



Original Research

The Relationship Between Athletic Identity and Academic Major Chosen by Student-Athletes

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ABSTRACT

International Journal of Exercise Science 10(6): 915-925, 2017. This study examines the correlation between athletic identity and academic major selection among intercollegiate student-athletes. A thorough review of literature focusing on academic clustering, athletic identity, and academic development leads to the development of two hypotheses – 1) student-athletes with stronger athletic identity will have a declared major of decreased academic rigor; and 2) student-athletes with stronger athletic identity will be more likely to be undecided on their major. Data were collected through a survey administered to Division I, II, and III student-athletes recording academic major and their Athletic Identity Measurement Scale (AIMS). After analyzing the student responses, Hypothesis I is supported, while Hypothesis II is met with some limitation that leads to a lack of statistical significance. Overall, this study sheds light on a connection between academic choice and athletic identity.

KEY WORDS: Athletic identity, intercollegiate athletics, higher education, academic clustering

INTRODUCTION

With the growing prevalence of intercollegiate athletics in mainstream society, the scrutiny placed on coaches, athletic departments, and most importantly, student-athletes has increased as well. More specifically, a considerable amount of attention has been placed on the practices of intercollegiate athletics leadership, (i.e., coaches and administrators), and how it affects the academic and career trajectories of student-athletes (9, 10). Because of this increased attention, a wide array of scholarly work has been produced examining the relationships between athletic identity, academic trends, and the connection to career maturity (5, 14, 20, 27). The literature draws common themes between a widely practiced activity within intercollegiate athletics, known as academic clustering, with the development of athletic identity of student-athletes.

Recently, the National Collegiate Athletic Association (NCAA) implemented significant changes to how they assess the academic performance of their member institutions. The NCAA introduced the Academic Reform Package in April 2004 as a means to promote academic success whilst achieving athletic success for student-athletes (28). Part of this was the Academic Progress Rate (APR), which is used to evaluate the academic progress of each athletic team. For teams to remain in satisfactory standing with the NCAA, each team must report a 925 out of 1000 APR score (29). If this score is not met, each team faces decreased scholarships and/or NCAA sanctions. Another rating scale implemented by the NCAA is the Graduation Success Rate (GSR), which provides statistical data related to student-athletes earning degrees (30). Although the NCAA has implemented strategies to promote academic success for their student athletes, strategic marketing campaigns within the organization leave room for speculation. For example, although the GSR shows a high percentage of student-athletes earning degrees, when filtered by specific sport, gender, and/or race, the statistics change drastically. For example, Division I male and female athletes' graduation percentages were 56% and 71%, respectively (9). Using race as the filter for GSR, the results show African-American student-athletes graduate at a significantly lower rate than their Caucasian teammates. With such large disparity in GSR numbers, but consistent APR results, focus must shift onto the academic practices that impact student-athletes.

With student-athletes and athletic departments under pressure to maintain high APR and GSR rates, it has led to unintended consequences on the student-athlete academic experience. One of these changes has been defined as academic clustering, which is when a particular population of students enroll within an academic major or courses, particularly seen with student-athletes (9, 10). Once 25% of the members within a team are enrolled in the same academic major, they are considered an academic cluster. The selection of academic majors for student-athletes have a wide range of perspectives, but the most common are: (a) direct advisement from coaches or academic advisors, (b) actual interest in program, i.e., Sport Management is a common cluster major, but being that student-athletes have a special interest in sport, the selection seems plausible, and (c) little to no resistance in rigor, class flexibility, and/or faculty associated with the athletic department (1, 18, 19).

Scholars have highlighted how academic clustering frequently exists within revenue-generating sports, such as football and men's basketball (35). By enrolling students in 'easier' programs, either by rigor or flexibility, coaches can ensure their student-athletes are meeting the academic requirements while not sacrificing attention and efforts with their sport (21). Fountain and Finley (10) examined the media guides of a Division I football program over a period of 10 years and tracked the academic progress of the players from freshman to senior (graduating) year. The results showed there was a mass matriculation into a handful of majors, such as general/university studies, sport/recreation management, and/or social sciences by the end of the students' matriculation. This trend was even more prevalent with the minority student-athletes, whereas their Caucasian teammates had slightly more diversity within their academic majors. This funneling into specified academic programs not only limited the academic development of student-athletes, but the overall identity development of student-athletes is affected.

Placing a strong emphasis on meeting the APR requirement is commendable. However, by funneling student-athletes into specific majors due to their lowered rigor and flexibility when scheduling around practice and travel, while also disregarding the interests and goals of the student-athletes, is detrimental to their academic and career trajectories (20). By overemphasizing the role of being an athlete, student-athlete unknowingly create a psychosocial divide between their academic and athletic identities. If this divide leads student-athletes to identify more with their role as an athlete, it can lead to a downward trend in academic output, such as lower grade point averages (GPA) and overall effort put into academics (2). This lowered effort and downward trend in GPAs would negatively impact the APR and GSR, but due to strategic placement in less rigorous majors, the negative trends are successfully prevented.

Even with the academic front being secured, the career component of academic clustering has not been fully addressed. Because the role of being an athlete is heavily emphasized, student-athletes often find themselves unprepared for life after sport. By their athletic identity possessing a high degree of individual salience, student-athletes spend little time exploring other academic or career opportunities. This lack of exploration leads to a period of career immaturity, meaning that their development of skills necessary to their career achievement are somewhat non-existent when compared to that career mature counterparts (27). This career immaturity is directly related to a lack of academic interest or preparation, overemphasis of the athletic role, and delayed motivational sense of self.

As with all college students, identity development is a process that is the culmination of past and present experiences. When these experiences are socially or culturally influenced, particular components of ones' identity are largely impacted (5). For student-athletes, the dual role they hold within their respective institutions is largely impacted by their experiences prior to college and are even further impacted by their college experiences as a student-athlete. The varying degrees of motivation towards sport participation and academic achievement are direct responses to student-athletes' views of self (42). The Athlete Identity Measurement Scale (AIMS) was designed to evaluate the saliency of athletic identity to ones' core being (4, 5). Student-athletes who possessed a strong athletic identity were more likely to develop depressive moods if their athletic career ended, but also lacked the necessary preparation to explore career opportunities (27). The overwhelming disparities between academic and career exploration is a growing concern within the realm of intercollegiate athletics. Furthermore, the underlying connection between athletic identity and the motivation to explore academic and career opportunities creates additional challenges for student-athlete academic welfare. The connection between both areas lies within the academic clustering of student-athletes. By gradually funneling student-athletes into academic programs conforming to their athletic identity, is that detrimental to their overall academic and career development? If so, is there a possible way to allow student-athletes to pursue academic majors of their choice, while also providing the necessary resources to ensure that all NCAA requirements are being met?

The purpose of this study is to explore the effect of athletic identity on the major choices of college student-athletes. Previous academic clustering studies have not explored greater

details on why student-athletes are choosing specific majors at high rates compared to others (9, 10, 15, 38). With significant research pointing to the possibility of student-athletes choosing a major with less responsibilities and minimized conflicts with their sport (1, 8, 34). Assessing the difficulty of academic majors can be challenging, as majors can fluctuate on their academic rigor from different universities, program accreditation, and even faculty within the program. To counter these challenges, the researchers used the National Survey of Student Engagement (NSSE), which provides detailed information on weekly time spent by college students on their coursework and other requirements for their major (32). To further explore this gap in the literature, the following hypotheses guided this study:

Hypothesis 1 (H1): Student-athletes with stronger athletic identity will have a declared major of decreased academic rigor.

Hypothesis 2 (H2): Student-athletes with stronger athletic identity will be more likely to be undecided on their major.

For H1, there is a litany of research showing student-athletes with a strong athletic identity will perceive academic responsibilities as a secondary concern compared to their athletic duties (3, 22, 26). Concerns have been raised about student-athletes choosing their major not based on their career goals, but to accommodate around their athletic schedule (12, 36). Within this decision, choosing athletics over academics means the student-athletes is risking their career satisfaction and future earning potential (17, 39). Because of these risks, it is important to directly assess if student-athletes possessing a strong athletic identity are pursuing less rigorous majors.

For H2, it is a slight extension to the first hypothesis, but instead focusing on only student-athletes who have a declared major of “undecided” or “undeclared”. Tens of thousands of students enter higher education with undecided on their major (11). Studies on undecided students have shown there are more frequently to pose reduced academic performance and persistence towards graduation (25). Undecided students are also more likely to portray pessimism for their career outlook and lower self-efficacy for decision-making ability for their career choices (6). Many of these academic concerns for undecided students are similar to concerns about student-athletes (37, 40). In fact, intercollegiate athletics has frequently used a first-year course to introducing student-athletes to the various offices and academic opportunities available on their campuses, similar to the exploratory courses used for undecided students across higher education (41). Because of these similarities, and the strong association between athletic identity and the reduced emphasis on academic priorities, a further examination between the relationship of athletic identity and declaring an undecided major is warranted.

METHODS

Participants

The participants for this study are active student-athletes at NCAA (Division I, II, and III) institutions ($n = 546$). The target population was chosen because of their unique experience of

participating in elite level sport and being required to participate in college courses. Also, the survey was chosen to be distributed across all three NCAA divisions to provide greater generalization of results to the student-athlete academic experience (7). More detailed information on the survey participants and their demographics are available in Table 1.

Table 1. Demographic characteristics of participants (n = 546).

Characteristic	n	%
Gender		
Male	161	30
Female	385	70
Race		
American Indian/Native Alaskan	2	<1
Black/African American	32	6
Asian	10	2
Hispanic/Latino/Latina	18	3
Native Hawaiian/Pacific Islander	3	<1
White/Caucasian	443	81
Multi-Racial	31	6
Other	7	1
Year in College		
First	211	39
Second	105	19
Third	119	2
Fourth	91	17
Fifth	19	4
NCAA Division		
Division I	217	40
Division II	228	42
Division III	101	19
Public/Private		
Public	203	37
Private	343	63

Note. Totals of percentages may not equal 100 due to rounding

Protocol

To assess the effect of athletic identity, the researchers utilized the athletic identity measurement scale (AIMS) (5). Athletic identity has been defined as, “the degree to which an individual identifies with the athlete role” (5, p. 237). The original AIMS scale is a unidimensional, 10-item scale. The researchers utilized a revised version of AIMS, which include seven items and has three dimensions (social identity, negative affectivity, and exclusivity) (4).

Participants also were provided an opportunity to provide their current major. To code these majors, the researchers utilized results NSSE (32). NSSE provides summary tables on many different frequencies and engagement indicators from freshman and senior college students. For this study, the researchers gathered information from two items on the average amount of time they spent weekly on their major/coursework. NSSE provides this breakdown across ten

different major categories. To provide a more accurate rank-order of majors by the amount of time required to complete coursework, the researchers calculated a mean for each major category including both freshman and senior college students (32). Additionally, NSSE provides a codebook, showing which majors were designated within each major category (33). Using the codebook, the researchers re-coded the participant's major designations to align within each major category outlined by NSSE. The re-coding allowed a rank order of major declarations, with 1 being the lowest amount of time spent on coursework (as assessed by NSSE), and 10 being the highest amount of coursework. Any major choices by participants that did not align with the choices outlined on NSSE were removed from analysis for H1. Coding for declared and undeclared majors was completed by coding all participants who provided a major that was not undeclared as a decided student and any student listing their major as undeclared or blank was considered an undecided student. The frequency table of major choices and undecided majors is provided in Table 2.

Table 2. Frequency characteristics for student-athlete major choices.

Characteristic	<i>n</i>	%
Major Choices		
Communication, Media, PR (Lowest)	20	4
Social Services	16	4
Business	86	19
Social Sciences	68	15
Education	23	5
Health Professions	96	21
Arts & Humanities	30	7
Physical Sciences, Math, Computer Science	17	4
Biology, Agriculture, Natural Sciences	60	13
Engineering (Highest)	41	9
Undecided/Decided		
Undecided Student	69	13
Decided Student	475	87

Note. Totals of percentages may not equal 100 due to rounding

Statistical Analysis

The revised version of AIMS allows the researchers to compute composite scores of each dimension (social identity, negative affectivity, and exclusivity). By computing the composite scores, this allows the researchers to perform multiple regression using the order-rank major (ordered by academic rigor) as the dependent variable and the AIMS subscales as the predictor variables. To perform analysis on the effect of athletic identity on undecided students, an analysis of variance (ANOVA) was performed to analyze differences between AIMS subscales and whether the participant had a declared or undeclared major.

RESULTS

To test the researcher's first hypothesis, a multiple regression was performed, with designated major as the dependent variable and the three AIM subscales (social identity, negative affectivity, and exclusivity) as the predictor variables. The results from the multiple regression

is provided in Table 3. The overall regression model was statistically significant ($p < .01$), meaning the proposed regression model results in a significantly better prediction than the rank-order of majors (based on rigor) alone. The correlation between the dependent and predictor variables was .17 and possessed an R^2 of .03. Investigating further, two of the three AIMS subscales, social identity and exclusivity, had a negative effect on the rigorousness of the major chosen by the participants. Of these two subscales, only one, exclusivity, was found to be statistically significant ($p < .05$). This means for every one standard deviation increase of exclusivity in athletic identity, it resulted in the student-athlete choosing a major with a .13 standard deviation decrease in academic rigor. These findings of a statistically significant regression model, and statistical significance of exclusivity on the student-athlete choosing a less rigorous major, confirms H1.

Table 3. Regression analysis summary for athletic identity variables predicting rigor of major.

Variable	B	SE B	β	t	p
Major (Constant)	7.78	1.01			
Social Identity	-0.39	0.24	-0.09	-1.65	0.10
Exclusivity	-0.34	0.15	-0.13	-2.32	<0.05
Negative Affectivity	0.15	0.16	0.05	1.00	0.32

Note: R Squared = 0.03 (n = 456, $p < 0.01$).

To test the second hypothesis, the researchers performed an ANOVA, which analyzed differences between AIMS subscales and the participant's declared or undeclared major. The ANOVA results are provided in table 4. The ANOVA results for each of the AIMS subscales (social identity, exclusivity, and negative affectivity) were not statistically significant. This means there is no significant effect of athletic identity on whether a student-athlete has a declared or undeclared major. The lack of statistical significance means that H2 can be rejected.

Table 4. One-way analysis of variance summary table for the effects of athletic identity on undeclared/declared major.

Source	df	SS	MS	F	p
Social Identity					
Between	1	.86	.86	2.54	.11
Within	542	184.54	.34		
Exclusivity					
Between	1	.54	.54	.60	.44
Within	542	487.34	.90		
Negative Affectivity					
Between	1	0	0	0	.99
Within	542	358.95	.66		

DISCUSSION

This study explored the effect of athletic identity on the major choices of college student-athletes. Examining the effect of athletic identity on academic outcomes is important because of the previous connections between athletic identity stunting the academic development of student-athletes (23, 24). While studies have previously indirectly examined student-athlete

major choices (9, 10, 38), no previous study has directly examined the effect of athletic identity on major choices.

The results from H1 provide further evidence that a strong athletic identity leads to negative ramifications on the student-athlete's academic experience (3, 22, 26). If student-athletes are factoring in their athletic responsibilities when choosing a major, it increases the likelihood of not choosing a major aligning with their career goals, but follows their short-term athletic goals (39). This is especially important for student-athletes possessing a strong exclusivity within their athletic identity (i.e., believing that athletics is the only importance component of their identity). These findings further reinforce the importance of athletic departments and university administrators to monitor their student-athlete's athletic identity and provide greater emphasis on academic opportunities available to students. The researchers also recommend monitoring major choices made by their student-athletes to help reduce the prevalence of academic clustering (9, 10) and/or the frequency of choosing reduced rigor majors deemed by NSSE (32, 33). This monitoring can include historical data to identify trends and whether specific majors attract a greater number of student-athletes by percentage compared to the general student population.

For H2, the results from this study were found to not support the assumption of athletic identity having an undeclared major. The lack of significance may be tied to the propensity of college students to start their higher education career as an undecided major, but ultimately finding a major suiting their needs (16). The NCAA also requires student-athletes to make meaningful progress towards degree completion during each year of eligibility (NCAA, 2016), making it difficult for student-athletes to maintain an undeclared major going into their third year of eligibility. That said, the expectation was to find potential significance from first- and second-year student-athletes on choosing a major based on their level of athletic identity.

While the hypothesis was rejected, the findings are a positive development. Research has shown that students with undeclared majors are less likely to persist towards graduation (25) and have reduced career decision-making skills (6). The lack of athletic identity's effect on student-athletes possessing an undeclared major eliminates another group of negative academic ramifications based on their varsity athletics participation. On the other hand, this may imply heavy involvement from the athletic department's academic support center is helping pushing student-athletes to declare a specific major instead of having an undeclared major (13, 18). Having an undeclared major has negative implications (25), but the potential of being pressured to choose a major has shown connections with lower graduation rates and lack of satisfaction in career outlets (39). Further examination could be utilized on predictor variables for student-athletes with undeclared majors to better predict these student-athletes and provide proactive feedback to further reduce the frequency.

This study does possess limitations on the generalization of results. The female-to-male ration of participants does not align with the participation ratios provided by the NCAA, especially the lack of male participants. Also, the researchers depended on student-athletes self-reporting their athletic identity and declared major, leading to potential response bias concerns. Lastly,

the participants included only active student-athletes at NCAA institutions, limiting the generalizability to other groups of athletes (NAIA or NJCAA) or non-athlete students.

The results of this study sheds light on an important dynamic between athletic identity and academic major selection amongst student-athletes. This dynamic, although seen across all divisions and sports, largely impacts student-athletes who possess a higher degree of athletic identity. This higher degree not only limits the academic scope of student-athletes, but the scope of career preparations and exploration is limited as well. Through academic clustering, overemphasizing the athletic identity of being a student-athlete, and lack of academic and career exploration, student-athletes are finding themselves choosing academic majors with less rigor. By using rigor, or lack thereof, as the basis of academic major selection, student-athletes are choosing to place their athletic career over their academic and/or professional career. This decision negatively impacts academic and career satisfaction, along with future earning potential within their respective career fields. By better understanding this connection, athletic departments can 1) better prepare their student-athletes to understand the career outlook of their academic major, 2) assist student-athletes who have interests with majors that have a higher degree of rigor through tutoring, and 3) closer monitoring of major selection and academic advisement to better gauge the reasoning behind academic clustering.

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