The scholastic achievement of financially aided athletes at the University of Montana 1965-1969

Gary William Johnson

The University of Montana

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THE SCHOLASTIC ACHIEVEMENT OF FINANCIALLY AIDED ATHLETES

AT THE UNIVERSITY OF MONTANA, 1965-1969

By.

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B.S. Mankato State College, 1964

Presented in partial fulfillment of the requirements for the degree of

Master of Science for Teachers in Physical Education

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1970

Approved by:

Chairman, Board of Examiners

Dean, Graduate School

Date
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The author is indebted to his wife, Barb, and his daughter, Mandi, for their patience and understanding which made this paper possible.

G. W. J.
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CHAPTER I

INTRODUCTION

Intercollegiate athletics is an established function of most colleges and universities today. Although firmly embedded in American higher education, the relationship of athletics with higher education has elicited considerable debate during the last decade. In 1961 Cole (26) said, "The proper relationship of intercollegiate sports to the general framework of higher education is a problem, varying in its scope and intensity from one institution to another. But it is not a problem without a solution or solutions." Educators have felt for many years that college athletics has within its framework the desirable attributes for a complete and satisfactory affiliation with education. Yet at the same time, it looms as one of the most corrosive threats that has ever challenged the honesty and integrity of higher education.

College athletics is presently centered in a transitional state between amateurism and professionalism. The public demand for winning teams has necessitated increased college athletic expenditures. Professional recruitment of prospective athletes, the offering of larger and greater number of scholarships, and expensive modes of travel are examples of costly expenditures modern athletic teams must absorb if they wish to remain in this vicious winning circle. These expenditures necessitate a scrupulous evaluation of contemporary athletic programs. It is quite possible that intercollegiate athletics is not an integral component of higher education, but actually is a non-educational feeder system for professional sports.
As a college student, the athlete must advance scholastically in pursuit of his future goals, presumably to earn a college degree. Hopefully, the athlete's athletic endeavors at the university level will be secondary to his scholastic attainments.

Athletes for many years have been considered poor students; commonly today called "dumb jocks." This adage has never been substantiated. Studies, to date, dealing with the relationship of athletic participation to academic performance, have yielded conflicting and inconclusive results. Hall (13), Reals and Reess (27), Slusher (31), Savage (15), Hindman (16), and Cooper and Davis (5) reported that athletes tend to be slightly inferior to non-athletes when compared on intelligence and grades earned. In contrast, Jones (20), Ray (26), Eidsmoe (9, 10), Rehberg and Schaefer (7), Edwards (8), and Reeder (28) indicated that the academic performance of athletes was equal to or above that of non-athletes as measured by intelligence and grades earned.

At the University of Montana, efforts are being made to assess the scholastic achievement of athletes. The following study initiated this investigation and specifically assessed the scholastic achievement of financially aided athletes at the University of Montana.

The Problem

The purpose of this study was to determine the scholastic achievement of financially aided undergraduate students who engaged in inter-collegiate football and basketball at the University of Montana during the years 1965 through 1969. In conducting this investigation consideration was given to the following questions:
1. Did financially aided athletes in football and basketball
differ from undergraduate male students in over-all grade point average
(GPA) during this period of time?

2. Did financially aided athletes in football and basketball
differ from the undergraduate male and female university population in
over-all GPA during this period of time?

3. Did financially aided football players differ from financially
aided basketball players in over-all GPA during this time period?

4. Did the GPA of financially aided football and basketball
players differ with respect to their major fields of study during this
time period?

5. Did the GPA of financially aided football and basketball
players, that graduated during the years 1965-1969, differ in relation
to their major fields of study?

6. What was the GPA of financially aided football and basketball
players during the major quarter of competition during this period of
time?

7. What was the GPA of financially aided transfer athletes
during this period of time?

8. Did the GPA of transfer and non-transfer financially aided
football and basketball players differ during this period of time?

9. What was the withdrawal rate of financially aided football
and basketball players during this period?

Definition of Terms

The following terms are defined as they were used in this study:

Financially aided athlete: Refers to the male undergraduate
student who received financial aid, either scholarship or work study, and played football or basketball during the years 1965-1969.

Academic achievement: Refers to the cumulative grade point average (GPA) of the athletes.

Cumulative GPA: Refers to the grade point average (academic achievement) as determined by the University of Montana registrar's office. The GPA of a student is the ratio of honor points to his total number of hours. Grading is based upon a four-point system: 4.0 = A; 3.0 = B; 2.0 = C; 1.0 = D; 0.0 = F.

Individual GPA: Refers to the cumulative GPA of each financially aided football and basketball athlete that is totaled for one year (his first year as a varsity athlete) and not in subsequent years of participation. Therefore, new GPA's were figured each year with new members, either freshmen or transfers.

Team GPA: Refers to the cumulative GPA of all financially aided football and basketball athletes that are totaled for every year of varsity competition of all team members, including returnees and new members. Therefore, the team GPA did include some repeats from the preceding year.

Major quarter of competition: Refers to the quarter in which the major portion of that sport was in competition. The football quarter would be fall quarter; basketball would be winter quarter.

Transcript: Refers to the academic record kept by the registrar's office containing the academic courses pursued and GPA earned by each university student.

Transfer athlete: Refers to a student athlete who transferred
from either a junior college or a four-year college or university to
the University of Montana.

Male undergraduate sample: Refers to all male undergraduate
students enrolled at the University of Montana during the years 1965
through 1969.

University undergraduate population: Refers to all male and
female undergraduate students enrolled at the University of Montana
during the years 1965 through 1969. The Dean of Students supplied the
GPA for all males and females.
CHAPTER II

METHODS AND PROCEDURES

Subjects

The 145 subjects were those students who, according to athletic department records, had received financial aid and played football or basketball, during the years 1965-1966, 1966-1967, 1967-1968, and 1968-1969. Non-transfer athletes must have received financial aid for two years to be included in the study. Athletes that transferred to the University of Montana from a junior college or a four-year institution were included in the study, with the grade point average of their previous college work figured into their GPA at the University of Montana. All transfer students that received aid for at least one year were included in the study.

Data gathered for this study included the cumulative grade point averages of all subjects' classwork at the University and, in the case of transfer students, classwork that had been completed at different institutions. It should be noted that some of the athletes are still in school, some withdrew from school, and others have graduated from the University of Montana. No attempt was made to study each of these groups separately except for GPA. Thus, the GPA's given for teams and individuals will reflect two and sometimes three of these groups of athletes. Additional information was collected to determine: the number of athletes that graduated; the number of quarters it took for graduation; the number of hours carried and GPA's earned during the major quarter of
competition; and their major field of study. The above information was gathered relative to teams and then broken down into specific groups, such as transfer students, graduates, students still in school, and students who withdrew.

**Procedure**

1. The literature relative to the scholastic achievement of athletes was reviewed.

2. The subjects were obtained from the athletic department records.

3. Each subject's transcript was obtained from the registrar's office.

4. The subjects were grouped according to sport, whether they were transfers or non-transfers, and according to academic majors.

5. Calculation of data, according to the above groups, was figured so individual, team, and combined results of these athletes' records could be used for analysis of the subjects.

6. Discussion of the data was interpreted through questions and review of related literature.

7. Summary, conclusions, and recommendations were made according to the data.

**Treatment of Data**

1. Individual and team GPA's of 145 financially aided athletes were compared to the GPA's of male undergraduate students and to the male and female undergraduate university students.
2. The GPA's of football and basketball players were compared.

3. The GPA's of transfer and non-transfer players were compared.

4. The GPA's of 145 financially aided athletes according to major fields of study were compared.

5. The GPA's of all graduates, withdrawals, and students still in school were analyzed.

6. The GPA's of athletes during the major quarter of competition were compared to their cumulative GPA's.
CHAPTER III

ANALYSIS AND DISCUSSION OF DATA

The scholastic attainment, as demonstrated by GPA, of financially aided football and basketball players at the University of Montana will be presented in this chapter. The use of questions as an investigative tool was utilized to provide a more vivid analysis of the data. Each question will be analyzed in relation to the data secured and integrated into a review of related literature.

Analysis of Results

1. Did financially aided athletes in football and basketball differ from the undergraduate male students in over-all GPA during this period of time?

Several studies have compared the scholastic achievement of athletes to non-athletes. Since most studies evidence many discrepancies, the effects of participation in sports on academic performance is without agreement.

Data secured in this study revealed that the cumulative GPA of 145 financially aided football and basketball players was 2.37. The cumulative GPA of the undergraduate male students was 2.38. Therefore, the difference between the groups is obviously negligible. However, a further analysis by sport shows the cumulative GPA for financially aided football players was 2.33, slightly lower than that of the undergraduate male student. The basketball players' GPA of 2.46 was somewhat
higher than that of the male undergraduate student. The combined GPA of football and basketball teams was 2.40. Therefore, athletes did earn a slightly higher GPA than did undergraduate male students during this same time period. A test of significance could not be run as the standard deviation of the male group was unavailable.

The team GPA would be the best measure to use in comparing athletes with the non-athletic group. The individual GPA does not reflect repeated GPA's from one year to the next, whereas the team GPA does. In figuring the undergraduate male GPA, each student's GPA was refigured for each year that he was in school. Therefore, the team GPA of 2.40 would be the most accurate indicator of scholastic achievement.

Pangle's (24) five-year study of 101 high school graduates compared the grades of football and basketball participants to non-participants. The analysis, as measured by the "t" test, indicated that there was no significant difference between participants and non-participants in grade point averages.

A study of high school athletes in Iowa by Eidsonoe (9, 10) revealed some interesting facts about the scholastic achievement of athletes. It was found that over a period of one semester the grade point average of 168 basketball players was 2.566 as compared to 2.186 for their non-participating classmates. Eidsonoe's later study of 30 top-ranked high school football teams found the GPA of 592 football players to be 2.523, whereas the GPA of their non-participating classmates was 2.085. An interesting subject analysis of the football players as compared to their classmates showed:


Kremer's study (19) of 219 athletes and 184 non-athletes in six high schools of Monroe County, Michigan, concluded that athletes exceeded non-athletes scholastically by over one-third of a letter grade when grade averages were figured.

Schafer and Armer (30) found .52 of a grade point difference in GPA. On a four-point grading scale, the athletes' GPA was 2.35 and the non-athletic group was 1.83. This study is more significant than most studies because it attempted to control five variables in grouping the athletes and non-athletes. Subjects were grouped according to year in school, measured intelligence, father's occupation, previous GPA, and curriculum.

One of the earlier investigations of college athletics directed by Savage and reported by Hindman (16) indicated that athletes tend to be slightly inferior to non-athletes in measured intelligence and grades earned. These investigations were carried out in several colleges and universities throughout the United States during the 1920's and 1930's. Savage also reported that more athletes received grades near the failing mark than did non-athletes, and that more athletes were placed on academic probation than were non-athletes.

Cooper and Davis (5) summarized several investigations for a 29 year period, and concluded that in most cases the non-athlete performs slightly better in school work than does the athlete, although the differences are not significant.
The data of this study would indicate that the difference of GPA between athletes and non-athletes is negligible. The limitations of this study and the several studies reported were the lack of equal samples, varying methods of measuring scholastic achievement, and the failure to compare athletes and non-athletes on similar curricula. The various methods of measuring and evaluating the scholastic achievement of athletes accounts for the inefficacy to give conclusive results. It is suggested that future studies of academic achievement of athletes be conducted with better controlled variables over a longer period of time.

2. Did financially aided athletes in football and basketball differ from the undergraduate male and female university population in over-all GPA during this period of time?

Data relative to this question appear in Table I. The cumulative GPA for the football and basketball teams from 1965 through 1969 was

<p>| TABLE I |
| YEARLY GRADE POINT AVERAGE COMPARISONS |</p>
<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Male &amp; Female</th>
<th>Football &amp; Basketball Teams</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-1966</td>
<td>2.28</td>
<td>2.37</td>
<td>2.53</td>
<td>2.53</td>
</tr>
<tr>
<td>1966-1967</td>
<td>2.35</td>
<td>2.46</td>
<td>2.43</td>
<td>2.29</td>
</tr>
<tr>
<td>1967-1968</td>
<td>2.40</td>
<td>2.51</td>
<td>2.41</td>
<td>2.36</td>
</tr>
<tr>
<td>1968-1969</td>
<td>2.47</td>
<td>2.57</td>
<td>2.26</td>
<td>2.16</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>2.38</td>
<td>2.48</td>
<td>2.40</td>
<td>2.37</td>
</tr>
</tbody>
</table>
2.40. The cumulative undergraduate male and female GPA for the same period was 2.48. Therefore, the team GPA of athletes was slightly lower than that of the non-athletic male and female university group. A test of significance could not be run as the standard deviation of the all-university group was unavailable.

The GPA comparison of \( \frac{11}{2} \) financially aided athletes to undergraduate university population likewise shows the individual GPA to be somewhat lower than the GPA of the university non-athletic group.

A further examination of Table I reveals that as the undergraduate male GPA and the combined male and female GPA steadily increased each year, the team and individual GPA's of athletes steadily decreased. More specifically, from 1965-1969 the undergraduate male GPA increased .19 of a grade point and the combined male and female average also increased .20 of a grade point. However, during this same time period the GPA of financially aided football and basketball players decreased .27 of a grade point. Such a decrease is rather significant in view of the fact that athletes must maintain at least a 1.6 GPA in order to be eligible to participate and were compared with students who in many cases did not maintain a 1.6 GPA. Also, it is significant in that it is more difficult to change the GPA of a large group such as the university male and female population than to change the GPA of the smaller athletic group. An interpretation of the data as shown in Tables I, II, V, and VI seems to indicate why the GPA of the athletic group declined during this time period. According to Table II, the team GPA of football players declined .30 of a grade point from 1965 to 1969. The team GPA of the basketball group declined .17 of a grade point but the greatest decline occurred during the school year 1968-1969. A large drop
for football players also occurred during the 1968-1969 school year. The considerable increase in financially aided football players from 32 to 52 over a four-year period seems to indicate that more emphasis was being placed on football. The large decline of the individual GPA of football players from 2.54 in 1965 to 2.12 in 1969 indicates that the scholastic attainment of new financially aided athletes was considerably less than those financially aided athletes during the 1965-1966 school year. Likewise, the decline in the GPA of financially aided basketball players ranged from 2.51 to 2.27. Examination of Table VI shows a significant increase in financially aided transfer athletes in football. More specifically, the increase in transfer football players was three times greater than the previous two years. At the same time, the GPA of the transfer football athletes declined from 2.28 to 2.04. Even though the number of transfer basketball players did not increase during this time period, a drop of .22 of a grade point possibly indicates the recruiting of marginal transfer student athletes. The decline in GPA from 2.28 to 2.04 for transfer football players likewise seems to indicate the recruitment of marginal student athletes in football.

In summary, a possible explanation for the decline in GPA's of financially aided athletes was due in part to the recruitment of a rather large number of marginal transfer students. In view of this possibility, one wonders if the recruitment program is aimed at securing students who are primarily academically able to carry on college work.

3. Did financially aided football players differ from financially aided basketball players in over-all GPA during this period of time?
Table II compares the GPA's of financially aided football and basketball players. The fact that more athletes participated in football than basketball accounts for some of the difference between these two groups. The basketball players earned GPA's, in three of the last four years, that ranged from .10 to .18 of a grade point higher than that of the football group. Although this difference was noticeable, it was not significant at the .05 level of confidence. The comparison of their individual GPA's also shows that the GPA of the basketball group was higher than the football group in three of the last four years.

**TABLE II**

GPA COMPARISONS OF FOOTBALL AND BASKETBALL PLAYERS
1965-1969

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-66</td>
<td>32</td>
<td>2.54</td>
<td>.11</td>
<td>17</td>
<td>2.51</td>
<td>.51</td>
<td>32</td>
<td>2.54</td>
<td>17</td>
<td>2.51</td>
</tr>
<tr>
<td>1966-67</td>
<td>39</td>
<td>2.40</td>
<td>.10</td>
<td>13</td>
<td>2.52</td>
<td>.14</td>
<td>16</td>
<td>2.19</td>
<td>6</td>
<td>2.55</td>
</tr>
<tr>
<td>1967-68</td>
<td>51</td>
<td>2.36</td>
<td>.11</td>
<td>18</td>
<td>2.54</td>
<td>.43</td>
<td>34</td>
<td>2.32</td>
<td>10</td>
<td>2.48</td>
</tr>
<tr>
<td>1968-69</td>
<td>52</td>
<td>2.24</td>
<td>.13</td>
<td>16</td>
<td>2.34</td>
<td>.27</td>
<td>23</td>
<td>2.12</td>
<td>7</td>
<td>2.27</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>177</td>
<td>2.37</td>
<td>.11</td>
<td>64</td>
<td>2.48</td>
<td>.41</td>
<td>105</td>
<td>2.33</td>
<td>41</td>
<td>2.46</td>
</tr>
</tbody>
</table>

* Standard deviation.

If one compares the teams separately to the undergraduate male and female GPA (Table I) some interesting results are obtained. These are:

1. The GPA of the football group was lower than that of the undergraduate male and female group in three of the four years studied.
(2) The cumulative GPA of the football group was .11 of a grade point lower than that of the undergraduate male and female group.

(3) The GPA of the basketball group was higher than that of the undergraduate male and female group in three of the four years studied.

(4) The basketball group and the undergraduate male and female group had identical cumulative GPA's for the four years studied.

Comparisons of the individual GPA's of both football and basketball players yielded similar results with the basketball players consistently earning GPA's that were comparable to the undergraduate male and female population. In addition, the football players consistently earned GPA's lower than the university group. Eidsmoe (9, 10) and Ryan (19) found results that were quite similar to those just reported. Eidsmoe studied high school football and basketball players' GPA.

4. Did the GPA of financially aided football and basketball players differ with respect to their major field of study during this period of time?

Table III indicates that twelve major fields of study were represented by the subjects in this investigation. The largest portion (45%) of the athletes majored in Health and Physical Education and earned a cumulative GPA of 2.22, which was the lowest of the major disciplines represented. Twenty-three athletes (15%) were Business Administration majors and earned the highest GPA of 2.57. Fifteen percent of the financially aided athletes majored in History and Political Science and earned a cumulative GPA of 2.55. The remaining 25 percent of the financially aided athletes earned GPA's that ranged from 1.79 to 3.21 and represented nine academic areas.
### TABLE III

**ATHLETES' GPA ACCORDING TO MAJOR FIELD OF STUDY**

1965-1969

<table>
<thead>
<tr>
<th>Major Field of Study</th>
<th>No.</th>
<th>Percentage</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Physical Education</td>
<td>65</td>
<td>45%</td>
<td>2.22</td>
</tr>
<tr>
<td>History and Political Science</td>
<td>23</td>
<td>15</td>
<td>2.55</td>
</tr>
<tr>
<td>Business Administration</td>
<td>23</td>
<td>15</td>
<td>2.57</td>
</tr>
<tr>
<td>Education</td>
<td>11</td>
<td>8</td>
<td>2.24</td>
</tr>
<tr>
<td>Science</td>
<td>5</td>
<td>3</td>
<td>2.53</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>14</td>
<td>3</td>
<td>2.18</td>
</tr>
<tr>
<td>Pre-Medecine</td>
<td>3</td>
<td>2</td>
<td>3.21</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>2</td>
<td>2.35</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>2</td>
<td>2.39</td>
</tr>
<tr>
<td>Forestry</td>
<td>2</td>
<td>1</td>
<td>2.30</td>
</tr>
<tr>
<td>Psychology</td>
<td>2</td>
<td>1</td>
<td>2.23</td>
</tr>
<tr>
<td>Philosophy</td>
<td>1</td>
<td>1</td>
<td>1.79</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>145</td>
<td>100%</td>
<td>2.37</td>
</tr>
</tbody>
</table>

5. Did the GPA of financially aided football and basketball players, that graduated during the years 1965-1969, differ in relation to their major field of study?

The mean GPA, as shown in Table IV, of the 53 financially aided athletes that graduated was 2.56. Their graduating GPA ranged from 2.40 for those majoring in Education to 2.82 for those graduating in
Business Administration. The mean number of quarters needed for graduation of financially aided athletes was 14.1. At the University of Minnesota, Stecklein and Dameron (34) indicated that athletes took an average of 13.3 quarters to earn their four-year degrees. The largest group (47%) of graduating athletes majored in Health and Physical Education and earned a GPA of 2.41. Also, Health and Physical Education graduates averaged 14.3 quarters to earn an undergraduate degree.

Athletes that majored in Business Administration earned their degrees in 13.5 quarters and made up 21 percent of financially aided athletes that graduated. The 2.72 GPA of athletes majoring in History and Political Science ranked second in graduating GPA's; however, they ranked first in the fewest quarters needed for graduation with 13.1. The remaining athletes (15%) that graduated majored in Education, Science, and Forestry, with GPA's of 2.40, 2.81, and 2.48, respectively.

**TABLE IV**

**GPA'S AND AVERAGE QUARTERS NEEDED FOR GRADUATION**

<table>
<thead>
<tr>
<th>Major</th>
<th>No.</th>
<th>Percent</th>
<th>GPA</th>
<th>Quarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Physical Education</td>
<td>25</td>
<td>47%</td>
<td>2.41</td>
<td>14.3</td>
</tr>
<tr>
<td>Business Administration</td>
<td>11</td>
<td>21%</td>
<td>2.82</td>
<td>13.5</td>
</tr>
<tr>
<td>History and Political Science</td>
<td>9</td>
<td>17%</td>
<td>2.72</td>
<td>13.1</td>
</tr>
<tr>
<td>Education</td>
<td>5</td>
<td>9%</td>
<td>2.40</td>
<td>15.8</td>
</tr>
<tr>
<td>Science</td>
<td>2</td>
<td>4%</td>
<td>2.81</td>
<td>13.5</td>
</tr>
<tr>
<td>Forestry</td>
<td>1</td>
<td>2%</td>
<td>2.48</td>
<td>15.0</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>53</td>
<td>100%</td>
<td>2.56</td>
<td>14.1</td>
</tr>
</tbody>
</table>
Although not indicated on the previous tables, it was interesting to note that only 11 financially aided athletes graduated in 12.0 quarters, while it took six athletes up to 18.0 quarters to graduate. Such a range of quarters needed for graduation indicates that it is quite unusual for financially aided athletes to graduate in the customary 12.0 quarters. This fact may lend some support for consideration of financial aid beyond the typical four-year athletic scholarship.

6. What was the GPA of financially aided football and basketball players during the major quarter of competition during this period of time?

Table V reveals the average quarter hours taken and the GPA of financially aided athletes during their major quarter of competition. As previously shown in Table I, the cumulative GPA of financially aided football and basketball players was 2.40. However, as shown in Table V, the combined GPA of financially aided football and basketball players during their major quarter of competition declined to 2.19. Therefore, one could interpret the difference of .21 of a grade point as a negative effect of athletic competition on scholastic achievement during the major quarter of competition. This difference as measured by the "z" score was significant at the .05 level of confidence. The cumulative GPA during the major quarter of competition for the financially aided football group was 2.14. This represents a decline of .23 of a grade point from the cumulative team GPA. The lowest GPA's during the major quarter of competition for the football players were registered the last two years of the study. More specifically, the competitive GPA of the football group declined .26 of a grade point during the 1967 football
TABLE V

AVERAGE HOURS TAKEN AND GPA DURING MAJOR QUARTER OF COMPETITION

<table>
<thead>
<tr>
<th>Year</th>
<th>Team GPA</th>
<th>Competitive GPA</th>
<th>Hours Taken</th>
<th>Team GPA</th>
<th>Competitive GPA</th>
<th>Hours Taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-1966</td>
<td>2.54</td>
<td>2.39</td>
<td>15</td>
<td>2.51</td>
<td>2.31</td>
<td>15.1</td>
</tr>
<tr>
<td>1966-1967</td>
<td>2.40</td>
<td>2.26</td>
<td>15.5</td>
<td>2.52</td>
<td>2.37</td>
<td>14.7</td>
</tr>
<tr>
<td>1967-1968</td>
<td>2.36</td>
<td>2.10</td>
<td>14.9</td>
<td>2.54</td>
<td>2.31</td>
<td>14.1</td>
</tr>
<tr>
<td>1968-1969</td>
<td>2.24</td>
<td>1.95</td>
<td>14.5</td>
<td>2.34</td>
<td>2.23</td>
<td>15.8</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>2.37</td>
<td>2.14</td>
<td>14.9</td>
<td>2.48</td>
<td>2.31</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Combined Football and Basketball competitive GPA ............. 2.19
S for Football players was ................................. .18
S for Basketball players was ................................ .21
S for combined Football and Basketball players was .......... .19

season and declined .29 of a grade point during the 1968 football season. This difference among football players was highly significant at the .01 level of confidence. During the latter season the GPA of the football players declined to less than a "C" average. As further shown in Table V, the GPA of financially aided basketball players was affected to a larger decline during the 1965-66 and 1967-68 basketball seasons. The cumulative GPA during the quarter of competition declined .17 of a grade point from the cumulative team GPA. The difference among basketball players was highly significant at the .01 level of confidence. In addition, the mean number of quarter hours taken for both basketball and
football teams was 14.9 during the quarter of competition. Data obtained in the study concurs with that reported by Tuttle and Beebee (35). In that study, the authors reported that scholastic averages at the University of Iowa were negatively affected during the quarter of competition. A study by Stecklein and Dameron (34) found the GPA earned by athletes at the University of Minnesota during the major quarter of competition declined although the decline was termed by the authors as being negligible.

7. What was the GPA of financially aided transfer athletes during this period of time?

Information relative to the above question appears on Table VI. An examination of that table will reveal that a total of 71 transfer athletes were given financial aid during the years 1965-1969. Of that total, 69 percent participated in football and 31 percent participated in basketball. It should also be recognized that of the 50 transfer

<table>
<thead>
<tr>
<th>Year</th>
<th>Football</th>
<th>Basketball</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>GPA</td>
<td>No.</td>
</tr>
<tr>
<td>1965-1966</td>
<td>7</td>
<td>2.28</td>
<td>8</td>
</tr>
<tr>
<td>1966-1967</td>
<td>6</td>
<td>2.16</td>
<td>4</td>
</tr>
<tr>
<td>1967-1968</td>
<td>26</td>
<td>2.26</td>
<td>4</td>
</tr>
<tr>
<td>1968-1969</td>
<td>11</td>
<td>2.04</td>
<td>5</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>50</td>
<td>2.20</td>
<td>21</td>
</tr>
</tbody>
</table>

TABLE VI
GPA OF TRANSFER PLAYERS
football players that have been given financial assistance from 1965-69 approximately 75 percent enrolled during the last two years of this study. Also, the cumulative GPA of the 71 transfer student athletes was 2.28. This is slightly higher (.06) than the mean GPA recorded by the athletes upon transfer to the University of Montana. The cumulative GPA of the football and basketball players were 2.20 and 2.35, respectively. However, it should be noted that from 1965 through 1969 the GPA of the transfer football group declined from 2.28 to 2.01 and the GPA of the transfer basketball group declined from 2.48 to 2.26. This indicates a GPA difference over a period of four years of .24 and .22 of a grade point, respectively. It should also be noted that the transfer football group suffered its greatest decline during the 1968-1969 academic year when its GPA dropped .22 of a grade point. More significant is the fact that the GPA of the transfer basketball group declined .37 of a grade point during the 1967-68 season.

8. Did the GPA of transfer and non-transfer financially aided football and basketball players differ during this time period?

The GPA of 71 transfer athletes was 2.28, which was lower than the cumulative GPA of 2.45 of 74 non-transfer financially aided athletes. This difference was significant at the .05 level of confidence, as shown by the "z" score. A possible explanation might be that recruiting efforts have been directed toward transfer athletes who were marginal students. The transfer athlete may be the student who was unable to enroll in a larger university because of a poor academic record and, therefore, he may select a school with minimal academic entrance requirements. It is the feeling of this author that marginal transfer
TABLE VII

GPA OF TRANSFER AND NON-TRANSFER PLAYERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Transfer</th>
<th>Non-Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-1966</td>
<td>2.39</td>
<td>2.60</td>
</tr>
<tr>
<td>1966-1967</td>
<td>2.29</td>
<td>2.31</td>
</tr>
<tr>
<td>1967-1968</td>
<td>2.25</td>
<td>2.48</td>
</tr>
<tr>
<td>1968-1969</td>
<td>2.11</td>
<td>2.20</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>2.28</td>
<td>2.45</td>
</tr>
</tbody>
</table>

S for transfers was ....... .30
S for non-transfers was ...... .51

students will down-grade both athletics and educational efforts of the University of Montana.

9. What was the withdrawal rate of financially aided football and basketball players during this period of time?

Twenty-five percent of the 145 financially aided athletes withdrew from the University between the school years 1965-1969. Although no attempt was made to determine the reasons for these withdrawals, the following observations may reflect some insight as to why the athletes withdrew. Some athletes may have withdrawn because of failure to make the team. They may have completed their eligibility for the sport and did not care to complete college at this time. They may have been injured in a sport and could not participate any longer even though a
scholarship was retained. Finally, some may have withdrawn to pursue additional career training.

The combined GPA of the 36 withdrawals was 2.17; within this group, the financially aided football and basketball transfer players earned an even lower combined GPA of 2.10. It is important to note that 75 percent of the withdrawals were football players; of these, 70 percent were transfer football players.

Stecklein and Dameron (34) reported that the dropout rate for athletes was 6.5 percent of the total enrollment while the dropout rate for non-athletes was 11.4 percent of the total enrollment.

<table>
<thead>
<tr>
<th>Year</th>
<th>All Player Withdrawals</th>
<th>Transfer Withdrawals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Football</td>
<td>Basketball</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>GPA</td>
</tr>
<tr>
<td>1965-1966</td>
<td>4</td>
<td>2.54</td>
</tr>
<tr>
<td>1966-1967</td>
<td>8</td>
<td>2.10</td>
</tr>
<tr>
<td>1967-1968</td>
<td>12</td>
<td>2.11</td>
</tr>
<tr>
<td>1968-1969</td>
<td>3</td>
<td>1.83</td>
</tr>
<tr>
<td>CUMULATIVE</td>
<td>27</td>
<td>2.14</td>
</tr>
</tbody>
</table>

Combined Football and Basketball of All Players . . . . . . . 2.17
Combined Football and Basketball Transfer Players . . . . . . . 2.10
It would be interesting to secure what percentage of the total university enrollment withdrew from college prior to completion. These facts, which were not readily available to the author, could be compared to the withdrawal rate of financially aided athletes to determine a more meaningful statistic relative to this question.
CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine the scholastic achievement of financially aided football and basketball athletes at the University of Montana during the school years 1965 through 1969. Initially, subjects were identified and categorized according to sport involvement, namely football and basketball. Of the 115 financially aided athletes, 105 were football players and 10 were basketball players. Each subject's transcript was examined to determine GPA during attendance in school. GPA's were compared according to predetermined classifications. The following comparisons were made: (1) Did financially aided athletes in football and basketball differ from the undergraduate male students in over-all GPA during this period of time? (2) Did financially aided athletes in football and basketball differ from the undergraduate male and female university population in over-all GPA during this period of time? (3) Did financially aided football players differ from financially aided basketball players in over-all GPA during this period of time? (4) Did the GPA of financially aided football and basketball players differ with respect to their major field of study during this period of time? (5) Did the GPA of financially aided football and basketball players, that graduated during the years 1965-1969, differ in relation to their major field of study? (6) What was the GPA of financially aided football and basketball players during
the major quarter of competition during this period of time? (7) What was the GPA of financially aided transfer athletes during this period of time? (8) Did the GPA of transfer and non-transfer financially aided football and basketball players differ during this time period? (9) What was the withdrawal rate of financially aided football and basketball players during this period of time?

Each subject was examined and categorized with the respective team. Analysis of the data, using the arithmetic mean formula for the average GPA and the averaging means formula for the cumulative and combined GPA totals, produced the team and individual mean GPA; further analysis yielded individual, cumulative, and combined averages.

Data obtained were organized into tables in order to present a more vivid analysis. Conclusions and recommendations for further study were made in relation to the data obtained.

Conclusions

From an examination of the data secured in this investigation the following conclusions seem tenable.

1. There were negligible differences in GPA between financially aided football and basketball players and undergraduate male students at the University of Montana, from 1965-1969.

2. The cumulative GPA of both male and female undergraduate students was slightly higher than the GPA of financially aided football and basketball players at the University of Montana during this time period.

3. While there has been a steady increase in GPA of the undergraduate male and female students, there has been a steady decline in
the combined GPA of financially aided football and basketball players from 1965-1969 at the University of Montana.

4. The GPA of financially aided basketball players has generally been higher than that of the undergraduate male, and combined male and female student body.

5. The GPA of financially aided football players has generally been lower than that of the combined male and female student body.

6. The GPA of financially aided basketball players has generally been higher, although not significantly different, than financially aided football players at the University of Montana during 1965-1969.

7. The largest portion of financially aided football and basketball players majored in Health and Physical Education, History and Political Science, and Business Administration at the University of Montana during this time period.

8. The largest group of financially aided athletes who graduated from 1965-1969 majored in Health and Physical Education.

9. Financially aided football and basketball players who graduated averaged 14.1 quarters of attendance before completing requirements for a degree.

10. The GPA of financially aided football and basketball players was significantly lower during the major quarter of competition at the University of Montana during 1965-1969.

11. The GPA of financially aided football and basketball transfer students was significantly lower than that of the non-transfer financially aided football and basketball players at the University of Montana during 1965-1969.
12. A larger portion of transfer athletes than non-transfer athletes withdrew from the University of Montana from 1965-1969.

Recommendations

Based upon the findings of this study, the following recommendations are made:

1. The withdrawal rate of all athletes should be compared to the withdrawal rate of the entire undergraduate student population.

2. A comparison should be made between all athletes and the entire undergraduate student population relative to the average number of quarters needed for graduation.

3. A comparison should be made between all athletes and the entire undergraduate student population relative to the proportion of degrees earned.

4. Further studies should involve a comparison between financially aided athletes and non-financially aided athletes.

5. More appropriate selection devices should seriously be considered for all transfer athletes prior to entrance at the University of Montana.

6. Serious consideration should be given to the possibility of providing financial aid to athletes for more than 12 quarters.
SELECTED BIBLIOGRAPHY
SELECTED BIBLIOGRAPHY


