

Academic Majors of Upperclassmen Football Players in the Atlantic Coast Conference: An Analysis of Academic Clustering Comparing White and Minority Players

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Studies on graduation rates of college athletes have typically utilized subdivisions based on race, gender, and sport to allow for more transparent scrutiny of potential problem areas. However, subdivision by race has not been utilized when examining clustering of football players into academic majors. Clustering occurs when 25% or more of an athletic team shares a single academic major (Case, Greer, & Brown, 1987). Football media guides from Atlantic Coast Conference (ACC) schools were utilized to determine the academic majors of upperclassmen to explore whether race could be a factor in academic clustering. The results showed that Minority players were clustered into specific academic programs at greater rates than their White counterparts. While academic clustering occurred for both White and Minority players, the clustering of Minority players involved greater numbers of players enrolled in clustered majors, as well as the existence of a second clustered major at several schools. At six of the schools in the study, 75% or more of the Minority players were enrolled into just two academic majors.

he academic performance of college athletes, most notably in revenue-generating sports, continues to receive considerable attention from both the academic community and the media. The research focus of the academic community has included comparisons between athletes and the general student body in regard to graduation rates, academic performance, academic support services, academic entrance requirements, and academic motivation (Carodine, Almond, & Gratto, 2002; Gaston-Gayles, 2004; Maloney & McCormick, 1993; Purdy, Eitzen, & Hufnagel, 1982). The primary focus of the media has revolved around the reporting of unusual and/or unethical behavior by coaches, players, alumni, athletic department employees, university administrators and faculty members as it pertains to the academic performance of athletes (Finley, Finley, & Fountain, 2008; Lederman, 2003; Suggs, 2003).

Exploring the academic performance of athletes has demonstrated sustained interest among academicians ever since the creation of collegiate athletics and, more specifically, comparisons between athletes and the general student population. For example, Purdy et al. (1982) found that athletes at a Division I university underperformed over a ten-year span when compared to non-athletes at the same institution using educational attainment (grade point average and graduation rates) as the benchmarks. The study highlighted that athletes at the institution started their college studies with inferior academic backgrounds, earned lower grades, and were less likely to graduate than their non-athlete counterparts. The study also revealed scholarship athletes scored lower than non-scholarship and partial-scholarship athletes in educational attainment and that male football and basketball players had a "low probability of receiving an education" (p. 445).

Similarly, over a decade later, Maloney and McCormick (1993) analyzed the academic performance of athletes and non-athletes over a five-year period at an Atlantic Coast Conference (ACC) university. The results showed that (even when controlling for background factors) athletes in revenue sports received lower grades than non-athletes. The study also revealed that athletes in revenue sports achieved lower grade point averages during the playing season. More recently, Gaston-Gayles (2004) examined both athletic and academic motivation and found academic motivation was significant in predicting academic performance regardless of athletic motivation. The study also noted that for Minority students who enter college unprepared academically, the "college environment exacerbates the negative impact on academic motivation" (p. 81).

NCAA and academic reputation

The National Collegiate Athletic Association (NCAA) makes considerable effort to defend the reputation of college athletes in the media by releasing data on graduation rates each year and funding advertising campaigns that reinforce the position collegiate athletes are, first and foremost, students. Advertisements that tout the student-athletes as "going pro in something other than sports" are ubiquitous during football and basketball seasons, and the right to air the ads has been written into the broadcasting contracts (Zillgitt, 2007). The NCAA frequently chooses to highlight graduation rates for athletes in all sports combined because athletes, as a group, graduate at a higher rate than undergraduate students in general (63% for all Division I athletes and 61% for all non-athletes in the 1999-2000 freshman class) (NCAA, 2007a).

When graduation rates have been subdivided by gender, race, and specific sport for Division I, the difference in graduation rates between certain groups were noticeable (NCAA, 2007a). For example, the graduation rate of all Division I female athletes was 15% higher than that of all Division I male athletes (71% to 56%). Less than half of all Division I men's basketball players graduated (46%) and African-American male basketball players as a group had an even lower graduation rate (42%). Division I football player as a group had a slightly higher graduation rate than basketball players (54%) but African-American football players had a graduation rate of only 49%. Removing female athletes and non-revenue generating sports from the data illustrated a clear picture that college football and men's basketball graduated a paltry number of athletes, given the considerable resources dedicated to supporting their academic opportunities. In spite of these facts, President Myles Brand has said, "The academic achievement of our student-athletes continues to improve" and "It is becoming one of our greatest success stories" (NCAA, 2006, p. 1).

Academic Reform

The NCAA also created the Graduation Success Rate (GSR) to better reflect the percent of athletes who do earn a college degree. This measure increases the overall Division I athlete graduation rate up to 77% (from the 63% based on traditional means of measurement) for the 1999-2000 freshman class, once athletes who transfer schools are accounted for (NCAA, 2007b). However, the GSR for Division I-A (Football Bowl Subdivision) showed a marked gap between White and African-American players (64% GSR and 50% GSR, respectively) (The Institute for Diversity and Ethics in Sport, 2007). Unfortunately there is no GSR score for the general student body to compare against the GSR for athletes.

In April of 2004 the NCAA Division I Board of Directors adopted the Academic Reform Package. The goals of the reform package, according to Myles Brand, were to "…improve the academic progress, retention, and graduation rates of student-athletes…" (NCAA, 2004, p. 1). The Academic Progress Rate (APR) was created to measure the academic progress of each athletic team. Teams that fall below the NCAA acceptable APR (925 out of 1000 possible points) risk losing scholarships (NCAA, 2007c). The metric encompasses maintaining eligibility and staying enrolled in the short run, as well as graduating players over time.

Basketball coaches' opinions of the new academic reform revealed some of the top coaches in the country did not immediately embrace the APR (Prisbell, 2005). Roy Williams of the University of North Carolina said, "I am not going to care about the APR at all. The fact of a guy leaving early for the NBA, that may be what I think about, but the APR is not what I will be thinking about" (p. E1). Syracuse University's coach Jim Boeheim said, "The better players you recruit, the lower your APR is going to be" and "the scholarship reduction might be worth it if you end up winning the national championship" (p. E1). Boeheim also said, "I can have a 1000 APR every year, I can graduate every guy. I won't be coaching here very long. You're not going to win" (p. E1). Bob Huggins was concerned about disciplinary action because throwing a player off the team for violating rules would lower a team's APR score.

While the goal of the APR, to increase graduation rates of athlete, is admirable, the means utilized by schools to avoid loss of scholarship could prove to be dubious. Pressure on coaches, and subsequently on academic advisors and professors, to find new and creative ways for players to stay eligible and ultimately to graduate is not a new issue (Renick, 1974), but, among academicians, there is concern that the APR will drive such practices to new extremes (Capriccioso, 2006; Finley & Fountain, 2007). Given that coaches certainly do not want to face scholarship reductions due to a low APR, they will be faced with several options for maintaining, or increasing graduation rates. First, they can recruit athletes who are truly and completely prepared for the academic rigors of the university. Second, they can increase expectations of players and provide academic services for the players of marginal academic pedigree. Third, they can recruit athletes of marginal academic ability and seek easier majors, courses, and professors to ensure a reasonable graduation rate. Exercising the third option could lead to an increase in academic clustering of athletes. Academic clustering (loading athletes into a few majors which might be "athlete friendly") is not a new phenomenon but is one that might become more prevalent in the face of the APR and the threat of lost scholarships. Indiana Professor Murray Sperber, a former chair of *The Drake Group*, believes "you will see a kind of movement toward more Mickey Mouse courses" when addressing the issue of eligibility of athletes (Prisbell, 2005, p. E1). Sperber is not alone in this belief. Richard Southall, director of the College Sport

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Research Institute, stated that the APR "will exacerbate this pressure and lead to more occurrences of clustering, sketchy majors and/or classes and more utilization of design your own degree programs" (Capriccioso, 2006, p. 1).

Academic Clustering

While the clustered programs vary from campus to campus, anecdotal evidence suggests programs that could best be described as "general studies" degrees could be considered safe havens for players at many schools. Arizona State University, for example, had 18% of its football players enrolled in interdisciplinary studies in 2003 (Ganczaruk, 2004), which allowed students to select courses from multiple disciplines and to avoid ever taking higher level and foreign language courses. Further, this program allowed graduation with a 2.0 grade point average, while most programs at ASU required a 2.5. Former Texas A & M basketball star Antoine Wright, during an interview with Bob Costas, claimed players were forced into majors and his high school courses were tougher. Rather than increase academic rigor in response, Texas A & M created a university studies major that would be open to students with low GPAs, which historically precluded them from admission to other majors (Cohen, 2007).

Lederman (2003) compared the percentage of football players in given academic majors to the total percentage of undergraduates in that major on several campuses. The results showed a large concentration of football players in majors that few other undergraduates selected. For example, 26% of the football team at Auburn was majoring in sociology compared to only 0.3% of the entire undergraduate population. The article highlighted eight schools and the most frequently selected academic majors by football players (sociology at Auburn and Duke, economics at Harvard, sport management at North Carolina State, Michigan, and Southern Mississippi, residential property management at Virginia Tech, and communications at Wake Forest). Each of these majors showed a striking disparity in popularity when comparing football players with the undergraduate population. The administration at Auburn suggested players clustered around majors like sociology because of the career possibilities and the class flexibility. However, an interview with a player revealed suggestions from academic advisors and advice from older teammates was the driving force behind his selection of the sociology major (Lederman).

The Chronicle of Higher Education (Suggs, 2003) exposed the clustering of football players for schools competing in bowl games following the 2002 season and found high concentrations of football players in majors that were selected by relatively few other undergraduates. The article raised the issue of the large number of players in generalized programs at the University of Miami specifically and the issue of devaluing the degree in majors that are stacked with athletes. Administrators from several different schools addressed the issues of flexibility and the path of least resistance when explaining away the clustering of players into specific majors. Former Texas A & M football coach, R.C. Slocum, after being fired, even complained he was at a disadvantage because his players did not have a general studies program like players at the rest of the schools in the Big Twelve (Suggs).

To date, the most thorough peer-reviewed study found of academic clustering was an analysis of NCAA basketball teams by Case, Greer and Brown (1987). The impetus for their study was one of the authors interviewed for a position at a major research university and was told the position was dedicated to teaching in a program established to house selected athletes. Clustering was operationally defined as occurring when 25% of the players on a team were in

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one academic major. The authors examined media guides from 130 randomly selected NCAA Division I basketball teams (77 men's teams, 53 women's teams). Results showed men's teams clustered players more often than women's teams. In addition, African-American players comprised over half the team roster on 71% of the teams exhibiting clustering.

While athletes in football and men's basketball are often steered into academic programs (Knobler, 2007), this is apparently seen as little more than the cost of doing business by the NCAA. In response to a survey that found nearly one-third of football and basketball players at the Division I level were prevented from pursuing the major they really wanted, NCAA President Myles Brand responded, "You have to be somewhat directed. Everyone doesn't get in this world to do everything they want to" (Knobler, 2007, 1A). While journalistic attention has been paid to the issue of academic clustering among football players, it has treated the players as one group. To date, no attempt was found that determined whether academic clustering is more prevalent among football players when divided into White and Minority subgroups.

The overarching purpose of this investigation was to examine academic clustering and race and to determine whether it merits entrée into discussions that traditionally centered on graduation rates, academic fraud, and academic support. The following researcher questions were considered: 1) Does academic clustering occur among ACC football players? 2) Is there a difference in prevalence of clustering when considering White and Minority subgroups? 3) Are there multiple majors at these schools that exceed the threshold to be considered clustered?

Method

Participants

The ACC was utilized as the population for this study. Following the 2006 season, it was decided to analyze a Bowl Championship Series (BCS) conference that had an average football performance, and preferred to examine a twelve-team conference to increase the size of the population under examination. The ACC was considered to best represent an average BCS conference, in terms of football performance in 2006. The ACC was ranked fourth of the six BCS conferences, according to Sagarin rankings (Sagarin, 2007) and was the in the middle of the three conferences with 12 teams (The Southeastern Conference was the highest rated conference and the Big Twelve was sixth). Data from 11 of the 12 ACC schools was available.

The data set contained 394 football players from 11 of the 12 ACC schools. The sample had 41.4% of players identified as White and 58.6% identified as Minority. The percentages of Whites and Minorities was nearly identical to published percentages of White and Minority football players at the Division I level (the 1999-2000 freshman class had 42% White players and 58% Minorities) (NCAA, 2007a). The number of upperclassmen per team with published majors at a particular university ranged from 28 to 44 players, with a mean of 35.8.

Procedure

As in prior research (Case et al., 1987), a survey study was conducted via analysis of media guides from the 2006 season to determine the published academic major of athletes. The operational definition of clustering as proposed by Case et al. was utilized: Clustering occurs when 25% of a team was identified as having the same major.

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Using the official media guides and websites for each school's football program the published major was recorded for each player. These were typically presented in the biographical information provided in the media guide or on a player roster page. The study was limited to upperclassmen for two distinct reasons: First, prior research (Finley & Fountain, 2007) found many of the underclassmen were listed as "undeclared" or the listed major was really a program of general study, from which students are expected to select a major after the sophomore year (such as General College at the University of North Carolina). Second, there is evidence to suggest players will enter college with a desired area of study, which could be listed as a major for one or two years, but the player is then pressured into another, presumably easier, major to ensure that eligibility is maintained (Knobler, 2007). In these cases, it is possible the student never took a course, or took very limited courses, in the major listed during the first two years on campus. Therefore, it was believed an examination of upperclassmen would result in the most accurate assessment of academic clustering.

Using photographs from the media guides, players were independently classified into a dichotomous variable of White or Minority, and the published academic major was recorded. Analysis was performed on each school separately because, as illustrated by Lederman (2003), athletes clustered into different programs at different school.

However, to utilize a chi-square test of independence to examine the relationship between race and academic major, the players in the study were considered as one group for the analysis. Application of a chi-square test was not possible at the individual school level because the expected number of football players in each major was frequently too low (less than five). To alleviate the problem with each school having unique majors or similar majors with differing titles, each player was assigned to one of nine general categories that best reflected the nature of the major. These nine categories were then analyzed to determine whether race was a factor in academic clustering.

Results

Research Question 1: Does academic clustering occur among ACC football players?

Results demonstrated the concentration of football players into only a few majors occurred at all schools in this study (See Table 1) and the percentage of players in the clustered programs frequently exceeded the 25% cutoff as defined by Case et al. (1987) by a wide margin. One university had the highest concentration of football players clustered into one major, with fully 73% of the upperclassmen studying Business Management. Six schools had one-third or more of the players in a single major.

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School	<u>IN</u>	<u>(n) and %</u>	Major
University 1	33	(24) 73%*	Business Management
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University 2	28	(13) 46%*	Social Science
University 3	38	(17) 45%*	Liberal Arts
-			
University 4	44	(17) 39%*	Apparel, Housing and Resource Mgt.
University 5	31	(11) 36%*	Sport Management
5			
University 6	36	(12) 33%*	Sociology
University 7	43	(13) 30%*	Communications
	15	(15) 5070	
University 8	41	(12) 29%*	Arts & Science
University 0	36	(10) 28%*	Criminology
University 9	30	$(10) 2870^{\circ}$	Chilinology
University 10	36	(10) 28%*	Sociology
TT ' '/ 11	20		
University 11	28	(7) 25%*	Sport Administration

 Table 1-Highest Concentration of Upperclassmen Majors

* Meets or exceeds the 25% cutoff for academic clustering as defined by Case et al. (1987). N = total number of football players with a listed major in the media guide. (n) = the number of players in that specific major, followed by the percent of the total players.

Research Question 2: Is there a difference in prevalence of clustering when considering White and Minority subgroups?

Nearly every school in the study had Minority football players clustering into a single major at a higher percentage than their White counterparts (See Table 2). The pattern of Minorities clustering more densely into a single program held true at nine of the schools. Four teams had 62% or more of its Minority upperclassmen clustered into a single major. Only in one case was the percentage of White players in one major as high (69%).

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0%) 62%)*		
0%) 67%)*		
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67%)*		
Apparel, Housing & Resource Mgt. (62%)*		
Sport Management (50%)*		
African American History (22%)		

Table 2- Academic Clustering Subdivided by White & Minority Players

* Meets or exceeds the 25% cutoff for academic clustering as defined by Case et al. (1987)

To compare the population utilizing a chi-square test of independence to determine if there was a statistically significant relationship between race and academic major, each subject was placed into one of nine broader areas of study. Placing the athletes in areas of study mitigated the problem of each school having different majors and similar majors with differing

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titles. Further, the athletes had to be treated as one population to allow for sufficient numbers of expected values to make the use of chi-square appropriate. These broad academic areas consisted of: 1) Social and Political Sciences, 2) Liberal Arts, 3) Health, Exercise Science, and Recreation, 4) Engineering and Construction, 5) Education, 6) Sport Management/Administration, 7) Business, 8) Science, Math, and Technology, and 9) General Studies.

	Count/Expected	Minority	White	Total
Social/Political Science	Count	96	51	147
	Expected	86.2	60.8	147
Liberal Arts	Count	14	12	26
	Expected	15.2	10.8	26
Health/Exercise/Recreation	Count	13	16	29
	Expected	17	12	29
Engineering/Construction	Count	4	8	12
	Expected	7	5	12
Education	Count	5	6	11
	Expected	6.4	4.6	11
Sport Management/Admin	Count	16	6	22
	Expected	12.9	9.1	22
Business	Count	30	43	73
	Expected	42.8	30.2	73
Science/Math/Technology	Count	7	7	14
	Expected	8.2	5.8	14
General Studies	Count	46	14	60
	Expected	35.2	24.8	60
Total	Count	231	163	394
	Expected	231	163	394

Table 3-Cross-tabulation of race and area of study

Pearson Chi-Square Value = 28.710 df= 8 Asymp. Sig. (2-sided) = .000

2 cells (11.1%) have expected count less than 5. The minimum expected count is 4.55

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A chi-square test of independence was performed to examine the relation between race and academic major. The relation between race and academic major was significant, X^2 (8, N = 394) = 28.71, p \leq .01. Minority players were clearly over-represented in General Studies and Social and Political Science, whereas White players were under-represented in both areas. Conversely, White players were over-represented in Business programs and the minorities were under-represented (See Table 3).

Question 3: Are there multiple majors at these schools that also exceed the threshold to be considered clustered?

There were secondary majors that also accounted for tremendous percentages of football players when subdivided by White and Minority groups. Four schools had Minority upperclassmen clustering into more than one major. Nine schools had over half the Minority players listed within just two majors, and six schools accounted for over 75% of the minorities in just two majors. White players, on the other hand, never clustered into more than one major at any school in the study.

Discussion

This study examined the clustering of athletes and compared the difference in clustering between White and Minority players at 11 universities in the ACC. Surprisingly however, the results highlighted a large number of upperclassmen in General Studies programs. The last published academic study found of this nature examining clustering in athletics was published over 21 years ago and focused on men's and women's basketball players (Case et al., 1987). An examination of college football, benefiting from larger team rosters, would allow for in-depth scrutiny as to whether race played a part in clustering. The findings clearly revealed a substantial difference between White and Minority players in terms of the percent of players clustered into a limited number of majors at several ACC schools in the study. Further, the presence of secondary clustered majors existed for Minority players at four schools but never occurred for White players. At six schools over 75% the minorities were enrolled in only two majors. This high a percent of players being accounted for within only two programs occurred at only one school for the White players. It should be noted that in a few cases it would be difficult for a second clustered major to exist for Minority players, given the staggering number enrolled in the most popular major.

When viewing teams as a whole, combining White and Minority players (Table 1), the results reflected what had been reported previously (Suggs, 2003); football players tended to cluster together. Only viewing Table 1, however, might lead some people to the conclusion that clustering in college football affects the White and Minority players equally. However, once race was considered (Table 2), a troubling difference between White players and Minority players is evident. The fact that Minority players not only are clustering into one major, but that a tremendous percentage of players can be accounted for within only two majors, is absolutely striking.

When one considers the recent scandals in college sports, such as the extensive offerings of directed-reading courses at Auburn and grade changes at the University of Tennessee, to name just two, one must begin to question the efforts that will be made in the future to ensure eligibility of players. Moreover, to what extent is clustering a part of the ends-justify-the-means culture that has inundated college athletics?

One common explanation for academic clustering has been the players gravitate to majors that allow flexibility in scheduling, allowing more electives, and offering a wide variety of class times (Capriccioso, 2006; Finley & Fountain, 2007). However, if flexibility of scheduling were the driving force behind academic clustering, a large percent of players, both White and minorities would select the same majors as opposed to the significant divisions between White and Minority players. In only three universities in this study was the clustered program the same for White and Minority players. It should be noted that at one university, where Business Management is the major of preference for a tremendous number of both White and Minority players in this study, there was an alarming disparity in the GSR between White (81%) and African-American (34%) players according to The Institute for Diversity and Ethics in Sport (2007).

The NCAA over the years has attempted to address academic issues by adopting certain academic criteria like Proposition 16 and requiring academic reports to track academic progress and graduation using the GSR and the Academic Progress Rate (APR). Nevertheless, the NCAA may be oblivious to the larger issues of academic integrity and fairness as it pertains to the treatment of student-athletes and especially Minority student-athletes in revenue generating sports. Factoring in the significant financial resources schools allocate for academic support for athletes as well as the presence of clustering the athletes into a few majors (including into General Studies majors) the graduation rates of football players, especially African-American players at some schools is appalling and should be viewed as the greatest academic crises facing college football. It is not surprising that some view college football as little more than a "neo-plantation" that creates high-paying jobs for coaches and athletic directors, while players are sometimes treated like raw materials, used up and discarded, with no better than a coin-flip's chance of earning a degree. One must also determine if a degree in "General Studies" has value.

The NCAA needs to exert more control over academic integrity and fairness. Future NCAA legislation should focus on legitimacy of academic programs at each institution, especially if clustering is present. Having a system in place that only analyzes the most basic academic information (graduation rate, academic standing during current and previous terms, and progressing toward any degree) does not allow for any analysis of the quality of education received. For example, a system that allows a Division I football program to graduate only 49% (the average) of its Minority players but does not review what majors the degrees were in or the quality of the degree is creating a path of least resistance and nobody should feign surprise when the institutions exploit that very path.

This study did not seek to determine how players selected majors, which has been attributed to cultural or sociological interest, scheduling, advising, and pressure from coaches (Capriccioso, 2006; Finley & Fountain, 2007; Finley et al., 2008). Further research should be performed to make definitive statements about how players come to be enrolled in a major. Other athletic conferences and other sports may be analyzed to determine if clustering in other conferences and sports occurs. A longitudinal study also needs to be conducted to determine if new APR rules and punishments increase the likelihood of clustering at schools over time. Finally, this research should be replicated on a broader scale to determine whether the clustering that is evident at the ACC schools is also present among the Bowl Championship Series schools in general, particularly as the pressures regarding the potential loss of scholarships due to the APR become more pronounced.

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