influenced by contextual factors that may shape how recipients perceive messages, messengers, and the intent (Wolf et al., 2009).

NCAA Athletes and Academic Socialization

While NCAA athletes primarily have similar social informants as their peers, the culture surrounding their participation in sports creates a distinctive context where the structure of their

daily lives does not align with that of their peers. At many universities, it is expected that college athletes will spend most of their day around teammates and athletics personnel, which can leave them socially and academically secluded from non-athlete peers (Comeaux & Harrison, 2011). Having limited interactions with people outside of athletics can envelop NCAA athletes in an environment that places perpetual salience on their athletic role and reduces their opportunities to explore their post-sport identities (Kidd et al., 2018; Killeya, 2001). The culture surrounding athletics can expose athletes to academic messages and socializers who are not encountered by the typical college student, including coaches and academic support staff.

Parents and Family. Families likely are foundational in helping college athletes establish their academic beliefs and habits (Beamon & Bell, 2006; Lowe et al., 2018; Marx et al., 2008). For instance, Beamon and Bell (2006) noted that parents' educational socialization and support for academic achievement was associated with NCAA athletes having higher grades. Research by Marx and associates (2008) found that parents were more likely than other socializers to emphasize academics and that their positive expectations helped athletes to have higher academic aspirations. Furthermore, Dorsch and colleagues (2016) determined that parental academic engagement predicted greater academic self-efficacy for college athletes. However, they also found that parental involvement was negatively associated with emotional and functional independence (Dorsch et al., 2016). Therefore, parents may provide athletes with messages that help their academic confidence, but too much of this can limit their ability to develop self-sufficiency. Parental academic socialization may influence college athletes' grades, as well as how they perceive themselves as college students and young adults.

Professors and Peers. NCAA athletes often are perceived negatively by others on college campuses, as having this identity may come with expectations and generalizations about academic and athletic motivations (Rubin & Moses, 2017). Seminal work by Engstrom and Sedlacek (1991) showed that other students believed college athletes were unable to perform academic duties comparable to their peers. At times, these low academic expectations extend to the negative treatment of athletes within classrooms and other academic contexts. Athletes have described scenarios in which their peers treated them negatively and many believed that this behavior was sanctioned by some of their professors, who also announced their beliefs about athletes' inability to succeed in the classroom (Simons et al., 2007).

Alternatively, researchers have found that sometimes peers and professors provide academic messages that bolster athletes' success in academic settings. Athletes reported doing better in courses for which their professors and peers communicated high expectations or made supportive comments about how difficult it must be to balance being a student and an athlete (Simons et al., 2007). Other researchers determined that athletes had higher grades when they believed that their professors provided challenging and intellectually stimulating courses (Harrison et al., 2006). Comeaux and Harrison (2011) suggested that professors could promote academic success if they encouraged high-performing athletes to attend graduate school. Thus, when professors and peers treat NCAA athletes as capable students, these messages can translate to improved academic outcomes.

Coaches. Coaches can be a major source of athletic guidance, but they also communicate academic expectations to NCAA athletes. At many schools, coaches establish team expectations and may determine how much or little academic support athletes will receive. One

study found that when athletes believe that their coaches have high academic expectations for them, it can improve athletes' self-efficacy and help them feel supported when others on campus stigmatize them (Feltz et al., 2013). Essentially, coaches who communicate their beliefs that athletes can be capable students increase the likelihood athletes will attempt to live up to those standards.

Coaches also can negatively influence academic beliefs and outcomes by signaling low academic expectations or by creating an environment rife with conflicts between academic and athletic obligations. This sends the message that athletics is the primary responsibility and that athletes should prioritize athletics over academic or career development (Beamon, 2008; Bimper et al., 2013; Cooper, 2016). Additionally, coaches who discourage athletes from choosing certain majors can negatively impact Division I male athletes' grades (Beron & Piquero, 2016). Athletes who play for these coaches likely receive more academic messaging that dissuades them from attempting enriching academic tasks and focuses on remaining athletically eligible.

Academic Support Staff. While coaches can influence the broader academic culture of teams, much of the daily micro-level educational socialization is provided by athletes' academic support staff. These staff members often are provided by athletics departments to assist athletes with balancing their school and sport obligations and promote departmental messages about academic expectations (Ishaq & Bass, 2019; Rubin & Moses, 2017). Academic support staff can help athletes learn effective study and time management skills, while also supporting holistic development (Cooper, 2016; Gerlach & Gibson, 2020). Some staff members expect athletes to make their own decisions, while others curate athletes' educational opportunities (Lyons et al., 2015). The effectiveness of these varied styles of aid depend on an athlete's individual characteristics. Though, NCAA athletes give better subjective evaluations of support staff when they feel prepared to make independent career decisions (Burns et al., 2013).

Scholars suggest that a primary objective for many of these advisors is helping players maintain eligibility, which can contribute to a culture of low academic expectations that are tied to the NCAA's definition of success (Comeaux & Harrison, 2011; Turner et al., 2015). Actions that may cultivate this culture include emphasizing athletic obligations during times of role conflict, providing excessive assistance, selecting course schedules with minimally rigorous classes, and clustering athletes into less demanding majors (Comeaux & Harrison, 2011; Fountain & Finley, 2011; Goodson, 2020; Harrison et al., 2011; Hollis, 2001). These actions could be seen as attempts to help athletes manage their schedules or allow them to have a familiar academic community (Berg & Warner, 2019). However, some caution that these decisions can be controlling, infantilizing, or they may impede collegiate athletes' intellectual growth and development (Comeaux & Harrison, 2011; Hollis, 2001; Killeya, 2001). Much of this type of academic support mirrors the kind of socialization that yields negative outcomes (Hill & Tyson, 2009). Treating athletes as if they are less capable of making personal academic decisions can create athletes who struggle making their own educational choices. Thus, this type of academic guidance may be shortsighted because it addresses short-term academic goals, without building the scaffolding necessary for long-term independence.

Athletic Identity and Professional Sport Expectations

Another unique element of NCAA Division I athletes' academic experiences is the potential that their individual athletic interests compete with their academic focus. While college

athletes vary in their motivations toward achievement in sports and school (Nichols et al., 2019; Woodruff & Schallert, 2008), overidentification with an athletic role has been associated with negative outcomes such as reduced academic performance, greater social isolation, and a lack of career preparation (Beamon & Bell, 2011; Brewer et al., 1993; Harrison et al., 2011; Kidd et al., 2018). There are similar findings for athletes who expect to play their sport professionally. For example, Beamon and Bell (2002) noted that Black NCAA football players who had higher professional sport expectations read fewer assigned class readings. Individual characteristics, such as gender, racial identity, athletic scholarship status, and type of sport, can affect both athletic identity and professional sport expectations (Beamon & Bell, 2006; Gaston-Gayles, 2005). NCAA athletes' personal identities and motivations toward athletics affects how they define academic success and what it takes to be successful.

Irrespective of athletes' personal aspirations and characteristics, the culture surrounding college sports often overemphasizes athletic endeavors at the expense of academic enrichment (Beamon & Bell, 2006; Jayakumar & Comeaux, 2016). Previous studies have identified family, peers, coaches, academic advisors, professors, and university policies as potential social reinforcers that can promote athletics as prominent over academics (Beamon, 2008; Bimper et al., 2013; Feltz et al., 2013; Killeya, 2001; Marx et al., 2008). Some socializers frequently communicate their beliefs that sports, and not education, is the most viable path to an athlete's future success (Beamon & Bell, 2002). This may influence athletes' educational and athletic goals and actions. Collectively, the literature underscores the importance of considering how others shape athletes' self-perceptions, behaviors, and outcomes.

Current Study

Much of the previous research on NCAA Division I athletes' socialization experiences has been helpful in identifying how social informants provide academic support to college athletes. These studies often find that athletes perceive that their academic experiences are different from those of other college students. However, there is limited research making quantitative contrasts between the academic socialization experiences of athletes and their peers. These comparisons are necessary given athletes' presence within the larger ecological structure that makes them simultaneous insiders and outsiders within the higher educational context. The research discussed above suggests that academic messages can impact identity, aspirations, wellbeing, sense of autonomy, and academic performance. Due to the scarcity of studies about the specific types of messages that NCAA athletes receive, this study focuses on identifying the types of socialization received by NCAA athletes and their peers and its impact on their grades.

The present study explores whether NCAA Division I athletes perceive similar levels of encouragement, involvement, and messages about the value of education as their peers from lower levels of athletic participation (i.e., club, intramural, and no sport). This study also examines whether receiving these messages predicts higher grades among college students in general and, specifically, among NCAA athletes. Due to the presence of athletics-funded academic support staff, it is anticipated that NCAA athletes will differ from their peers in the amount of encouragement and involvement they report. Though, given their status as emerging adults, it is expected that additional socialization efforts will not have a positive effect on grades.

Methods

Sample and Procedures

Participants in this study were 18 to 25-year-old students from a large, Division I (FBS) public university that competes in a Power 5 conference. Upon receiving university Internal Review Board (IRB) approval, participants were recruited based on course enrollment in the education department. The sample included a total of 442 college students including 117 NCAA, 109 club, and 117 intramural athletes who participated in a wide range of sports, as well as 99 students who did not participate in sports at any level. NCAA athletes participated in one of twelve sports, with nearly one-third coming from football and another third coming from a combination of men's and women's basketball, track and field, and swimming and diving. Data was collected using an online survey containing sociodemographic, athletic identity, and academic socialization measures. Responses were anonymous and students received credit toward a research participation course requirement.

Measures

Dependent variable. Grade point average (GPA) was measured by asking participants to report their cumulative GPA on a continuous scale from 0.0 to 4.0. While grades are a short-term measurement of achievement, they are an influential and memorable metric for college student success. Grades determine whether students qualify for various employment and scholarship opportunities and NCAA athlete eligibility. Using GPA allows for between-group comparisons of academic performance; self-reported GPA tends to highly correspond to institutional grade reports (Caskie et al., 2014).

Key independent variables. *Educational encouragement* from socializing agents was measured using a modified version of the Student Report of Parental Encouragement Scale (Hoover-Dempsey & Sandler, 2005). Items asked whether someone provides encouragement during scenarios such as "when I don't feel like doing my schoolwork" or "to try new ways to do schoolwork when I'm having a hard time." Response options ranged from (1) *very untrue* to (6) *very true* and scores from these 12 items were combined to generate a total educational encouragement score. For the current sample, the Cronbach's alpha was .92 for these eight items.

Value of education was measured using a five-item scale with questions assessing participants' perceptions of the necessity of formal education for their future success (Jodl et al., 2001). Students were asked their level of agreement with such items as: "I have to do well in school if I want to be a success in life," and "Schooling is not so important for [people] like me." The original items were modified for use with college students, as the original scale was used for young adolescents. Response options ranged from (1) *strongly disagree* to (5) *strongly agree* and the sum of the scores was used to create a total score. The internal consistency of .66 for this measure was acceptable (DeVellis, 2016).

Academic involvement of socializing agents was measured using a modified eight-item measure assessing the degree to which others assisted students with academic tasks (Régner et al., 2009). Items for this measure included: "Someone monitors whether I have done my homework," and "Someone talks to me about my academic problems." Responses for each item

ranged from (1) *strongly disagree* to (5) *strongly agree* and were summed to create a total involvement score. The alpha for this measure was .86 and scores ranged from 8 to 40.

Primary socialization source was measured by asking participants to identify the main provider of each encouragement, value of education, and involvement message from the previous socialization measures. For example, after responding to the item, "Someone monitors whether I have done my homework" from the Academic Involvement Scale (Régner et al., 2009), participants indicated who monitors them most frequently. Response options for these 25 items were: parent/family, professor, coach, peer, academic counselor/mentor, other, or no one. Selections were summarized and ranked to determine primary sources by participation group.

Control variables. Participants self-reported their athletic participation level (i.e., NCAA, club, intramural, no sport), sport, class standing (i.e., first-year, sophomore, junior, senior), gender, and race/ethnicity. Participants answered additional questions about academic and professional sport expectations, as well as athletic identity. *Academic expectations* were measured using one item that asked the highest level of education participants expected to attain (Jodl et al., 2001). The ordered response scale options ranged from (1) *some college* to (4) a *doctoral/professional degree*.

Professional sport expectations were measured using the following three items: "I expect to play a sport professionally," "My coach expects me to play a sport professionally," and "My family expects me to play a sport professionally." Response options ranged from (1) *strongly disagree* to (7) *strongly agree*. Responses to the three items were averaged to create a total Professional Sport Expectations (PSE) score. An alpha of .96 reflects the strong internal consistency of this unidimensional measure.

Athletic identity was measured using the seven-item Athletic Identity Measurement Scale (AIMS; Brewer & Cornelius, 2001; Brewer et al., 1993). The AIMS assessed how strongly one identifies as an athlete in various psychosocial aspects such as identity, goals, friendship, and emotions. Responses were combined for a total athletic identity score ranging from 7 to 49, with greater scores indicating higher role identification. Cronbach's alpha for this scale was .89.

Statistical Analyses

Preliminary analysis included a descriptive summary of variables and a ranking of primary socializers. Multivariate linear regression determined whether athletic participation level predicted significant group differences in reports of academic socialization. This analysis accounted for the possibility that reporting one socialization type might be related to scores on the other types. For this regression model, participation level was the sole predictor for the simultaneous continuous outcome variables of educational encouragement, value of education, and academic involvement. Group differences in means were calculated using the NCAA athlete category as the reference group.

Multiple linear regression analysis was used to determine whether encouragement, involvement, and value of education predicted GPA for all participants. This model controlled for the effects of participation level, class standing, gender, race, academic expectations, and athletic identity. Continuous variables were grand mean-centered to improve coefficient interpretability and results are reported below. A separate analysis, including professional sport expectations as an additional control, was conducted among the NCAA athlete subsample to determine whether their grades could be predicted using key academic socialization measures.

Results

The complete sample contained more men (59.7%) than women; the NCAA (64.1%) and intramural (77.8%) groups also had larger percentages of men. Group mean grade point averages ranged from 3.08 to 3.24. The NCAA group was racially distinct from the others, as it contributed the overwhelming majority of Black participants, but less than 5% of the Asian and Latino students. NCAA athletes had a larger concentration of first-year students and the most students who expected to earn a bachelor's degree or leave school early. Mean athletic identity rankings corresponded to participation levels with NCAA having the highest and students who did not participate in sports having the lowest AIMS scores. A complete participation level-separated distribution of sample characteristics is reported in Table 1.

Table 1
Sample Characteristics by Sport Participation Level

	Total <i>n</i> (%)	NCAA <i>n</i> (%)	Club <i>n</i> (%)	Intramural <i>n</i> (%)	No Sport <i>n</i> (%)
<i>n</i>	442 (100)	117 (26.5)	109 (24.7)	117 (26.5)	99 (22.4)
Gender					
Men	264 (59.7)	75 (64.1)	50 (45.9)	91 (77.8)	48 (48.5)
Women	178 (40.3)	42 (35.9)	59 (54.1)	26 (22.2)	51 (51.5)
Race/Ethnicity					
Asian American	72 (16.3)	1 (0.9)	19 (17.4)	32 (27.4)	20 (20.2)
Black	67 (15.2)	50 (42.7)	5 (4.6)	4 (3.4)	8 (8.1)
Hispanic/Latino	74 (16.7)	5 (4.3)	24 (22.0)	22 (18.8)	23 (23.2)
White	229 (51.8)	61 (52.1)	61 (56.0)	59 (50.4)	48 (48.5)
Class Standing					
First-year	64 (14.5)	37 (31.6)	9 (8.3)	11 (9.4)	7 (7.1)
Sophomore	88 (19.9)	26 (22.2)	21 (19.3)	25 (21.4)	16 (16.2)
Junior	118 (26.7)	29 (24.8)	27 (24.8)	34 (29.1)	28 (28.3)
Senior	172 (38.9)	25 (21.4)	52 (47.7)	47 (40.2)	48 (48.5)
Academic Expectations					
Some College	10 (2.3)	5 (4.3)	3 (2.8)	1 (0.9)	1 (1.0)
Bachelor's	153 (34.6)	53 (45.3)	32 (29.4)	39 (33.3)	29 (29.3)
Master's	184 (41.6)	45 (38.5)	41 (37.6)	51 (43.6)	47 (47.5)
Doctoral/Professional	95 (21.5)	14 (11.9)	33 (30.3)	26 (22.2)	22 (22.2)
	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>
Grade point average (GPA)	3.18 (0.5)	3.08 (0.5)	3.17 (0.5)	3.24 (0.5)	3.23 (0.5)
Encouragement	52.31 (10.9)	54.83 (10.4)	51.73 (12.2)	50.63 (9.3)	52.01 (11.3)
Value of Education	18.57 (3.6)	18.24 (3.3)	18.33 (3.8)	18.85 (3.6)	18.88 (3.5)
Involvement	26.28 (7.2)	31.90 (5.2)	24.04 (7.2)	24.33 (6.5)	24.52 (6.8)
Athletic Identity	31.33 (10.0)	40.31 (5.7)	32.32 (6.1)	29.38 (8.5)	21.84 (9.5)
Professional Sport Expectations	2.32 (1.8)	4.59 (1.7)	1.74 (1.2)	1.36 (0.7)	1.38 (0.9)

NCAA athletes differed from all other groups when reporting the primary source of encouragement, involvement, and value of education messages. The top four providers of academic messages for athletes were academic mentors/counselors, family, no one, and peers, respectively. All other groups reported family, no one, peers, and professors as their top four socializers. For NCAA athletes, the fewest academic messages came from professors; coaches provided the least socialization to each of the other participation groups.

Academic Socialization

Multivariate regression analysis was performed to assess whether all groups reported comparable amounts of academic socialization (results not shown in table). Analyses indicated the presence of significant differences in educational encouragement [$F(4, 435) = 3.38, p < .05$] and academic involvement [$F(4, 435) = 40.14, p < .001$]. Assessment of group differences using Tukey-adjusted pairwise comparisons of marginal means showed that NCAA athletes reported receiving more encouragement than intramural athletes [$B = 4.37, t(435) = 0.13, p < .05$], but similar amounts to club athletes and those who do not participate in sports. Additionally, NCAA athletes reported receiving significantly more involvement messages than all other groups (mean differences range 7.53-7.86, all $p < .001$). There were no significant differences in the amount participants reported education as being valuable for their future. Since club, intramural, and no sport groups were similar on all socialization measures, they were consolidated into a common non-NCAA group for subsequent analyses.

Academic Socialization Predicting GPA

Multiple linear regression analysis using the complete sample revealed that valuing education was associated with a higher GPA ($\beta = 0.121, p < .05$), while receiving more involvement and encouragement were unrelated to grades after controlling for sociodemographic factors (see Table 2). Expecting to attain a graduate degree predicted higher grades. Being Black or Hispanic or having a higher athletic identity was associated with having lower grades. Being an NCAA athlete or male did not predict significant grade differences.

In a regression analysis including only NCAA athletes, encouragement and involvement were not significant predictors of grade point average. However, value of education was nearly a significant predictor of GPA ($\beta = 0.194, p = .06$). Identifying as Black was the only significant predictor of lower grades among NCAA athletes. Expecting to receive a doctoral degree predicted higher grades. Surprisingly, NCAA athletes who expected not to finish college were predicted to have *higher* grades. A marginal means comparison by academic expectations found that the mean GPA for NCAA athletes planning not to graduate was 3.54 [$t(100) = 2.91, p < .05$], which was significantly higher than the predicted 2.95 GPA for those expecting to earn a bachelor's degree.

Table 2
Multiple Regression Analysis Predicting GPA

Variable	All Participants			NCAA Athletes		
	<i>B</i>	<i>B SE</i>	β	<i>B</i>	<i>B SE</i>	β
Academic Involvement	-0.007	0.004	-0.099	-0.002	0.010	-0.026
Educational Encouragement	-0.001	0.003	-0.025	0.002	0.005	0.046
Value of Education	0.017*	0.007	0.121	0.028	0.014	0.194
Academic Expectations [<i>ref</i> = <i>Bachelor's</i>]						
Some College	0.263	0.150	0.080	0.586**	0.201	0.264
Master's	0.153**	0.054	0.148	0.094	0.094	0.093
Doctoral/Professional	0.242***	0.063	0.200	0.548***	0.144	0.355
NCAA [<i>ref</i> = <i>Not NCAA</i>]	0.138	0.073	0.118	---		
Men [<i>ref</i> = <i>Women</i>]	-0.072	0.048	-0.070	-0.200	0.104	-0.196
Class Standing [<i>ref</i> = <i>Senior</i>]						
First-year	-0.005	0.079	-0.003	0.037	0.124	0.034
Sophomore	0.022	0.062	0.017	0.157	0.121	0.141
Junior	0.017	0.056	0.015	0.052	0.121	0.046
Race/Ethnicity [<i>ref</i> = <i>White</i>]						
Black/African American	-0.398***	0.074	-0.272	-0.200*	0.099	-0.203
Hispanic/Latino American	-0.337***	0.064	-0.252	0.072	0.220	0.029
Asian American	-0.105	0.067	-0.077	---		
Athletic Identity	-0.009***	0.003	-0.171	-0.014	0.008	-0.175
PSE		---		-0.011	0.030	-0.039
Observations	n = 412			n = 100		
Adjusted R ²	0.195			0.311		
F-statistic	7.66 (df = 15, 396)			4.20 (df = 14, 85)		

Notes. * $p < .05$, ** $p < .01$, *** $p < .001$.

Discussion

This study identifies important ways in which NCAA athletes' academic experiences may differ from those of their peers. A principal difference for NCAA athletes was that academic support staff, rather than family, were their primary sources of academic messages. Results showed that NCAA athletes encountered more school-related encouragement and involvement than their peers, yet these messages did not noticeably affect their grades. These findings call into question the effectiveness of a nationally ubiquitous approach for delivering academic support to NCAA athletes (i.e., heavy involvement and encouragement) and provide evidence that these efforts might be more ornamental than practical (Hollis, 2001; Huml et al., 2014).

NCAA athletes reported more educational encouragement than one peer group and more academic involvement than all other groups. This finding supports past research suggesting that athletes' interactions with athletics-affiliated academic support staff often include these types of direct intercession (Comeaux & Harrison, 2011). Unlike prior work showing the detrimental effects of some types academic support with younger students (Pomerantz et al., 2007; Suizzo & Soon, 2006; Tan & Goldberg, 2009), the current study indicates that these behaviors may not harm college students' grades. However, the present evidence suggests this type of assistance also may lack utility for improving grades within this older context.

When assistance does not appear to coincide with a students' personal goals or the quantity of support seems non-normative, aid might be interpreted negatively, thereby limiting its academic effectiveness (Pomerantz et al., 2007; Tan & Goldberg, 2009). Given their general expectation for independence during emerging adulthood, college students may evaluate academic encouragement and involvement with skepticism. It may be especially true for NCAA athletes that encouragement does not help their grades because many distrust the motives of athletics-sponsored academic support staff (Beamon, 2008; Huml et al., 2014), which was their primary source of encouraging messages. The ineffectiveness of involvement as a predictor of NCAA athletes' grades also may be explained by previous work. For NCAA athletes, if attempts to intervene are mandatory or unexplained, this can communicate that socializers prioritize eligibility or believe that the student lacks academic self-sufficiency (Beamon, 2008; Feltz et al., 2013). Having others who scrutinize NCAA athletes' grades beyond what is standard for other college students may signal to athletes that they are uniquely unqualified for college.

The belief that education is valuable was associated with higher grades among these college students and NCAA athletes valued education similarly to their peers. Those who provide academic support to athletes should consider increasing messages about the utility of education for future success. Reinforcing this message should be done regardless of whether professional sports is a viable and long-term part of an athlete's plans. Similarly, expecting to earn a graduate degree was associated with better grades among this sample. Thus, NCAA athletes should be guided toward people and programming that promote graduate school access for a wider range of students. For some, this may mean working with professors more frequently, as this type of mentorship has been found to support athletes' success (Bimper et al., 2013; Comeaux & Harrison, 2011; Cooper, 2016).

NCAA athletes' academic support structures sometimes provide mixed messages about their ability to thrive in classrooms with non-athlete peers. On one hand, staff provide emotional and material support when athletes face academic challenges (Gerlach & Gibson, 2020; Ishaq & Bass, 2019). On the other hand, many athletes are aware of academic major clustering (Fountain & Finley, 2011; Goodson, 2020), graduation rate disparities (Southall et al., 2015; Turner et al.,

2015), or deference to athletic scheduling and conclude that academic rigor is secondary (Beamon, 2008). Therefore, many stakeholders are concerned that some athletes are being pushed toward short-term accomplishments that ensure their suitability to participate in sports with minimal emphasis on preparation for their post-sport lives (Beamon & Bell, 2011; Bimper et al., 2013; Cooper et al., 2017; Kidd et al., 2018). This study finds evidence to support the validity of this concern, as NCAA athletes who expected to leave school without graduating were predicted to have higher grades than those who planned to earn a bachelor's degree. Although this finding was based on a small sample, it likely would be puzzling in any academic context outside of college athletics. Universities must use more complete and holistic evaluations of athletes' success (Cooper, 2016; LaForge & Hodge, 2011).

Having a higher athletic identity predicted lower grades in the whole sample, but not among NCAA athletes. A negative association between athletic identity and academic success has been documented in the past (Antshel et al., 2016; Beron & Piquero, 2016). However, there is plenty of research finding examples of NCAA athletes succeeding in the classroom (Bimper et al., 2013; Comeaux & Harrison, 2011; Cooper, 2016; Nichols et al., 2019). In fact, the only factor that predicted lower grades among NCAA athletes was identifying as Black or African American. Racial disparities in the academic experiences, outcomes, and success of Black students and particularly Black athletes have been well-documented (Beamon & Bell, 2011; Cooper et al., 2017; Southall et al., 2015). This study adds to the literature suggesting that many of the current strategies for academic support do not adequately address racial equity and systemic barriers to the success of Black athletes. Especially when one considers that Black athletes in the present sample reported higher levels of academic socialization than their White peers in preliminary analyses (not shown).

Professional sport expectations also were unrelated to NCAA athletes' grades. In the past, these beliefs were shown to correspond with negative academic behaviors for some NCAA athletes (Beamon & Bell, 2002, 2006). However, expecting to play professionally does not always decrease academic determination (Bimper et al., 2013). Current findings suggest that increasing athletes' beliefs about the value of education could be more impactful for improving their grades than trying to convince them to abandon their pro sport aspirations. Perhaps this can be done by encouraging athletes to explore non-athletic enrichment while in college and helping them plan for life after sports (Cooper, 2016; Kidd et al., 2018). This is especially true for Black athletes, who have some of the highest professional sport expectations, but often are more restricted in their choice of majors (Fountain & Finley, 2011; Goodson, 2020) and limited in their opportunities to explore identities outside of sports (Harrison et al., 2011).

It could be reasoned that despite scheduling constraints and possible academic or motivational deficiencies, socialization from academic support staff enhances NCAA athletes' ability to make similar grades as their non-athlete peers. Perhaps NCAA athletes receive more support in response to an initial academic underperformance, which may be related to the reality that some athletes begin college less prepared than their peers (Harrison et al., 2006). Also, some athletes may be solely interested in eligibility maintenance and might welcome intensive academic support to meet this goal. Finally, receiving extra socialization could be due to either athletes who are unmotivated or those who actively request support for challenging coursework.

These arguments are valid; although, there is little evidence to bolster claims that this highly-involved and widely-used approach to academic support directly benefits NCAA athletes' grades (Hollis, 2001; Huml et al., 2014). While the GPAs of the NCAA athletes in this study were not different from their peers, there remain major gaps between the graduation rates of

these two groups at many NCAA Division I schools (Southall et al., 2015; Turner et al., 2015). Thus, even if academic support programming helps NCAA athletes make satisfactory grades, it appears that these grades do not translate to similar degree attainment rates. Another long-term consequence of receiving too much support is that it can suppress college students' ability to achieve developmentally appropriate independence as these young adults transition to their post-college lives (Chickering, 1967; Erikson, 1968). Universities should consider the social and financial costs of offering elaborate academic support structures that provide heavy encouragement and involvement, while producing an indiscernible impact on academic outcomes.

Limitations and Future Directions

Although this study has many strengths, several limitations should be considered when interpreting the findings. One limitation is that participants self-reported their GPA, which is less accurate than using institutional grade reports. Since other researchers have found that self-reported GPA is highly correlated with institutional reports (Caskie et al., 2014), it could be argued that these self-reported grades were sufficient. A potential threat to this assertion would be if college athletes are significantly less likely to know or accurately report their GPA than non-athlete students. However, given the varied levels of academic inclination within both the athlete and non-athlete populations, and a lack of empirical evidence for this phenomenon, it would be presumptuous to assume that athletes' self-reports contain greater error than those of other students. Future research should use institutional grade reports to minimize these potential risks.

Additionally, this study did not account for the reality that many college students establish their academic beliefs and dispositions prior to attending college. Their motivation to maintain a certain level of academic performance may be intrinsic and therefore less susceptible to external socialization. In addition, it is challenging to infer whether students received academic messages out of need or requirement. Future studies should consider a longitudinal design that includes aptitude measures to account for these issues.

This study explores levels of academic socialization using student reports and does not assess academic messages from the perspective of socializing sources. Therefore, socializers' motivations, intentions, and the mechanics of their roles in providing support were not specified. It is likely that many socializers have good intentions and are unaware of their academic or psychosocial impact on college students and athletes. Socializers' intentions and whether they can effectively communicate their intentions to students should be studied in future work.

Finally, the sampling method applied here limits generalizability. Subsequent research should sample a larger number of students from a wider range of schools to determine how socialization experiences may vary across NCAA divisions, sports, and sociodemographic groups within and between universities. Notwithstanding, NCAA athletes in this study likely are similar to a large national subgroup of college students. They participated in 1 of 12 different sports and came from various backgrounds. The university has academic programming comparable to many other U.S. schools and a Division I athletics program that competes in a Power 5 conference. Several states have multiple institutions that could be described similarly. These students do not represent all NCAA athletes at every school, but their academic experiences plausibly are reflected in a vast number of schools.

Practical Implications and Conclusions

After comparing the academic socialization of NCAA athletes to that of their peers, it is clear that NCAA athletes are unique due to the volume of messages they receive and the primary provider of these messages. This study reveals a paradoxical experience in which NCAA athletes receive more academic support than other students, without concrete evidence that this support has comprehensive academic value. Receiving more academic support in the form of encouragement and direct involvement do not appear to give athletes advantages, but may be somewhat useful if it helps them to keep pace with their peers. Academic support staff should reduce their use of direct academic involvement and educational encouragement so that NCAA athletes' socialization more closely mirrors that of their peers. Universities and academic support staff should be mindful of the possible developmental consequences of providing academic support that could be perceived as overreaching or which communicates that athletic accomplishments are the top priority for scholarship athletes. These types of messages can establish an eligibility surveillance network that does not place similar emphasis on helping athletes to value or be invested in their own educational experience.

Athlete support resources should shift from direct academic support and grade monitoring to services that promote the belief that a college education has a long-term value, aid with post-college preparation, and allow NCAA athletes to develop their identities outside of sports. In order to foster independence, some of these activities should take place outside of the direction of athletics staff. Such a change might be particularly helpful for Black athletes, who often face unique systemic barriers that may limit their ability to explore and transition into post-sport opportunities. This recommendation is especially salient given the consistent evidence that Black athletes experience worse academic outcomes than their White counterparts within the current construction of athletics-funded academic support structures at many schools.

To enhance long-term educational equity, NCAA and university administrators should work to ensure that NCAA athletes' academic development opportunities are as similar as possible to those of their peers. One way to achieve this goal would be to eliminate university or athletic department policies mandating that NCAA athletes receive their academic support and advising from athletics-affiliated officials. Allowing athletes to monitor their own academic progress and decide when they need academic support and who provides that support most closely mirrors their peers' experiences. This permits universities and athletics departments to conserve resources for students and athletes who will benefit from extra assistance, rather than appropriating funds in support of the assertion that a considerable amount of athletes need this particular type of aid. Empowering NCAA athletes to have more agency in their own academic decision-making enables them to determine what is valuable to their academic and personal growth, while avoiding potential conflicts of interest for athletics officials and academic support staff. Embracing more academic freedom will increase the likelihood that NCAA athletes develop the skills necessary to attain sustainable success during and after their participation in college sports.

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