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## Article

# Academic Achievement among NCAA Division 2 Student-Athletes and Non-Athletes

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**Abstract:** There is a lack of published research on the evaluation of academic success among student-athletes in National Collegiate Athletic Association (NCAA) Division 2 (D2) institutions. Our study focused on comparing academic performance and career prospects between student-athletes and non-athletes (traditional students) at a D2 university. A survey measuring academic and career-related variables was administered to 170 participants, with 92 (54%) being student-athletes and 78 (46%) being non-athlete students. Our findings revealed no statistically significant differences between the two groups in terms of study hours, grade point average, and academic motivation. Moreover, there were no disparities in declared majors, expected graduation timelines, and career aspirations. The academic performance of student-athletes was found to be similar to that of their non-athlete counterparts. Most D2 student-athletes did not foresee pursuing professional sports careers, highlighting the importance of academic achievement in their overall career objectives.

**Keywords:** NCAA; academics; student-athletes; traditional students; Augustana University; achievement; GPA; Division 2



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## 1. Introduction

The management of college athletics across North America is entrusted to the National Collegiate Athletic Association (NCAA), which oversees three divisions (D1, D2, D3), encompassing approximately 1100 colleges and universities [1]. The primary objectives shared by all three NCAA divisions are to govern college athletics, uphold integrity, and offer educational opportunities to student-athletes [2]. While D3 institutions do not provide athletic scholarships, both D1 and D2 schools offer athletic scholarships and additional perks to student-athletes. Consequently, this has prompted inquiries into whether there exist disparities in the academic achievements of student-athletes from D1 and D2 institutions when compared to the general student population.

The NCAA Division 1 encompasses a wide array of 363 institutions, each with its own unique characteristics. These institutions range from the highly esteemed and academically focused Ivy League schools to the larger and more athletically competitive “Power-5” universities. In general, D1 schools boast larger athletic programs compared to their D2 counterparts, with substantial financial resources, state-of-the-art facilities, and a greater number of athletic scholarships being available. On the other hand, D2 serves as an intermediate-level division of athletic competition, providing an alternative to the larger D1 programs while still offering a minimum of partial athletic scholarships. At present, there are a total of 303 active D2 schools, encompassing both public and private institutions [1].

Most published research reports describing the academic success of student-athletes were performed at D1 institutions. These reports have shown that student-athletes, in comparison to the general student body, perform worse academically [2–8], have lower graduation rates [9], and prioritize athletics ahead of academics [10]. In a report from

65 NCAA D1 schools, it was shown graduation rates were 7% lower for student-athletes compared to non-athlete students [5]. Furthermore, when graduation rates in student-athletes were stratified by sport, race, and gender, the disparities were even wider. Based on research and media reports, it has been observed that student-athletes participating in high-revenue sports, such as football and basketball, tend to exhibit lower academic performance compared to their peers. These student-athletes often have lower grade point averages (GPAs) and demonstrate significant deficiencies in fundamental reading and comprehension skills [7,11,12]. Additionally, an assessment of critical thinking, open-mindedness, maturity, and inquisitiveness revealed that male student-athletes were lower than female student-athletes; however, both groups fell below traditional students [8]. This may be due to D1 student-athletes being expected to place a greater amount of time and effort into sport compared to school, with the majority of society viewing these individuals as being in college to play sports [13]. Despite prior research stating that student-athletes have lower grade point averages, the NCAA reports that D1 and D2 athletes outperform their non-athlete counterparts when assessing graduation rates [14]. Despite the extensive comparisons between athletes and non-athletes at D1 schools, these relationships are unknown at D2 schools.

In 2003, the NCAA introduced the Academic Progress Rate (APR) as part of a D1 reform aimed at enhancing academic standards and ensuring accountability among individual schools for the academic advancement of their student-athletes [14–17]. Subsequently, in 2020, the NCAA released a comprehensive Gallop Survey report indicating an increase in graduation rates (year-over-year) for student-athletes in D1/D2/D3 programs (NCAA, 2020). Additionally, the study highlighted that student-athletes who enrolled in college between 1975 and 2019 exhibited superior performance in various key social indicators, such as happiness, career success, and financial well-being, both during their college years and after graduation when compared to their non-athlete counterparts in the same time frame [18].

There is an existing gap in the academic literature regarding the academic performance of student-athletes from D2 institutions. More specifically, there is a lack of data comparing student-athletes and traditional students using metrics like GPAs, study hours, and career prospects. Therefore, the aim of this study was to analyze the academic success of student-athletes and non-athletes at a small private D2 institution in the Midwest region of the United States.

## 2. Methods

### 2.1. Subjects and Survey

The data for our study were collected through the analysis of a survey called “An Assessment of Academic Achievement and Future Success Amongst Student-Athletes and Traditional Students at Augustana University”. The survey consisted of 29 questions and was created using Google Forms ([https://docs.google.com/forms/d/1u9TeJhYQA0HXmnoyTu\\_YoZN39-vNIUNOGc-5-wYvgo/viewform?edit\\_requested=true](https://docs.google.com/forms/d/1u9TeJhYQA0HXmnoyTu_YoZN39-vNIUNOGc-5-wYvgo/viewform?edit_requested=true), accessed on 31 July 2024). Its purpose was to evaluate key academic factors among the participant group. The survey was distributed randomly to students at Augustana University during the period of 6–31 May 2022. The criteria for enrollment inclusion were students that were (1) actively enrolled onsite as undergraduate or graduates during the 2022 academic year and (2) full-time, i.e., 12 h or more per semester for undergraduate and 9 h or more per semester for graduate-level. Those surveys that were partially completed were excluded from the analysis. The survey was distributed randomly to a selection of college professors and athletic coaching staff using the Augustana University email system. College professors and coaching staff were asked to distribute the questionnaire to respective students. Respondents provided information across a spectrum of academic/athletic areas, including academic GPA, athletics experiences, social experiences, career aspirations, and time commitments. The 29-question survey consisted of responses that included a mixture of qualitative (e.g., yes/no) and quantitative answers (0–10 rank) in three sections. The first

section (questions 1–8) collected basic demographic information such as age, academic year, majors/minors, and extracurricular participation. The second section (questions 9–14) was qualitative and aimed to determine composite GPAs, hours per week spent studying, participating in sports, etc. The final section (questions 15–29) investigated future career aspirations. The identities of the subjects in this study were anonymous, and the questionnaire was designed to be completed within 30 min. The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Augustana University (Protocol #:SP22.05, approved October 2022). Informed consent was obtained from all subjects involved in the study. Augustana University is a private liberal arts school with an enrollment of 2022 undergraduate/graduate students in Spring 2022. This university is NCAA D2 and includes 19 sanctioned varsity sports; the campus is in Sioux Falls, South Dakota.

## 2.2. Data Analysis

Participants that met established enrollment criteria were collated into Google Forms and the data were stratified according to traditional students and student-athletes. Concerning the construction of graphs and tables, data were entered into Microsoft Excel. Statistical analyses, including mean, standard deviation (SD), *t*-tests, and *z*-tests, were performed using GraphPad (PRISM 9.5.0) [19] and Social Science Statistics (Version 2022) [20] analysis software.

## 3. Results

### 3.1. Survey Demographics

This study aimed to analyze a minimum of 100 surveys from approximately 50 traditional students and 50 student-athletes from Augustana University in Sioux Falls, SD. A total of 232 surveys were randomly distributed electronically or in person to college students between 6 May and 31 May 2022. Of the 232 surveys distributed, 172 (73%) were returned and reviewed for inclusion. Two surveys were omitted since they were only partially completed. The overall student-body participation rate was ~8.4% (170 participants/2022 total full-time undergraduate and graduate students).

### 3.2. Student Demographics

Out of the 170 participants in the study, 78 individuals (46%) were classified as traditional students and 92 (56%) were student-athletes. In this study, student-athletes were defined as full-time students actively participating in an NCAA-sanctioned sport at the university. Among all the respondents, 23% identified as seniors, 27% as juniors, 16% as sophomores, and 15% as freshmen. The remaining 19% were classified as either fifth-year seniors or graduate students. The average age of all participants was 21.5 years, with a median age of 21 and a mode of 21. The age range varied from 18 to 41 years. A summary of the study demographics based on traditional students and student-athletes is presented (Table 1).

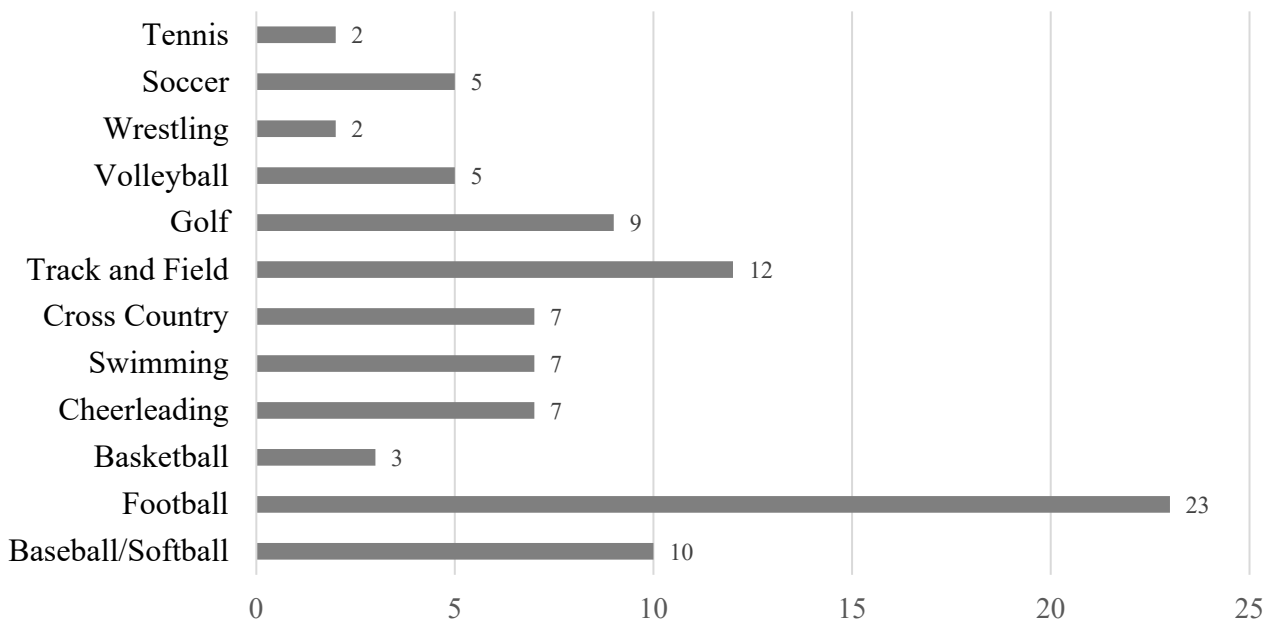
Of 78 traditional students, 62 (79%) reported active participation in an extracurricular activity. Intramural sports (non-NCAA recreational/club athletics) and sanctioned student organizations<sup>1</sup> (non-athletic, sanctioned clubs) were the most popular extracurricular activities, with 21 (27%) and 19 (24%) students, respectively. Among combined male and female student-athletes ( $n = 92$ ), the majority participated in football ( $n = 23$ ; 25%) and track and field ( $n = 12$ ; 13%; Figure 1).

**Table 1.** Subject demographics ( $n = 170$ ) at Augustana University, 2022.

	Traditional Students <sup>1</sup> ( $n = 78$ )	Student-Athletes <sup>2</sup> ( $n = 92$ )
<b>Class Rank</b>		
Freshman	13 (17%)	12 (13%)
Sophomore	15 (19%)	11 (12%)
Junior	21 (27%)	24 (26%)
Senior	21 (27%)	19 (21%)
Senior+ <sup>3</sup>	1 (1%)	17 (18%)
Graduate	7 (9%)	9 (10%)
<b>Age</b>		
Average	21.9	21.2
Range	18–47	18–25
Median	21	21
Mode	21	21

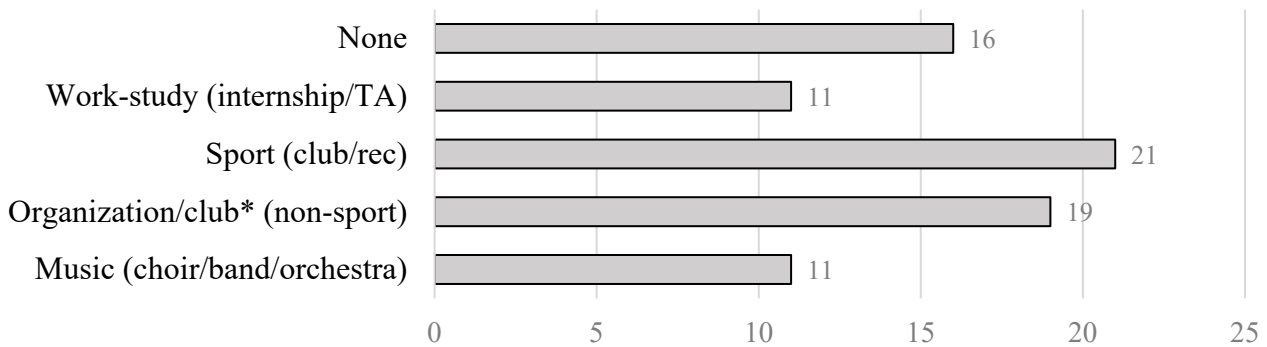
<sup>1</sup> Traditional students are general full-time students not participating in a NCAA D2 sanctioned sport. <sup>2</sup> Student-athletes are full-time students participating in a NCAA D2 sanctioned sport. <sup>3</sup> Senior+ are fifth year undergraduate or graduate-level students.

**Student-Athletes: Sport ( $n = 92$ )**



**Figure 1.** Cont.

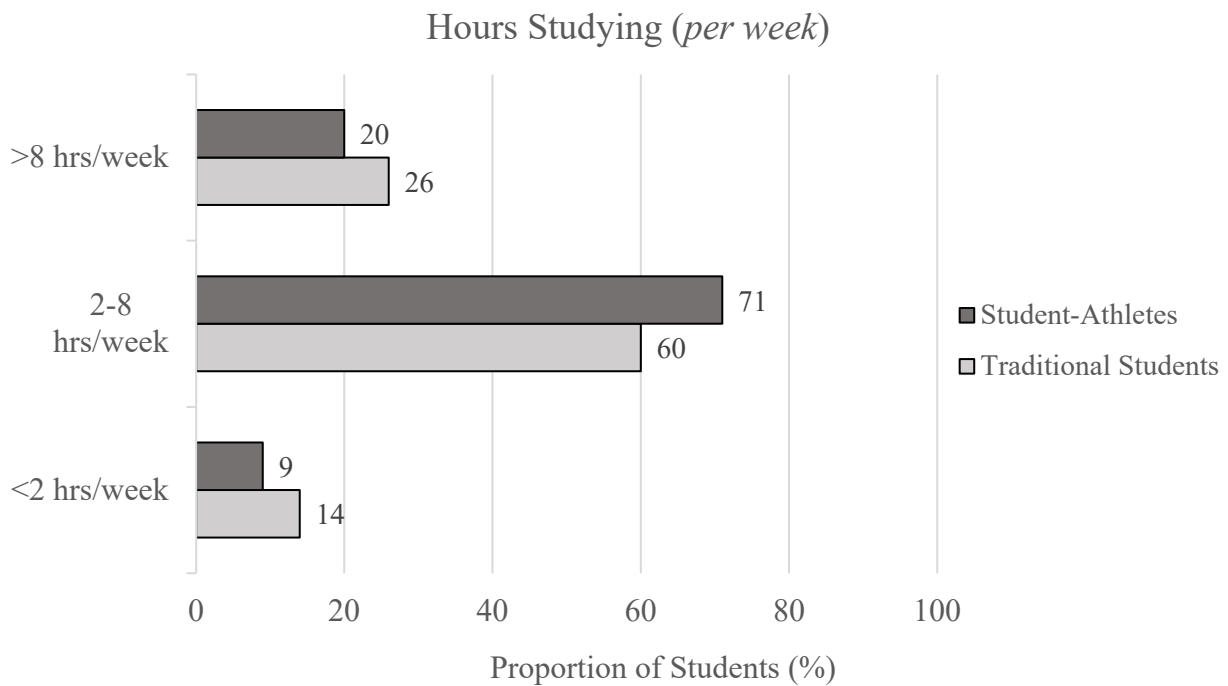
### Traditional Students: Extracurricular Activity ( $n = 78$ )



**Figure 1.** Student-athlete sports (**top**) and traditional student (**bottom**) extracurricular activities at Augustana University, 2022. \* An organization/club is one of Augustana University’s 96 recognized (non-sport) groups. Examples include subject-matter, departmental, career, academic, faith-based, and diversity and inclusion groups.

#### 3.3. Academic Differences

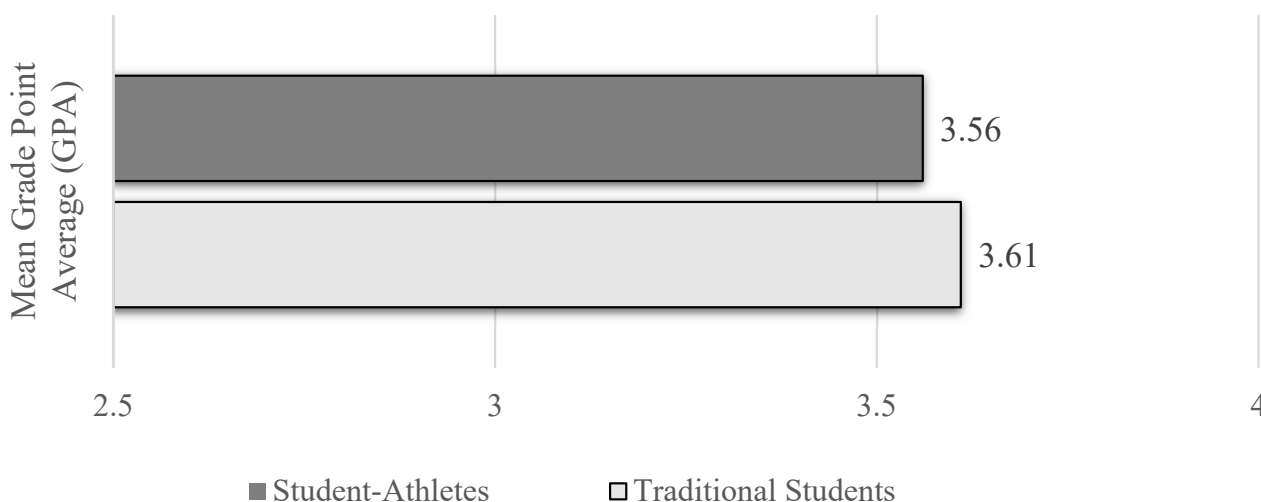
Study hours per week. There was no statistically significant difference ( $p > 0.05$ ) in the number of study hours per week across all ranges, as shown in Figure 2. Among the traditional students, 47 out of 78 participants (60%) reported studying between 2–8 h each week. Similarly, 65 out of 92 student-athletes (71%) stated that they devoted 2–8 h to studying per week. The percentage of respondents who reported studying more than 8 h per week was slightly higher for traditional students (26%) compared to student-athletes (20%). On the other hand, 14% of traditional students and 9% of student-athletes indicated that they study less than 2 h per week (Figure 2).



**Figure 2.** Study hours per week for traditional students and student-athletes. There was no statistical significance at any interval ( $p > 0.05$ ).

Grade Point Average (GPA). The average GPA for traditional students was 3.61 (range: 2.0 to 4.0) compared to a 3.56 GPA (range: 2.4 to 4.0) for student-athletes. A *t*-test was used to evaluate the significance of self-reported surveys. The mean difference (Mean D) was 0.05, the *t*-test value was 0.845, and the degrees of freedom were 168. There was no significant difference in GPA ( $p = 0.4$ ) observed between groups (Figure 3).

### GPA, Traditional Students vs. Student-Athletes



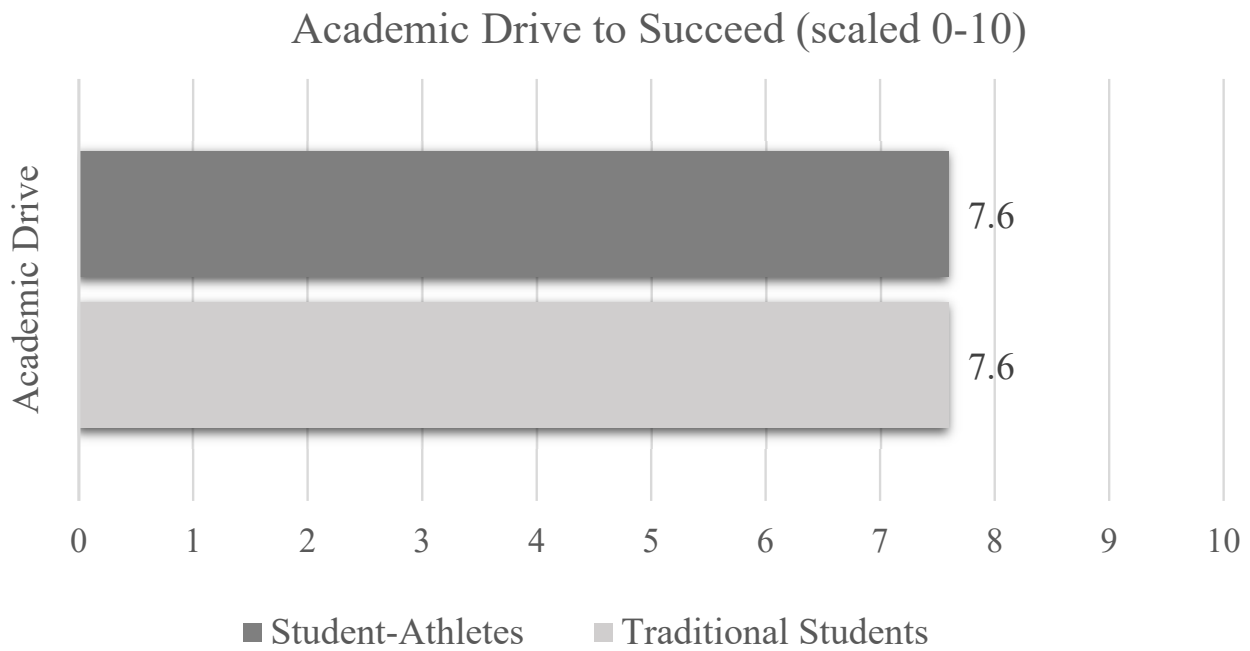
**Figure 3.** Mean grade point average (GPA) among student-athletes and traditional students. Results were self-reported and represent overall GPA on a 4.0 scale. No statistical difference was observed. ( $p > 0.05$ ).

Major selected. The declared majors for traditional students and student-athletes are shown in Table 2. Among traditional students, there were a total of 22 declared majors. The most common major was Business ( $n = 21$ ); followed by Education ( $n = 16$ ), Nursing ( $n = 8$ ), Biology ( $n = 6$ ), and Computer Science ( $n = 5$ ). Student-athletes selected similar majors; however, there were only 15 different majors selected. Similarly, the most frequent major declared among student-athletes was Business ( $n = 24$ ). In the student-athlete group, Exercise Science ( $n = 10$ ) was among the ‘top 5’, while Computer Science ( $n = 5$ ) was selected among the top for traditional students (Table 2).

**Table 2.** Most frequently selected majors among student-athletes and traditional students. Total responses for major selected is shown in parenthesis.

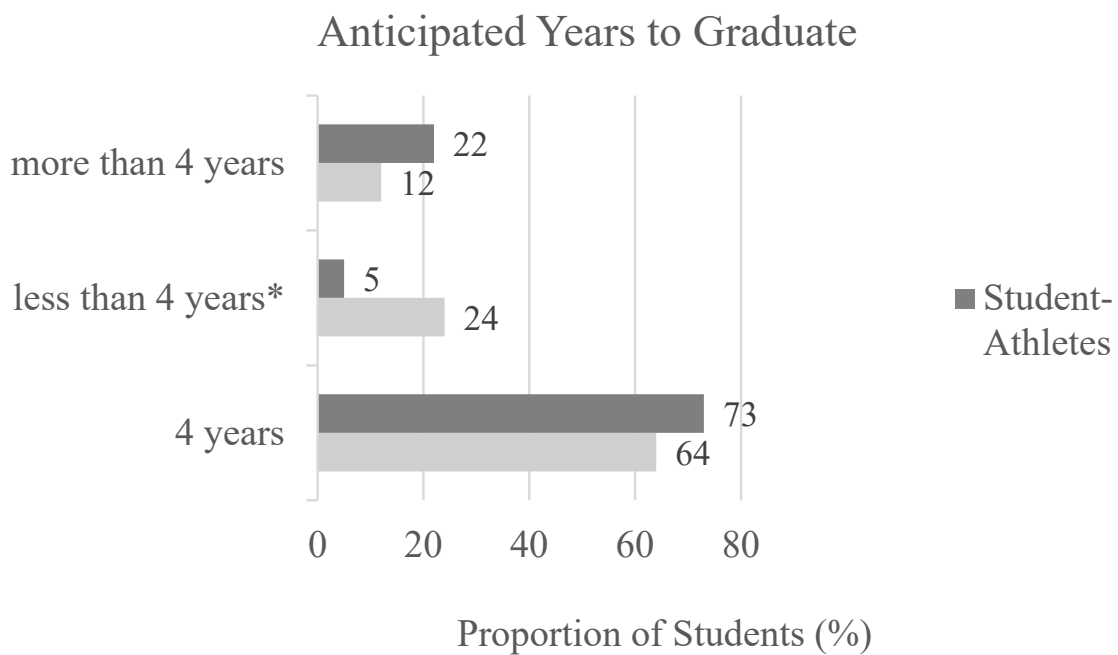
Rank	Student-Athletes	Traditional Students
1	Business/Finance/Marketing/Accounting (24)	Business/Finance/Marketing/Accounting (21)
2	Education (17)	Education (16)
3	Biology/Biochemistry (11)	Nursing (8)
4	Exercise Science (10)	Biology/Biochemistry (6)
5	Nursing (5)	Computer Science (5)

Drive for Success. Respondents were asked to select a value from 0–10 (10 as the highest) to rate their personal drive toward academic success. The average score was identical for traditional students and student-athletes; therefore, no statistical difference ( $p > 0.856$ ; 95% CI =  $-0.594$  to  $0.494$ ) was observed (Figure 4).



**Figure 4.** Comparison of academic drive. Respondents were asked to indicate on a scale of 1–10 (10 = highest) how driven they are to succeed academically. Responses were self-reported and are shown as average. No statistical difference was observed ( $p > 0.05$ ).

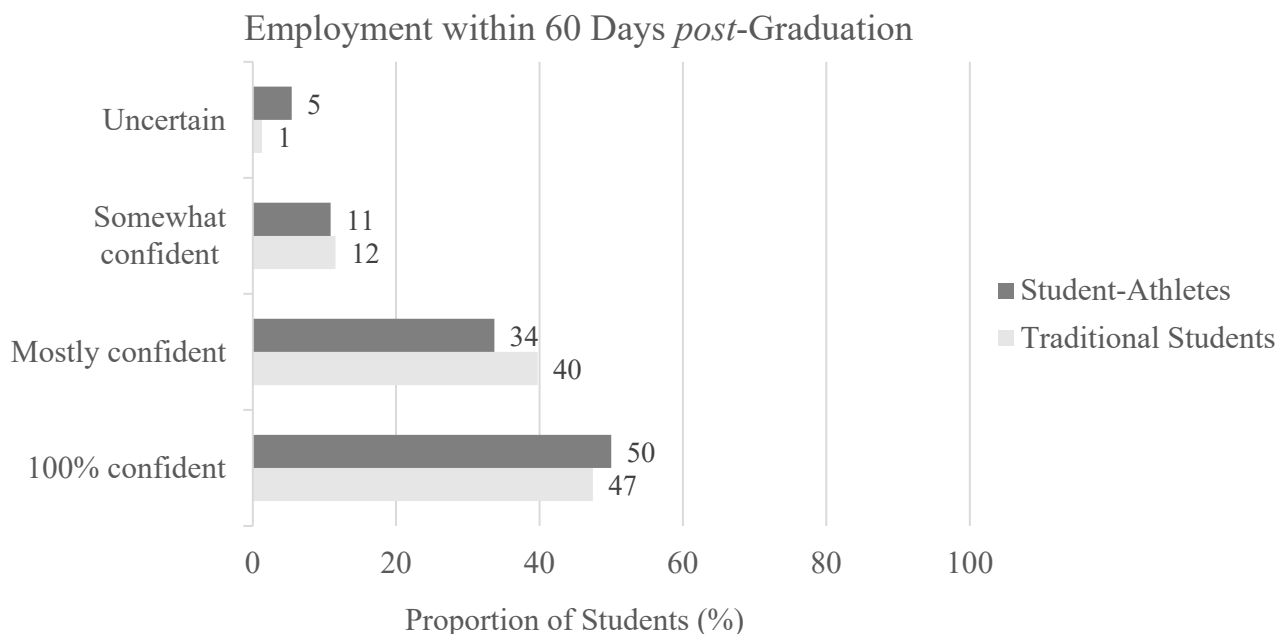
Undergraduate degree timeline. An estimated timeline for graduation, i.e., the expected number of years to graduate, was performed between comparison groups. When asked ‘How many years do you anticipate taking to obtain your undergraduate degree’, comparisons were not significant for responses of ‘4 years’ ( $p = 0.441$ ) and ‘more than 4 years’ ( $p = 0.091$ ). However, there was a statistical difference ( $p < 0.01$ ) between groups for the response ‘less than four years’ (Figure 5).



**Figure 5.** Anticipated years to graduate for student-athletes and traditional students. \* A statistical difference was noted ( $p < 0.01$ ) for <4 years. No statistical difference was observed ‘for more than 4 years’ or ‘4 years’ ( $p > 0.05$ ).



Future career prospects. Respondents were asked about their confidence in obtaining a job in their field of study within 60 days after graduation. Of the four possible choices provided (somewhat confident, mostly confident, 100% confident, and uncertain), there was no statistical significance among groups. Notably, seven student-athletes (5%) and one traditional student (1%) indicated that they were 'uncertain' about finding a job after graduation; however, the comparison was not statistical ( $p = 0.052$ ; Figure 6).



**Figure 6.** Proportion of responses when asked “Certainty of obtaining a job in your field within 60 days of graduation”. No statistical significance ( $p > 0.05$ ) was noted for any comparison.

#### 4. Discussion

Extensive prior research has shown that student-athletes often encounter academic difficulties. The NCAA has taken proactive measures to tackle this issue, with the implementation of the Annual Progress Rate (ARP) report resulting in enhanced graduation rates among Division 1 (D1) athletes. The 2020 NCAA Gallup Study offers a thorough analysis of the academic achievements of student-athletes spanning from 1975 to 2019 across all three NCAA divisions [18]. However, there is a need to present academic performance data of student-athletes from Division 2 (D2) schools, as there is a paucity of research comparing student-athletes to traditional students in regard to GPA, study hours, and career prospects. This is the first study to analyze the academic success of student-athletes and non-athletes at a small private D2 institution in the Midwest region of the United States.

The athletic programs at major NCAA D1 institutions differ significantly from most D2 schools due to various factors. D1 programs, particularly those with a substantial following, are expected to generate substantial revenue, which allows them to have larger budgets, coaching staff, and state-of-the-art facilities. Notably, the D1 Football Bowl Subdivision (FBS), which includes prestigious programs like Michigan and Notre Dame, can provide up to 85 full athletic scholarships annually to prospective athletes. These large D1 programs often spare no expense in their efforts to attract the most promising recruits nationwide. However, it is worth noting that many of these highly talented recruits may face academic challenges, yet they are still admitted to enhance the team’s performance. Research has shown that D1 student-athletes often receive admission advantages that are independent of academic merit [10,21–23]. The ‘athlete admission advantage’, whereby college enrollment criteria are lowered for highly desirable recruits has been previously documented and remains a subject of scrutiny throughout college sports [10,24–26]. Ultimately, institutions that lower admission standards to enroll athletes foster an environment where athletes will

prioritize their sport over classroom performance. Despite improvement in student-athlete graduation rates [14], overall academic performance, i.e., the GPAs of student-athletes in D1 revenue-generating sports, are historically lower compared to the general student body [7,27] and most likely remain lower today. Thus, many student-athletes are less committed or, worse, completely uncommitted to academic success and to earning a college degree [10,25–28]. For example, from 2004–2012, severe reading deficiencies were noted in 60% of UNC-Chapel Hill athletes who played football and basketball [11]. Similarly, an analysis of 21 D1 schools revealed 7–18% of student-athletes in men’s basketball and football harbored significant reading deficiencies that put them at a major disadvantage in any college-level course [11,12]. The NCAA has found, most recently through their 2020 Gallup study, that the academic success of student-athletes continues to improve [18].

Our research stands out due to its focus on academic performance at an NCAA Division 2 institution. Unlike Division 1 schools, D2 schools generally have moderate-sized athletic programs with modest revenues. In D2 football, for instance, a limited number of athletic scholarships (36 per year) are available, often divided into partial awards to attract more players. Our study included a diverse group of participants, including both student-athletes and traditional students involved in various sports and extracurricular activities (Table 1, Figure 1). Arnett (2004) states that college students are more open to significant changes once they leave their family home [29]. D2 coaches are perceived to have great influence over their student-athletes and typically encourage self-control and discipline. As a result, the athletic identity of the D2 athlete includes a strong focus on academics [30]. Upon comparison to non-athlete peers, student-athletes devote the same number of hours per week to studying, with only 9% indicating that they studied less than two hours/week (Figure 2). Additionally, commitment to academic achievement was comparable to non-athletes, as determined by overall GPA.

As per our findings, an overall GPA of 3.56 and 3.61 (out of 4.0) for student-athletes and traditional students, respectively, was not statistically different (Figure 3). In contrast to prior D1 reports, our findings revealed that student-athletes are as academically ambitious as their non-athlete peers. Additionally, an assessment of academic drive indicated that both groups had identical average quantitative response values (Figure 4). Among the student-athletes, only 12% (11 of 92 respondents) selected “5” or lower (out of 10) on a self-rating of academic drive. Additionally, comparisons of academic majors were similar when compared to traditional students. A total of four majors (Business, Education, Biology, and Nursing) were among the top five selected majors for both groups. There was only one major that was different between the groups. For traditional students, Computer Science made the top five while Exercise Science was selected for student-athletes (Table 2). This is not surprising considering student-athletes may be more interested in fields of study that include kinesiology, health, and nutrition. Finally, 95% of student-athletes vs. 86% of traditional students anticipated taking four years to complete an undergraduate degree. One notable difference was that a lower number of student-athletes, i.e., 5% of student-athletes vs. 24% of traditional students, felt they would graduate in less than four years (significance  $p = 0.4$ ; Figure 5). This difference may be attributed to the fact that many student-athletes are often ‘red-shirted’. Thus, athletes are eligible and often encouraged to play five years of college athletics.

Prior research has shown that D1 student-athletes hold a negative outlook toward a career in their study field because they feel they are destined to become professional athletes. In one D1 study, 52% of football and 76% of basketball student-athletes indicated they will likely become professional athletes [31]. Conversely, D2 student-athletes seem to hold a more grounded expectation for a future in professional sports. In our study, only 13% (12 of 92 respondents) of student-athletes indicated an intention to pursue a career in professional sports after college. Thus, D2 athletes may be focused more on leveraging athletics to obtain a career in their selected field of study rather than pursuing professional sports. While academic achievement was shown to be equivalent between groups, the student-athletes acknowledged a struggle to balance sport and coursework.

We found that 63% (58 of 92) of student-athletes stated that sports occupy more time than academics. Despite this, most student-athletes stated that playing an NCAA sport was a positive influence on their overall college experience. When given an opportunity to briefly elaborate, several student-athletes commented that “athletics benefit my classwork because it has taught me important time management skills” and “my sport provides structure and discipline that carry-over into the classroom”. Overall, student-athletes at D2 programs report that sports are a positive influence on their overall undergraduate experience.

There were a few limitations in this study. Our results are collective responses covering multiple factors, including sport type, gender, and ethnicity. Additional studies assessing results by specific sport, e.g., football, basketball. In addition, gender and ethnic group may reveal statistical differences compared to traditional students. Furthermore, an evaluation of GPA in-season compared to off-season among student-athletes may reveal additional insights. Lastly, a five-year longitudinal study tracking student-athletes throughout their undergraduate years would also be beneficial.

This research represents the first independent study conducted outside of the NCAA to evaluate academic performance indicators of student-athletes at a D2 institution. Our results align with the NCAA’s findings, demonstrating a positive academic performance among athletes in comparison to the general student population, including GPA data. In contrast, our data contradicts previous reports from D1 schools, which suggested that student-athletes exhibit lower academic performance when compared to their non-athlete counterparts. The NCAA emphasizes that D2 athletics is designed to empower student-athletes to succeed in their academic endeavors, civic engagement, and athletic competitions. Our research findings reflect Augustana University’s commitment to delivering a valuable education that promotes intellectual growth, ethical behavior, and the integration of learning and service in a multicultural environment.

Most of the academic research is centered on NCAA D1, with little attention given to examining the similarities or differences within the other divisions. Hence, it is advisable for future studies to continue gathering similar data at the D2 level, as these insights are vital for aiding athletes, coaches, and parents in the decision-making process of pursuing a student-athlete path.

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**Institutional Review Board Statement:** The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Augustana University (Protocol #:SP22.05, approved October 2022).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author due to privacy.

**Conflicts of Interest:** The authors declare no conflict of interest.

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