A STUDY OF THE RELATIONSHIP OF STUDENT PARTICIPATION IN THE ACTIVITIES PROGRAM TO STUDENT ACHIEVEMENT, ATTENDANCE, AND SCORES ON COLLEGE ADMISSIONS EXAMINATIONS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF EDUCATION

By

Arthur Clifford Casey Jr., B.S., M.Ed.
Denton, Texas
December, 1985

This investigation studied the impact of male student involvement in selected school activities upon grade-point averages, rates of attendance and college entrance examination scores.

The main purpose of this study was to provide data for state officials, school administrators, and school boards as they seek to make decisions concerning the activities program and its place in the educational system. The specific purpose was to determine if involvement in selected school activities had any relationship to the variables grade-point average, attendance, and scores on college entrance examinations.

The study was carried out in four large Texas high schools with a total student population of 6,456. Male participants in seven major school activities were randomly selected. This process produced a total sample of 280 male students representing participation in seven activities in four high schools. Each activity was represented by a sample of forty male students.
The conclusions were drawn that (1) there is a positive relationship between participation in the activities program by male students and attendance rate, grade-point average, and scores on the Scholastic Aptitude Test and (2) there was no negative relationship between participation in the activities program and the participants' ability to receive a high school education.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPENDIX</td>
<td>112</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>116</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Demographic Data</td>
<td>25</td>
</tr>
<tr>
<td>II. Comparison of Football Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>36</td>
</tr>
<tr>
<td>III. Comparison of Basketball Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>40</td>
</tr>
<tr>
<td>IV. Comparison of Baseball Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>47</td>
</tr>
<tr>
<td>V. Comparison of Track Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>53</td>
</tr>
<tr>
<td>VI. Comparison of Band Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>59</td>
</tr>
<tr>
<td>VII. Comparison of Choir Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>65</td>
</tr>
<tr>
<td>VIII. Comparison of Speech-Drama Participants and Total Student Population on SAT, GPA, and Total Class Hours Missed</td>
<td>71</td>
</tr>
<tr>
<td>IX. Comparison of Totals for All Populations</td>
<td>79</td>
</tr>
<tr>
<td>X. School A Means</td>
<td>85</td>
</tr>
<tr>
<td>XI. School B Means</td>
<td>91</td>
</tr>
<tr>
<td>XII. School C Means</td>
<td>97</td>
</tr>
<tr>
<td>XIII. School D Means</td>
<td>103</td>
</tr>
</tbody>
</table>
# List of Illustrations

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hours Missed, Football</td>
<td>34</td>
</tr>
<tr>
<td>2.</td>
<td>Grade-Point Average, Football</td>
<td>35</td>
</tr>
<tr>
<td>3.</td>
<td>SAT Score, Football</td>
<td>37</td>
</tr>
<tr>
<td>4.</td>
<td>Hours Missed, Basketball</td>
<td>39</td>
</tr>
<tr>
<td>5.</td>
<td>Grade-Point Average, Basketball</td>
<td>41</td>
</tr>
<tr>
<td>6.</td>
<td>SAT Score, Basketball</td>
<td>42</td>
</tr>
<tr>
<td>7.</td>
<td>Hours Missed, Baseball</td>
<td>45</td>
</tr>
<tr>
<td>8.</td>
<td>Grade-Point Average, Baseball</td>
<td>46</td>
</tr>
<tr>
<td>9.</td>
<td>SAT Score, Baseball</td>
<td>48</td>
</tr>
<tr>
<td>10.</td>
<td>Hours Missed, Track</td>
<td>51</td>
</tr>
<tr>
<td>11.</td>
<td>Grade-Point Average, Track</td>
<td>52</td>
</tr>
<tr>
<td>12.</td>
<td>SAT Score, Track</td>
<td>54</td>
</tr>
<tr>
<td>13.</td>
<td>Hours Missed, Band</td>
<td>57</td>
</tr>
<tr>
<td>14.</td>
<td>Grade-Point Average, Band</td>
<td>58</td>
</tr>
<tr>
<td>15.</td>
<td>SAT Score, Band</td>
<td>60</td>
</tr>
<tr>
<td>16.</td>
<td>Hours Missed, Choir</td>
<td>62</td>
</tr>
<tr>
<td>17.</td>
<td>Grade-Point Average, Choir</td>
<td>64</td>
</tr>
<tr>
<td>18.</td>
<td>SAT Score, Choir</td>
<td>66</td>
</tr>
<tr>
<td>19.</td>
<td>Hours Missed, Speech-Drama</td>
<td>68</td>
</tr>
<tr>
<td>20.</td>
<td>Grade-Point Average, Speech-Drama</td>
<td>70</td>
</tr>
<tr>
<td>21.</td>
<td>SAT Score, Speech-Drama</td>
<td>72</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>22</td>
<td>Hours Missed, All Schools</td>
<td>74</td>
</tr>
<tr>
<td>23</td>
<td>Grade-Point Average, All Schools</td>
<td>76</td>
</tr>
<tr>
<td>24</td>
<td>SAT Score Means, Total Population</td>
<td>78</td>
</tr>
<tr>
<td>25</td>
<td>Hours Missed, School A</td>
<td>81</td>
</tr>
<tr>
<td>26</td>
<td>Grade-Point Average, School A</td>
<td>82</td>
</tr>
<tr>
<td>27</td>
<td>SAT Score Means, School A</td>
<td>84</td>
</tr>
<tr>
<td>28</td>
<td>Hours Missed, School B</td>
<td>87</td>
</tr>
<tr>
<td>29</td>
<td>Grade-Point Average, School B</td>
<td>88</td>
</tr>
<tr>
<td>30</td>
<td>SAT Score Means, School B</td>
<td>90</td>
</tr>
<tr>
<td>31</td>
<td>Hours Missed, School C</td>
<td>93</td>
</tr>
<tr>
<td>32</td>
<td>Grade-Point Average, School C</td>
<td>94</td>
</tr>
<tr>
<td>33</td>
<td>SAT Score Means, School C</td>
<td>96</td>
</tr>
<tr>
<td>34</td>
<td>Hours Missed, School D</td>
<td>99</td>
</tr>
<tr>
<td>35</td>
<td>Grade-Point Average, School D</td>
<td>100</td>
</tr>
<tr>
<td>36</td>
<td>SAT Score Means, School D</td>
<td>102</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

The question of academics versus activities programs has long been a topic of debate in the educational system. There have been, for years, accusations by teachers and parents that activities programs interfered with teaching and learning. Assertions have been made that what Johnny did on the football field or at the band contest was more important than what he did in his English class. Teachers have said for years, "How do I teach this child at the band contest or the baseball game," claiming that the activities programs remove students from their classes so often that it is difficult to teach.

Coaches and sponsors have historically responded to this type of attack as "sour grapes." The coaches and sponsors of activities programs point to the benefits that these activities have for students and to the fact that teaching leadership, cooperation for a group goal, and competition and fair play are in fact just as important as English. They continue by pointing out that the activities programs keep students in school, cause students to make better grades in the classroom and that students involved in
the activities programs are in class more than their non-involved counterparts.

The coaches and sponsors of activities programs have long held the upper-hand in this continuing debate. The public has accepted their explanations and has been willing to fund through tax monies the activities programs. In the recent months, however, the pendulum seems to have swung to the side of academics.

Statement of the Problem

This investigation studied the impact of male student involvement in selected school activities upon grade-point averages, rates of attendance and college entrance examination scores.

Purpose of Study

The main purpose of this study was to provide data for state officials, school administrators and school boards as they seek to make informed decisions concerning the activities program and its place in the educational system. The specific purpose was to determine if involvement in selected school activities had any relationship to the variables grade-point average, attendance and scores on college entrance examinations.
Research Questions

1. Is there a difference between male students who participate in football and the total student population with regard to attendance rate, grade-point average and scores on college entrance examinations?

2. Is there a difference between male students who participate in basketball and the total student population with regard to attendance rate, grade-point average and scores on college entrance examinations?

3. Is there a difference between male students who participate in baseball and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

4. Is there a difference between male students who participate in track and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

5. Is there a difference between male students who participate in band and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

6. Is there a difference between male students who participate in choir and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?
7. Is there a difference between male students who participate in speech-drama and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

8. Is there a difference between the total sample of male students who participate in the selected activities and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

Definition of Terms

For the purpose of this study, the following definitions are used.

A large high school is a publicly funded educational institution which has a total enrollment of 1,310 or more students in grades nine through twelve.

The activities program, for purposes of this study, includes the following activities: football, basketball, band, choir, speech, drama, track, and baseball.

Total school population includes all students enrolled in grades ten, eleven and twelve.

Number of daily absences is the number of times an individual student is officially counted absent from school.

Varsity group is a group that represents the high school at the highest level of competition (example: varsity football, marching band, etc.).
Total male population includes all males enrolled in grades ten, eleven and twelve.

GPA (grade-point average) is the average of a student's cumulative grades based on the 4.00 system.

SAT is the Scholastic Aptitude Test.

College entrance examination score is the student's score on the SAT.

ADA (school average daily attendance) is the average number of students in attendance each day, using all six-week periods to calculate the average.

IHMP (institutional hours missed to participate) is the number of institutional hours missed to participate in the activities program.

Background and Significance of the Study

One of the most important tasks that school officials must face in the foreseeable future will be to maintain a balance between the pursuit of academic excellence and the needs of the total student population. The effects of recent changes in national and state focus concerning academic excellence has created a need for research that identifies the positive and negative aspect of different school programs. Educators must address the issue of time used to support programs which intrude on instruction time. Researchers' opinions have differed regarding the relationship of activities program participation with school
attendance and academic success (2, 3, 5, 7). The majority of the studies which address these issues have been done in the eastern and northeastern parts of the United States. Due to the scope and breadth of the activities program in the State of Texas, the results of studies outside the state may have little real meaning to Texas.

Prompted by the national wave of concern about the public schools' failure to produce young people who can compete with Japanese, German and Russian youth (4, 6), the governor of Texas appointed a "blue ribbon" committee on education. This committee held meetings with teachers, administrators and parents across the state. These meetings often focused on the continuing debate between the academic and activities programs and their relative worth and effect on students. These meetings seem to have generated a cadre lead by committee chairman, Ross Perot, that believes that the activities programs are excessive and are a major problem in the disruption of classtime (7). The group is seeking to curtail the activities program without complete data to determine the actual effects of these programs upon the academic achievement of the participants.

Zinn (8) has published an article that summarizes some of the research in the area that points to the relative worth of the athletic program and its effect on students who are involved. However, the question of how activities
programs affect grades and loss of school time, as well as other negative or positive effects, has lacked hard data to support pro or con arguments. One sensed it was time to look closely at existing data and to conduct research that directly examines the problem as it relates to Texas schools.

Limitations

This study is limited to large high schools in Texas who agreed to participate in the study. Comparisons should not be made to any other school population. Students who were selected for the sample were males from the tenth, eleventh and twelfth grades and who participate in one or more selected varsity activities.

Instruments

The instruments used in this study were information sheets designed by the researcher (Appendix A). The information sheets designed for the sample group list information for male students in seven activities (football, basketball, baseball, track, band, choir, speech-drama). The instrument was used to collect data on grade-point averages, number of daily absences, IHMP (number of institutional hours missed to participate in activities program) and scores on college entrance examinations. This information was collected for each student that was selected to participate in the study. The information sheet designed for the total school
collected the following data: total school average daily attendance, school average score on SATs, and grade-point average for the total school.

Selection of the Sample

The total population consisted of all Texas public high schools with an average daily attendance above 1,310 in grades 9 through 12 for the 1983-1984 school year. The sample consisted of four high schools. These schools were selected by regional areas and their willingness to participate in the study. The anonymity of both schools and students was protected and no data were collected until permission to proceed with the study had been gained from the principal and superintendent of the selected schools.

The researcher visited each of the selected schools. A list of students who participated in each of the following activities was secured: band, speech-drama, choir, football, basketball, baseball and track. A random sample of ten male students from each activity in each of the selected schools was chosen using the list of random numbers. The schools were also asked to provide data on the total school attendance rate, grade-point average and college entrance examination scores. The researcher collected the sample data on each student selected for the sample from existing school records.
Research Design

This study employed a survey method of research. This design establishes whether a relationship exists between two or more groups (1). The study evaluated the relationship of participation in the activities program and student grade-point average, scores of college entrance examinations and attendance rate. The comparison of individual scores on the selected variables was made with total school scores on the variables.

Reporting the Data

The relationship of the variables within schools and between schools is graphically illustrated. Each bar graph is accompanied with appropriate written explanations and tables. The narrative assists the reader in drawing conclusions with relation to the research questions.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF RELATED LITERATURE

Student activities can be traced back as far as the Colonial period. The activities became a formal part of the school program in the late 1920s (16). The activities program of schools was viewed as an agent of unity and socialization in the comprehensive high school (16). Spring (19) suggests that clubs, athletics, assemblies, student government and school newspapers are, in fact, what a high school in the United States is all about.

More recently, however, the position of student activities in secondary education has become somewhat precarious. Students themselves not only have questioned their relevance but have criticized certain activities such as student government and school newspapers as being little more than facades through which the administration attempts to impose its definition of control of reality upon the student body. Also, with the increasing resistance of citizens to support, through taxes, the ever rising cost of education, student activities have been falling victim to the axe of fiscal austerity—albeit often not without resistance and counter-pressure. Witness, for example the public opposition to the ill fated proposal of the superintendent of Philadelphia Public Schools to eliminate extracurricular activities, most notable, varsity football as an austerity measure (19, pp. 80).

Texas has been recognized for many years as a leader in the United States in high school activities programs. Marshall (10), Executive Director of the Texas University Interscholastic League, stated recently that the league had
approximately 1,500,000 participants in extracurricular programs. The programs ranged from competition in mathematics to varsity football. However, many people in the State of Texas have questioned the positive effects of this participation. They have asked if the value of competition has become more important in Texas than the value of academic pursuits. They question the time away from classroom instruction. They question the expense to the state in carrying on an activities program (13). They point to the fact that Texas ranks first in athletics, but seventeenth out of twenty-two (only twenty-two states out of fifty use the SAT) in SAT scores, thirty-ninth out of fifty in number of students graduating from high school and forty-second out of fifty in expenditures per pupil (6). They believe that at least part of the cause for these low standings stems directly from an overemphasis on the activities program.

In a recent survey conducted by the University Interscholastic League entitled "Loss of School Time Survey--1983-1984," the following information is reported.

Varsity football players missed 2.69 hours of class time to participate, varsity basketball players missed 9.62 hours of class time to participate, and male varsity track participants missed 5.44 hours of class time to participate (23, p. 2).

These data were generated from surveys completed by approximately sixty large high schools in Texas (23). These
data address the number of hours missed from instruction to participate in activities programs but do not make any comparisons with the total school population. However, the report did address a comparison of participants in eighteen varsity sports to the total school population in the area of grade-point average. This report included both boys and girls varsity sports. The reported average grade-point average (GPA) for the general population of all reporting large high schools was 2.60; the total varsity GPA was 2.72.

"'The Battle of Waterloo," said the Duke of Wellington, 'was won on the playing fields of Eton'" (21, p. 177). However, as one looks at the literature, he finds that not everyone agrees with the Duke. In fact, the question of the activities programs in United States high schools has become a topic for a serious debate. Coleman (2), in The Adolescent Society, generates a thesis that because of the interscholastic structure of sports in high schools, a large amount of energy is diverted toward athletics and away from educational pursuits. Coleman (2) feels that the high school is a finite system and that time and energy spent on "frivolous" pursuits of team and school superiority and community honor divert energy away from the more substantive pursuits of better grades or higher career orientations. However, Jennings and Nathan (7) find Coleman's study
extensive but ambitious and stated that after looking at the data, "the only factor which could be used to predict success in later life was achievement in extracurricular activities" (7, p. 178).

Much of the data that have been generated on the consequences of the activities programs have been on the effects of participation in the athletic programs. Therefore, much of this review of the literature is directed toward athletic and non-athletic comparisons. Otto and Alwin (12) noted that "comparatively little has been done to explore the effects of other kinds of activities" (12, p. 112).

Many studies have addressed the question of achievement of athletes versus non-athletes, but the findings have been diverse. In an article entitled "High School Athletes are Brighter," Eidsmore (3) reported a study of 592 varsity football players from twenty-four of the top high schools in Iowa. He found that the football players' total grade-point average was 2.523, whereas the grade-point average of their non-participating classmates was 2.085. This comparison pointed to a significantly higher achievement rate by the football players.

Rehberg, in 1969, in a "speculative consideration," states,

Contrary to the belief that athletics is detrimental to educational pursuits, the evidence we have reviewed appears to support the belief that interscholastic athletics, specifically participation in interscholastic athletics, is conducive not only to
higher scholastic performance but to higher educational expectations as well (15, p. 88).

Taylor (20), in a study in 1972 of ninth- and tenth-grade female athletes in British Columbia, found that higher achievement for students involved in athletics is not confined to the male athlete. The study found that both ninth- and tenth-grade female athletes achieved a larger proportion of high grades in all subject areas.

Otto studied the hypothesis that participation in extracurricular activities both produces an independent effect on educational attainments and mediates the effects of family socioeconomic status, academic ability and school performance on educational attainments (11, p. 168).

The data were generated through a follow-up study of seventeen-year-old male high school students who were enrolled in the Lenawee County, Michigan, school system in 1958. The analysis showed that participation in the activities program plays a significant role in the educational attainment process. This study statistically controlled the effects of family socioeconomic background, academic ability and performance. Hedgpeth (5), in a doctoral dissertation that looked at a wide variety of activities program participation in the Arlington, Texas, school district, concluded that students who participate in school extracurricular activities tend to have higher academic grades than students who do not participate.
Spady (17), in a 1970 study entitled "Lament for the Letterman: Effects of Peer Status and Extracurricular Activities on Goals and Achievement," reported that athletes were deficient in the academic skills necessary for later success in college because athletics was their only form of involvement in the activities program. Participation only in athletics seemed to have no positive effect on educational attainment. Spady concluded that there was nothing but "lament for the letterman who did not engage in other phases of the extracurricular" (17, p. 701). Athletics was perceived by many students as an alternative rather than a complement to the academic mission of school.

Landers (8), in a similar study published in the Research Quarterly, found supporting evidence for Coleman's thesis. The study was designed to assess the influence of athletics on educational attainment. The study looked at a 1978 Maryland sample (N = 239) and a 1977 Pennsylvania sample (N = 403) of male and female high school students. The students were categorized into "athlete-only" and "athlete-service groups" and compared on Scholastic Aptitude Tests. Landers found that male students who participated only in athletics lacked the academic skills to fulfill their higher educational aspirations. The data produced by this study proved to be inconclusive for the female varsity athletes.

Picou and Curry (14) pointed out that most of the research up to 1974 in the area of athletic participation
versus no participation had been based on research done using urban athletes. Their study involved athletes in rural Alabama schools. The researchers found only modest support for the athletic participation-educational attainment hypothesis.

Perot (13), in an article published in the Dallas Morning News based on informal research conducted across the State of Texas, pointed out perceived discrepancies between athletics and academics in the State of Texas. Perot felt that there is little stated interest in academic achievement in many communities across the state. He stated several examples of overemphasis on the activities program. Asked if the tail was "wagging" the dog, a superintendent replied, "Ross, there is no dog left, but that's what the people want" (13, p. 36). A further example of athletics superseding academics was a situation involving the payment of a winning coach a salary higher than the superintendent and the principal. In an attempt to rectify the situation the superintendent and principal were given a substantial raise resulting in a cut in the salaries of classroom teachers (13).

As one looks at the data it becomes apparent that the place of the activities program on the high school campus is a serious question—a question that is nation-wide in scope but has particular importance in the State of Texas. The educational and political implications are numerous and important.
Related research in the area of the activities program has addressed the effects of participation on student dropout rates and student attendance rates. Much of the research data related to these topics are highly supportive of participation in the activities program. However, these data have been questioned by many lay people and educators alike.

In the area of student attendance, the research data point to a positive relationship between student attendance rate and activities program involvement; however, a common problem with much of the research is its failure to include class time missed to participate in activities programs as an absence from class. This type of absence is normally overlooked because it is not counted as an official absence from school.

Bertrand and Smith (1), in a study of eight high schools in the southern United States, found a significant relationship between participation in activities programs and the students' daily attendance rate. Laughlin (9), in a study of 243 high school athletes, found that fewer absences, cuts and referrals for disciplinary infractions occurred during the season than out of season. This report seems to indicate that athletes are much better "all-around students" during the time they are actively involved in interscholastic competition. Hedgpeth (5) concluded, in a similar study, that students who participate in school activities programs...
tend to have better school attendance than those who do not participate.

Contrasting data were reported by Harwick (4) in 1968. He studied the absences and grade-point averages of 200 lettermen and 400 non-lettermen at a high school in the Canal Zone. The study found no significant difference in the rate of attendance of lettermen and non-lettermen.

The bulk of the data that addresses the effect of participation on attendance, drop-out rate and student achievement supports the positive side of participation. Yet Eidsmor (3) observes, "the general public and especially educators, have long harbored the thought that athletes just do not measure up in academic performance to their classmates" (3, p. 76). On the other hand, Rehberg (15) writes that there are those teachers of physical education, coaches and certain laymen who assert that participation in interscholastic sports is beneficial to a student's academic pursuits. This faction reasons that, among other benefits, the competitive spirit and desire to win which is learned on the playing field is carried over into the classroom and the occupational world in the form of a desire for better grades, a better education and more prestigious occupation.

So the debate continues, fanned at the national level by several governmental reports including "A Nation at Risk" and in the State of Texas by "The Governor's Select Committee
on Education." One can only hope that everyone will take a hard look at the existing data as they seek improvement in the system.

Summary

A review of the literature indicates that a number of studies, both formal and informal, have been conducted in the area of participation in activities programs. These studies address the relationship of extracurricular participation to students' grades, attendance and college entrance examination scores. The majority of the literature presents data that seem to point toward a highly positive relationship between grades, attendance and test scores and participation in the extracurricular program. However, several of the studies contradicted this majority position.

The bulk of the literature speaks only to the relationship of athletic participation to the variables of grades, attendance and scores of college entrance tests. There is a shortage of literature that has addressed the effects of participation in the non-athletic portion of the activities program.
CHAPTER BIBLIOGRAPHY


CHAPTER III

DESIGN OF THE STUDY

This study was designed to determine the relationship of student participation in the activities program on school attendance, grade-point average and college entrance examinations. The study was conducted in four large high schools in the State of Texas. The research procedures used to fulfill the purposes of this study are described in this chapter.

Demographic Data

The high schools in this study ranged in size from 1,204 to 2,050 in grades 10 through 12. Two of the high schools were located in the Dallas metropolitan area and two were located in medium size towns in West Texas. The student population of the high schools selected varied somewhat with regard to ethnic make-up and socioeconomic backgrounds.

School A had a total school population of 1,612; 82.1 percent white, 8.4 percent black, 7.5 percent hispanic. The principal reported 65 students on free lunch. The school was located in a town of approximately 95,000 population.

School B had a total school population of 1,590; 85.1 percent white, 4.8 percent black, 7.5 percent hispanic. The principal reported 60 students on free lunch. The school was located in a town of approximately 101,000 population.
School C had a total school population of 1,204; 78.5 percent white, 1.6 percent black, 13.5 percent Hispanic. The principal reported 100 students on free lunch. The school was located in a town of approximately 90,000 population.

School D had a total school population of 2,050; 91.6 percent white, 5 percent black, 2 percent Hispanic. The principal reported 75 students on free lunch. The school was located in a suburban city of approximately 33,000 population.

The total student population of the high schools was 6,456 in grades 10 through 12. The ethnic breakdown for the total population of students was 85.17 percent white, 5.16 percent black, and 7.27 percent Hispanic. There were a total of 300 students on free lunch (Table I).

### TABLE I

DEMOGRAPHIC DATA

<table>
<thead>
<tr>
<th>School</th>
<th>Population Grade 10-12</th>
<th>Percent White</th>
<th>Percent Black</th>
<th>Percent Hispanic</th>
<th>Students on Free Lunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1,612</td>
<td>82.1</td>
<td>8.4</td>
<td>7.5</td>
<td>65</td>
</tr>
<tr>
<td>B</td>
<td>1,590</td>
<td>85.1</td>
<td>4.8</td>
<td>7.5</td>
<td>60</td>
</tr>
<tr>
<td>C</td>
<td>1,204</td>
<td>78.5</td>
<td>1.6</td>
<td>13.5</td>
<td>100</td>
</tr>
<tr>
<td>D</td>
<td>2,050</td>
<td>91.6</td>
<td>5.0</td>
<td>2.0</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>6,456</td>
<td>85.17</td>
<td>5.16</td>
<td>7.27</td>
<td>300</td>
</tr>
</tbody>
</table>
Procedures for Selection of Subjects

In mid-May, 1984, several high school principals were contacted. The principals were asked if they were willing to have their high school represented in this study. After the principal expressed a willingness to participate, the superintendent from each district was contacted and permission was obtained to proceed.

After the high schools were identified, the researcher visited each high school and secured the appropriate data for the general population of each school. In addition to the general data the researcher secured copies of University Interscholastic League eligibility reports and copies of teacher grade books for the seven activities to be studied. The list of students who participated in the seven activities were then reduced to the males participating by cross checking the student's name with information on sex contained on the student's permanent record file. This process produced a list of male participants in the seven activities in each of the four high schools.

A list of random numbers was applied to each list to produce a sample of ten male students from each activity for each school. This process produced a total sample of 280 male students representing participation in seven activities in four high schools. Each activity was represented by a sample of forty male students.
Each principal was asked to send a memo to the head coach or director of football, basketball, baseball, track, band, choir, and speech-drama in his respective school. The memo (Appendix B) asked each head coach or director to list and document the number of instructional hours that students involved in each activity missed during the 1983-1984 school year. The responses were verified through school trip lists, published schedules and consultation with each of the principals.

After the sample was identified, the researcher returned to each high school. Each selected student's school record was removed from the permanent school file. The researcher determined grade-point average, number of yearly absences and scores on college entrance examination from the student's official school records.

Data Treatment

The student information sheets were classified by school and were tabulated by hand, a mean was established for the SAT, average daily attendance (ADA), grade-point average (GPA), instructional hours missed to participate (IHMP), and total hours missed from school for the 1983-1984 school year. In all cases the figure for "total hours missed" was derived by multiplying the number of days missed in ADA times six hours and adding that figure to the number of instructional hours missed to participate. The resulting figure was thus, the
total hours of school missed for the 1983-1984 school year. This process was followed for football, basketball, baseball, track, band, choir, and speech-drama in each of the four schools.

The information sheets were then separated and classified by the seven activities to be studied. A mean score on SAT, average daily attendance, grade-point average, instructional hours missed to participate and total hours missed from school for the 1983-1984 school year was determined for each of the seven activities. These scores were averaged for the total sample by activity.

The final step involving use of the student tally sheet was to establish a mean score for the total sample on SAT scores, ADA, GPA, IHMP, and total hours missed for the 1983-1984 school year. This step established mean scores for the 280 male students who were chosen as subjects for this study.

The school tally sheets were used to tabulate the school-wide means in SAT scores, average daily attendance and grade-point average. These scores were taken from the official school records. The school tally sheets were also used to establish the means for SAT scores, average daily attendance and grade-point average for the four schools involved in the study.
Summary

Chapter III provided information on procedures and methodology used in conducting this study. The population characteristics of each of the four high schools was described. The procedures for collection of data and techniques used to tabulate the data were detailed. The treatment of the data was summarized. Chapter IV presents narratives of the data accompanied by tabled and graphic illustrations.
CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Purposes of the Study

The main purpose of this study was to provide data for state officials, school administrators and school boards as they seek to make informed decisions concerning activities programs and their place in educational systems. The specific purpose was to determine if involvement in selected school activities had any relationship to the variables grade-point average, attendance and college entrance examinations.

Presentation of Data

The data for this study were gathered from information sheets. The researcher assembled the data through personal visits to the high schools involved in the study. Four high schools in Texas were selected for the study. The four high schools' student population ranged from 1,204 to 2,050. A description of the procedure for gathering and tabulating the data has been outlined in Chapter III.

Narratives for this chapter present the research questions and present information concerning the total student population and those involved in selected student activities concerning grade-point averages, school attendance
and scores on college entrance examinations (only the SAT scores were considered for this variable because a very limited number of the selected sample took the ACT). The reader should consider that the mean score for varsity participants was derived from a limited number of scores. This was due to the fact that grades ten through twelve were considered and not all of the participants had taken the test. The seven selected activities are football, basketball, baseball, track, band, choir and speech-drama.

The selected students in these activities were compared on the three variables, between activities, between students, between schools and to the total populations. The total sample population consisted of 280 male students, ten students from each activity for each of the four high schools. These comparisons are presented in thirty-six illustrations with accompanying explanations.

**Football**

Is there a difference between male students who participate in football and the total student population with regard to attendance rate, grade-point average and scores on college entrance examination?

**Attendance rate**—Football players missed an average of 2.75 hours of class time to participate. Class time missed to participate was added to hours missed for normal
reasons to generate the total number of hours the participant was absent from school. The comparisons indicate an extremely positive relationship between participation in football and attendance rate. The mean of the selected sample of football players for the four schools was 34.55 hours class time missed. The mean of the four high schools total student population was 68.57 hours of class time missed. The varsity football player spent on the average 34.02 more hours per year involved in classroom instruction than the average for the total student population. This shows that the varsity football participant averaged missing 49.62 percent less time than the average for the total student body. Class time missed includes the amount of time that class was missed due to participation.

All four high schools showed a positive relationship between participation in varsity football and high attendance rate. School C exhibited the highest positive relationship between participation in varsity football and attendance rate. The football players in School C were involved in classroom instruction 45.45 more hours than the average for the total student body. School A's varsity football players' attendance rate was the lowest of the four selected schools. The varsity football players selected from School A were involved in classroom instruction 18.34 more hours than the total student body of School A. The varsity football players
selected from Schools B and D were involved in classroom instruction 42.0 and 29.68 more hours, respectively, than the total student body of these schools (Figure 1).

**Grade-point average.**—A positive relationship existed between participation in varsity football and grade-point average. The mean grade-point average for the total sample of varsity football players was 3.05 while the mean grade-point average of the total student population of all schools was 2.79. The comparison of mean grade-point average for the total population of students to the mean for the total sample of football participants indicated a difference of +.26 in favor of the football participants. However, the varsity football players in School A did not show this relationship. School A varsity football players had .06 less grade points than did the total student population in School A. The greatest difference in grade-point average was observed in School C, where the varsity football players had a mean grade-point average .57 points higher than the total student population. The varsity football players in School B had a .27 higher grade-point average than did the total student population in School B and the varsity football players in School D had a .24 higher grade-point average than the total student population in School D (Figure 2).

**College entrance examination.**—No relationship could be determined between participation in varsity football and
Fig. 2--Grade-point average, football
scores on the SAT. Varsity football players' mean test scores were six points lower than the mean test scores for the total student population. This difference was so slight that no relationship could be established. In two schools the SAT scores were higher for football participants and in two schools the SAT scores were lower for football participants (Figure 3, Table II).

| TABLE II |
| COMPARISON OF FOOTBALL PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED |

<table>
<thead>
<tr>
<th>Variable</th>
<th>Football Participants</th>
<th>Total Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>905.88</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>3.05</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>34.55 hrs.</td>
<td>68.57 hrs.</td>
</tr>
</tbody>
</table>

**Basketball**

Is there a difference between male students who participate in basketball and the total student population with regard to attendance rate, grade-point average and scores on college entrance examinations?

**Attendance rate.**—The average participant in varsity basketball missed 44.80 hours of class time. The average
for the total student population was 68.57 hours. The selected sample of basketball players spent 23.77 more hours involved in classroom instruction than the average for the total student body. This shows that the varsity basketball participant missed 34.66 percent less class time than the average for the total student body. School A basketball players were involved in classroom instruction an average of 20.94 hours more than the average for the total student body in School A. There was no difference observed between basketball players in School B and the total school population with regard to hours missed. School C basketball players were involved in classroom instruction 33.85 more hours than the average for the total student population in School C. The selected basketball players in School D were involved in classroom instruction 37.14 more hours than the average for the total student population from School D (Figure 4).

Grade-point average.—The varsity basketball players exhibited a consistently higher grade-point average than the average for the total student body. The average GPA for the varsity basketball participants was 3.16, while the average for the total student body was 2.79. The difference in the total population of all schools and the total sample was +.37 points in favor of the basketball players. The difference in School A was .34, School B was .50, School C was .20 and School D was .48. The selected sample of varsity
basketball players had higher grade-point averages in each school than the average for the total student population in each school (Figure 5).

College entrance examination.—A total of forty varsity basketball participants were selected for the sample, of this number fifteen had a score on the SAT. The total sample of varsity basketball players had a mean SAT score of 1039.52. The mean SAT score for the total student population was 911.75. This represented a difference of +127.77 points in favor of the basketball participants. The varsity basketball players in Schools A, B and D had a mean SAT score that was in excess of 100 points higher than the mean score for the total student population of their respective schools. Selected varsity basketball players from School C had a mean SAT score 102 points lower than the mean score for the total student population. However, only two of the ten selected basketball players in School C had a score recorded for the SAT (Figure 6, Table III).

### TABLE III

COMPARISON OF BASKETBALL PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED

<table>
<thead>
<tr>
<th>Variable</th>
<th>Basketball Participants</th>
<th>Total Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>1039.52</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>3.16</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>44.80</td>
<td>68.57</td>
</tr>
</tbody>
</table>
Fig. 5--Grade-point average, basketball
Fig. 6--SAT score, basketball
Is there a difference between students who participate in baseball and the total student population with regard to attendance rate, grade-point average and college entrance examination scores?

Attendance rate.—The average varsity player missed 53.05 hours of class time, while the average class time missed for the total student population was 68.57 hours. The comparison of the mean of the total school population to the mean varsity baseball players revealed a difference of 15.54 hours. This difference indicated that the varsity baseball player averaged spending 15.54 more hours involved in classroom instruction than the average for the total student population. The average varsity baseball player missed 22.66 percent less class time than the average for the total student population.

The comparison by schools indicated that in Schools A, C and D the varsity baseball player spent more time involved in classroom instruction than the average for the total student population at the respective schools. The differences ranged from 30.04 hours in School D to 17.14 hours in School A. The varsity baseball players from School C spent 27.25 more hours involved in classroom instruction than the average for the total student population of School C. However, in School B the varsity baseball players averaged spending 16.40
less hours in class than the average for the total student population of School B (Figure 7).

**Grade-point average.**—The average GPA for varsity baseball participants was 3.02, while the average GPA for the total student population was 2.79. The comparison of mean grade-point average of the total population to the mean of varsity baseball players indicated a difference of +.23 grade points in favor of the baseball players. This difference revealed that the varsity baseball player had a .23 higher grade-point average than that for the total student population.

The comparison of grade-point average by school revealed differences ranging from .57 grade points in School D to .00 grade points in School C. In all schools except School C the varsity baseball players had higher grade-point averages than the average for the total student population in their respective schools. The varsity baseball players from School A had .26 higher grade-point average than the average for the total student population of School A. The varsity baseball players from School B had a .12 higher grade-point average than did the total student population of School B (Figure 8).

**College entrance examination.**—There were a total of forty varsity baseball players selected for the sample, of this number sixteen had taken the SAT. The average baseball
Fig. 7--Hours missed, baseball
Fig. 3--Grade-point average, baseball
player had a score of 931.88 on the SAT, while the average score for the total student population was 911.75. The comparison of the total population of students to the total sample revealed a difference of +20.13 points in favor of the baseball players. This difference indicated that the varsity baseball player scored an average of 20.13 points higher on the SAT than the total student population.

Varsity baseball players from School A scored an average of 153 points higher than the mean for the total population of School A. The average SAT score for varsity baseball players from School B was 134 points lower than the mean score for the total population from School B. The varsity baseball players from School C scored 52 points higher on the SAT than the average for the total student population from School C and the varsity baseball players from School D scored an average of 78.75 points higher than the average for the total student population of School D (Figure 9, Table IV).

### TABLE IV

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseball Participants</th>
<th>Total Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>931.88</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>3.02</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>53.03</td>
<td>68.57</td>
</tr>
</tbody>
</table>
Track

Is there a difference between male students who participate in track and the total student population with regard to attendance rate, grade-point average and scores on college entrance examinations?

Attendance rate.—The mean hours of class time missed by the track participant was 32.16 hours, while the average for the total student population was 68.57. The comparison of total hours of class time missed by the student body to the total sample of varsity track participants indicated a difference of 36.41 hours in favor of the varsity track participants. The track participants missed 53.99 percent less class time than the average for the total student population.

The comparisons of the individual schools revealed the following differences: track participants from School A averaged spending 44.34 more hours involved in classroom instruction than the total student population from School A, track participants from School B averaged spending 30.80 more hours involved in classroom instruction than the total student population from School B, track participants from School C averaged spending 40.25 more hours involved in classroom instruction than the total student population from School C and track participants from School D averaged
spending 26.24 more hours involved in classroom instruction than the total student population from School D (Figure 10).

Grade-point average.—The mean GPA for the total sample of track participants was 2.87, while the mean GPA for the total student population was 2.79. The comparison of mean grade-point average of the total population of students to the mean of the total sample of track participants indicated a difference of +.09 grade points in favor of varsity track participants.

The comparisons of the individual schools revealed the following differences: track participants from School A averaged .18 less grade points than the average for the total student population of School A, track participants from School B averaged .20 more grade points than the total student population of School B, track participants from School C averaged .21 more grade points than the total student population of School C, and track participants from School D averaged .12 more grade points than the total student population of School D (Figure 11).

College entrance examination.—There were a total of forty varsity track participants selected for the sample, of this number fifteen had a score on the SAT. The track participants had an average score of 815.33 on the SAT, while the average score for the total student population was 911.75.
Fig. 10--Hours missed, track
Fig. 11—Grade-point average, track
The comparison of mean SAT score of the total population of students to the mean of the total sample of varsity track participants indicated a difference of +96.42 points in favor of the total student population.

The comparison of the individual schools revealed the following differences: track participants from School A averaged scoring 58 points higher on the SAT than the total student population of School A, track participants from School B averaged 37.50 points higher on the SAT than the total student population of School B, track participants from School C averaged 132.25 points lower on the SAT than the total student population of School C and track participants from School D averaged 1.43 points lower on the SAT than the total student population of School D (Figure 12, Table V).

### TABLE V

**COMPARISON OF TRACK PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Track Participants</th>
<th>Total Student Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>815.33</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>2.87</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>32.16</td>
<td>68.57</td>
</tr>
</tbody>
</table>
Fig. 12--SAT score, track
Is there a difference between male students who participate in band and the total student population with regard to attendance rate, grade-point average and scores on college entrance examinations?

**Attendance rate.**—The band participant missed 47.75 hours of class time while the average class time missed for the total student population was 68.57 hours. The comparison of average hours of class time missed by the total student population to the total sample of band participants indicated a difference of +20.82 hours in favor of the band participants. The varsity band participant missed 30.36 percent less class time than the average for the total student population.

The comparisons of the individual schools revealed the following differences: band participants from School A averaged 12.14 more hours involved in classroom instruction than the total student population of School A, band participants from School B averaged 14.00 more hours involved in classroom instruction than the total student population of School B, band participants from School C averaged 55.65 more hours involved in classroom instruction than the total student population of School C and band participants from School D averaged 31.94 more hours involved in classroom
Grade-point average.—The mean grade-point average for the varsity band participants was 3.10 while the mean grade-point average for the total student population was 2.79. The comparison of mean grade-point average of the total population of students to the mean of the total sample of band participants indicated a difference of +.31 grade-points in favor of the band participants.

The comparisons of the individual schools revealed the following differences: band participants from School A averaged .21 more grade points than the total student population of School A, band participants from School B averaged .25 more grade points than the total student population of School B, band participants from School C averaged .36 more grade points than the total student population of School C, and band participants from School D averaged .41 more grade points than the total student population of School D (Figure 14).

College entrance examination.—The band participant had an average score of 1077.33 on the SAT, while the average score for the total student population was 911.75. There were a total of forty band participants selected for the sample, of this number fifteen had a score on the SAT. The
Fig. 13--Hours missed, band
Fig. 14--Grade-point average, band
The comparison of mean SAT score of the total population of students to the mean of the total sample of band participants indicated a difference of +165.58 points in favor of the band participants.

The comparison of the means of the individual schools revealed the following differences: band participants from School A averaged 151 points higher than the total student population of School A, band participants from School B averaged 105 points higher than the total student population of School B, band participants from School C averaged 7 points lower on the SAT than the total student population of School C and band participants from School D averaged 234.29 points higher on the SAT than the total student population of School D (Figure 15, Table VI).

**TABLE VI**

**COMPARISON OF BAND PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Band Participants</th>
<th>Total School Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>1077.33</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>3.10</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>47.75</td>
<td>68.57</td>
</tr>
</tbody>
</table>
Fig. 15--SAT score, band
Choir

Is there a difference between male students who participate in choir and the total student population with regard to attendance rate, grade-point average and scores on college entrance examination?

Attendance rate.--The varsity choir participant averaged missing 60.00 hours of class time, while the average class time missed by the total student population was 68.57 hours. The comparison of the mean of the total population to the mean of the selected choir participants revealed a difference of +8.57 hours in favor of the choir participants. The choir participant missed 12.50 percent less class time than the average for the total student population.

The comparisons of the individual schools revealed the following differences: choir participants from School A averaged 11.86 less hours involved in classroom instruction than the total student population of School A, choir participants from School B averaged 2.40 less hours involved in classroom instruction than the total student population of School B, choir participants from School C averaged 20.65 more hours involved in classroom instruction than the total student population of School C and choir participants from School D averaged 24.74 more hours involved in classroom instruction than the total student population of School D (Figure 16).
Grade-point average.—The mean grade-point average for the total sample of choir participants was 2.93, while the mean grade-point average for the total student population was 2.79. The comparison of mean grade-point average of the total population of students to the mean of the total sample of choir participants indicated a difference of +.14 grade points in favor of the choir participants.

The comparisons of the individual schools revealed the following differences: choir participants from School A averaged .52 less grade points than the total student population of School A, choir participants from School B averaged .27 more grade points than the total student population of School B, choir participants from School C averaged .54 more grade points than the total student population of School C, and the choir participants from School D averaged .27 more grade points than the total student population of School D (Figure 17).

College entrance examination.—The mean score of the SAT for the total sample of choir participants was 950.77, while the mean score for the total student population was 911.75. There were a total of forty choir participants selected for the sample, of this number thirteen had a score on the SAT. The comparison of the mean SAT score of the total population of students to the mean of the total sample
Fig. 17—Grade-point average, choir
of choir participants indicated a difference of +39.02 points, in favor of the choir participants.

The comparison of the means of the individual schools revealed the following differences: choir participants from School A averaged 343 points higher than the total student population of School A, choir participants from School B averaged 11 points lower than the total student population of School B, Choir participants from School C averaged 72 points lower than the total student population of School C and choir participants from School D averaged 42.86 points higher than the total student population of School D (Figure 18, Table VII).

**TABLE VII**

**COMPARISON OF CHOIR PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Choir Participants</th>
<th>Total School Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>950.77</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>2.93</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>60.00</td>
<td>68.57</td>
</tr>
</tbody>
</table>

**Speech-Drama**

Is there a difference between male students who participate in speech-drama and the total student population
Fig. 18—SAT score, choir
with regard to attendance rate, grade-point average and scores on college entrance examinations?

**Attendance rate.**--The speech-drama participant missed 64.43 hours of class time, while the average class time missed by the total student population was 68.57 hours. The comparison of the average of total hours of class time missed by the total student population to the total sample of speech-drama participants indicated an average difference of +3.14 hours in favor of the speech-drama participant. This shows that the speech-drama participant missed 4.5 percent less class time than the average for the total student population.

The comparisons of the individual schools revealed the following differences: speech-drama participants from School A averaged 11.86 less hours per year involved in classroom instruction than the total student population of School A, speech-drama participants from School B averaged 2.20 less hours per year involved in classroom instruction than the total student population from School B, speech-drama participants from School C averaged 1.15 less hours per year involved in classroom instruction than the total student population of School C and speech-drama participants from School D averaged 32.94 more hours per year involved in classroom instruction than the total student population of School D (Figure 19).
Fig. 19--Hours missed, speech-drama
Grade-point average.--The mean grade-point average for the total sample of speech-drama participants was 3.20, while the mean of the total student population was 2.79. The comparison of mean grade-point average of the total population of students to the mean of the total sample of speech and drama participants indicated a difference of +.41 grade points in favor of speech-drama participants.

The comparison of the individual schools revealed the following differences: speech-drama participants from School A had .35 higher grade-point average than the total student body average. Speech-drama participants from School B had .39 higher grade-point average; speech-drama students from School C had .71 higher grade-point average; and speech-drama participants from School D had .17 higher grade-point average (Figure 20).

College entrance examination.--The mean score for the total sample of speech-drama participants was 952.50, while the mean for the total student population was 911.75. There were a total of forty speech-drama participants selected for the sample, of this number sixteen had a score on the SAT. The comparison of the mean SAT score of the total population of students to the mean of the total sample of speech-drama participants indicated a difference of +40.75 points in favor of the speech-drama participants.
Fig. 20—Grade-point average, speech-drama
The comparisons of the means of the individual schools revealed the following differences: speech-drama participants in School A averaged 229.0 points higher on the SAT than the average for the total student body; speech-drama participants from School B averaged 28.0 less points; speech-drama students from School C averaged 32.0 less points; and speech-drama participants from School D averaged 72.96 more points (Figure 21, Table VIII).

TABLE VIII
COMPARISON OF SPEECH-DRAMA PARTICIPANTS AND TOTAL STUDENT POPULATION ON SAT, GPA, AND TOTAL CLASS HOURS MISSED

<table>
<thead>
<tr>
<th>Variable</th>
<th>Speech-Drama Participants</th>
<th>Total School Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>952.50</td>
<td>911.75</td>
</tr>
<tr>
<td>GPA</td>
<td>3.20</td>
<td>2.79</td>
</tr>
<tr>
<td>Total class hours missed</td>
<td>64.43</td>
<td>68.57</td>
</tr>
</tbody>
</table>

Total Sample—All Populations

Is there a difference between the total sample of male students who participate in the selected activities and the total student population with regard to attendance rate, grade-point average, and college entrance examination scores?

Attendance rate.—The mean of the means for the total student population of the four high schools was 68.57 hours
of class time missed. The mean for class time missed by the total population of participants in the selected activities was 48.10 hours. The comparison to the total student population revealed a difference of +20.47 hours in favor of the activity program participants.

The comparisons of class time missed by activity to the mean of the total school population revealed the following differences: the male student involved in football spent 34.02 more hours per year involved in classroom instruction; the male student involved in basketball spent 23.77 more hours per year involved in classroom activities; the male student involved in baseball spent 15.54 more hours per year involved in classroom instruction; the male student involved in track spent 36.41 more hours per year involved in classroom instruction; the male student involved in band spent 20.82 more hours per year involved in classroom instruction; the male student involved in choir spent 8.57 more hours per year involved in classroom instruction; the male student involved in speech-drama spent 4.14 more hours per year involved in classroom instruction (Figure 22).

Grade-point average.—The mean of the means for the total student population of the four high schools' grade-point average was 2.79. The mean grade-point average for the total population of participants in the selected activities was 3.03 grade points. The comparison of the
Fig. 22--Hours missed, all schools
grade-point average of the activity participants to the total population revealed a difference of +.24 grade points in favor of the activity participants.

The comparisons of grade-point average by activity to the mean of the total school population revealed the following differences: the male student involved in football had a .26 higher grade-point average than the total student body; the male student involved in basketball had a .37 higher grade-point average; the male student involved in baseball had a .23 higher grade-point average; the male student involved in track had a .08 higher grade-point average; the male student involved in band had a .31 higher grade-point average; the male student involved in choir had a .14 higher grade-point average; the male student involved in speech and drama had a .41 higher grade-point average (Figure 23).

College entrance examination.—The mean of the means for the total student population of the four high schools was 911.75 on the SAT. Of the 280 activity program participants selected for the sample, 114 had a score on the SAT. The mean score for these participants was 957.28. The comparison of the mean of the activity participants to the mean of the total population of students revealed a difference of +45.53 points in favor of the activity program participants.
Fig. 23--Grade-point average, all schools
The comparisons of SAT scores by activity to the mean of the total school population revealed the following differences: the male students involved in football scored 5.87 lower on the SAT; the male students involved in basketball scored 122.79 points higher on the SAT; the male students involved in baseball scored 20.13 points higher on the SAT; the male students involved in track scored 96.42 points lower on the SAT; the male students involved in band scored 165.58 points higher on the SAT; the male students involved in choir scored 39.02 points higher on the SAT; and the male students involved in speech-drama scored 40.75 points higher on the SAT (Figure 24, Table IX).

The following comparisons represent a comparison of the selected activities in each of the four schools. The variables of class time missed, grade-point average and scores on the SAT were compared by activities in the four schools.

School A—Within School Comparisons by Activity

Class time missed.—The mean number of hours of class time missed by the total student population from School A was 76.14 hours per year. The mean number of hours of class time missed by the average male students involved in the activities program was 63.4 hours per year. This represents a difference of 12.74 hours per year in favor of the activities program participants.
FIG. 24—SAT score means, total population
### TABLE IX

**COMPARISON OF MEANS FOR ALL POPULATIONS**

<table>
<thead>
<tr>
<th>Activity</th>
<th>SAT</th>
<th>Days Missed</th>
<th>GPA</th>
<th>IHMP</th>
<th>Total Hr. Missed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>905.88</td>
<td>5.30</td>
<td>3.05</td>
<td>2.75</td>
<td>34.55</td>
</tr>
<tr>
<td>Basketball</td>
<td>1039.52</td>
<td>5.05</td>
<td>3.16</td>
<td>14.50</td>
<td>44.80</td>
</tr>
<tr>
<td>Baseball</td>
<td>931.88</td>
<td>6.53</td>
<td>3.02</td>
<td>13.88</td>
<td>53.03</td>
</tr>
<tr>
<td>Track</td>
<td>815.33</td>
<td>2.87</td>
<td>2.87</td>
<td>4.38</td>
<td>32.16</td>
</tr>
<tr>
<td>Band</td>
<td>1077.33</td>
<td>5.13</td>
<td>3.10</td>
<td>17.00</td>
<td>47.75</td>
</tr>
<tr>
<td>Choir</td>
<td>950.77</td>
<td>7.75</td>
<td>2.93</td>
<td>13.50</td>
<td>60.00</td>
</tr>
<tr>
<td>Speech-Drama</td>
<td>952.50</td>
<td>5.80</td>
<td>3.20</td>
<td>29.63</td>
<td>64.43</td>
</tr>
<tr>
<td>Total activity</td>
<td>957.28</td>
<td>5.74</td>
<td>3.03</td>
<td>13.66</td>
<td>48.10</td>
</tr>
<tr>
<td>participants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total student</td>
<td>911.75</td>
<td>11.43</td>
<td>2.74</td>
<td>N/A</td>
<td>68.57</td>
</tr>
<tr>
<td>population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The comparison by activities revealed the following differences in School A: the football players, on the average, spent 18.34 more hours per year involved in classroom instruction than the average for the total student population; the basketball players spent 20.94 more hours per year involved in classroom instruction; the baseball players spent 17.14 more hours per year involved in classroom instruction; the track participants spent 44.43 more hours per year involved in classroom instruction; the band participants spent 12.14 more hours per year involved in
classroom instruction; the choir participants spent 11.86 less hours per year involved in classroom instruction; the speech-drama participants spent 4.86 less hours per year involved in classroom instruction (Figure 25).

**Grade-point average.**—The mean grade-point average for the total population of students from School A was 2.61. The mean grade-point average of the male students involved in the activities program was 2.67. The male students involved in the activities program averaged .07 higher grade-point average than the total student population of School A.

The comparisons by activity revealed the following differences: the football players from School A had a .06 lower grade-point average than the mean for the total population; the basketball players had a .34 higher grade-point average; the baseball players had a .26 higher grade-point average; the track participants had a .18 lower grade-point average; the band participants had a .21 higher grade-point average; the choir participants had a .52 lower grade-point average; and the participants in speech-drama had a .35 higher grade-point average (Figure 26).

**College entrance examination.**—The average SAT score for the total student population from School A was 937. The average SAT score for male students involved in the activities program from School A was 1,017.32. The male
Fig. 25--Hours missed, School A
Fig. 26--Grade-point average, School A
students involved in the activities program averaged 80.23 points higher on the SAT than the average for the total student population. The average SAT scores from individual activities were produced from a limited number of scores—of 70 participants selected for the sample only 23 had a score on the SAT.

The comparisons by activity revealed the following differences: the football players averaged 45.00 points lower on the SAT than the average for the total student population; the average basketball players averaged 159.00 points higher on the SAT; the baseball players averaged 153.00 points higher on the SAT; the track participants averaged 58.00 points higher on the SAT; the band participants averaged 1.49 points higher on the SAT; the choir participants averaged 343.00 points higher on the SAT; and the speech-drama participants averaged 29.00 points higher on the SAT (Figure 27, Table X).

School B—Within School Comparisons by Activity

Class time missed.—The mean number of hours of class time missed by the total student population from School B was 67.2 hours per year. The mean number of hours of class time missed by the average male student involved in the activities program was 57.8 hours per year. This represents
Fig. 27 -- SAT score means, School A
### TABLE X

**SCHOOL A MEANS**

<table>
<thead>
<tr>
<th>Activity</th>
<th>SAT</th>
<th>Days Missed</th>
<th>GPA</th>
<th>IHMP</th>
<th>Total Hr. Missed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>892</td>
<td>8.8</td>
<td>2.55</td>
<td>5</td>
<td>57.80</td>
</tr>
<tr>
<td>Basketball</td>
<td>1096</td>
<td>6.7</td>
<td>2.95</td>
<td>15</td>
<td>55.20</td>
</tr>
<tr>
<td>Baseball</td>
<td>1090</td>
<td>8.5</td>
<td>2.87</td>
<td>8</td>
<td>59.00</td>
</tr>
<tr>
<td>Track</td>
<td>990</td>
<td>4.8</td>
<td>2.43</td>
<td>3</td>
<td>31.80</td>
</tr>
<tr>
<td>Band</td>
<td>1086</td>
<td>9.0</td>
<td>2.82</td>
<td>10</td>
<td>64.00</td>
</tr>
<tr>
<td>Choir</td>
<td>1280</td>
<td>12.0</td>
<td>2.09</td>
<td>16</td>
<td>88.00</td>
</tr>
<tr>
<td>Speech-drama</td>
<td>966</td>
<td>9.0</td>
<td>2.96</td>
<td>34</td>
<td>88.00</td>
</tr>
<tr>
<td>Total activity program</td>
<td>1,017.23</td>
<td>8.40</td>
<td>2.67</td>
<td>13.00</td>
<td>63.40</td>
</tr>
<tr>
<td>Total student population</td>
<td>937.00</td>
<td>12.69</td>
<td>2.61</td>
<td>N/A</td>
<td>76.14</td>
</tr>
</tbody>
</table>

A difference of +9.4 hours per year in favor of the students involved in the activities program.

The comparison by activities revealed the following differences in School B: the football players, on the average, spent 42.0 more hours per year involved in classroom instruction than the average for the total student population; the basketball players averaged the same amount of time involved in classroom instruction; the baseball players averaged 16.4 less hours per year involved in classroom instruction; the average track participants averaged
30.8 more hours per year involved in classroom instruction; the band participants averaged 14.0 more hours per year involved in classroom instruction; the choir participants averaged 2.4 less hours per year involved in classroom instruction; the speech-drama participants averaged 2.2 less hours per year involved in classroom instruction (Figure 28).

Grade-point average.--The mean grade-point average for the total population of students from School B was 2.70. The mean grade-point average of the male students involved in the activities program was 2.99. This represents a difference of +.29 grade points in favor of the activity program participants.

The comparisons by activity revealed the following differences in School B: the football players had a .27 higher grade-point average; the basketball players had a .50 higher grade-point average; the baseball players had a .12 higher grade-point average; the track participants had a .20 higher grade-point average; the band participants had a .25 higher grade-point average; the choir participants had a .27 higher grade-point average; and the participants in speech-drama had a .39 higher grade-point average (Figure 29).

College entrance examination.--The average SAT score for the total student population from school B was 938. The average SAT score for male students involved in the
Fig. 28--Hours missed, School B
Fig. 29--Grade-point average, School B
activities program from School B was 926.95. This represents a difference of +11.05 points in favor of the total student population. Average SAT scores from individual activities were produced from a limited number of scores—of seventy participants selected for the sample, twenty-three had a score on the SAT.

The comparisons by activity revealed the following differences in School B: the football players averaged 161.00 points lower on the SAT; the basketball players averaged 120.00 points higher on the SAT; the baseball players averaged 134.00 points lower on the SAT; the track participants averaged 37.00 points higher on the SAT; the band participants averaged 105.00 points higher on the SAT; the choir participants averaged 11.00 points lower on the SAT; the speech-drama participants averaged 28.00 points lower on the SAT (Figure 30, Table XI).

School C—Within School Comparison by Activity

Class time missed.--The mean number of hours of class time missed by the total student population from School C was 76.65 hours per year. The mean number of hours of class time missed by the male students involved in the activities program was 49.73 hours per year. This represents a difference of +26.92 hours per year in favor of the activities program participants.
Fig. 30--SAT score means, School B
The comparison by activities revealed the following differences in School C: the football players averaged 45.45 more hours per year involved in classroom instruction; the basketball players averaged 33.85 more hours per year involved in classroom instruction; the baseball players averaged 27.25 more hours per year involved in classroom instruction; the track participants averaged 40.25 more hours per year involved in classroom instruction; the band participants averaged 22.65 more hours per year involved in classroom instruction; the
choir participants averaged 20.65 more hours per year in classroom instruction; and the speech-drama participants averaged 1.05 less hours per year involved in classroom instruction (Figure 31).

Grade-point average.---The mean grade-point average for the total population of students from School C was 2.76. The mean grade-point average of the male students involved in the activities program was 3.13. This represents a difference of +.37 grade points in favor of the activities program participants.

The comparisons by activity revealed the following differences in School C: the football players had a .57 higher grade-point average; the basketball players had a .20 higher grade-point average; the baseball players had the same grade-point average as the average for the total student population; the track participants had a .21 higher grade-point average; the band participants had a .36 higher grade-point average; the choir participants had a .54 higher grade-point average; and the speech-drama participants had a .71 higher grade-point average (Figure 32).

College entrance examination.---The average SAT score for the total student population from School C was 852. The average SAT score for male students involved in the activities program from School C was 801.25. This represents a
Fig. 32--Grade-point average, School C
difference of +50.75 points in favor of the total student population. Average SAT scores from individual activities were produced from a limited number of scores—of seventy participants selected for the sample, sixteen had a score on the SAT.

The comparisons by activity revealed the following differences in School C: the football players averaged 23.00 points higher on the SAT than the average for the total student population; the basketball players averaged 102.00 points lower on the SAT; the baseball players averaged 157.00 points higher on the SAT; the track participants averaged 134.25 points lower on the SAT; the band participants averaged 7.00 points lower on the SAT; the choir participants averaged 72.00 points lower on the SAT; and the speech-drama participants averaged 32.00 points lower on the SAT (Figure 33, Table XII).

School D—Within School Comparison by Activities

Class time missed.--The mean number of hours class time missed by the total student population from School D was 51.14 hours per year. The mean number of hours of class time missed by the male students involved in the activities program was 21.46 hours per year. This represents a difference of +29.68 hours per year in favor of the activities program participants.
Fig. 33--SAT score means, School C
TABLE XII
SCHOOL C MEANS

<table>
<thead>
<tr>
<th>Activity</th>
<th>SAT</th>
<th>Days Missed</th>
<th>GPA</th>
<th>IHMP</th>
<th>Total Hr. Missed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>875</td>
<td>5.2</td>
<td>3.33</td>
<td>0</td>
<td>31.2</td>
</tr>
<tr>
<td>Basketball</td>
<td>750</td>
<td>6.8</td>
<td>2.96</td>
<td>2</td>
<td>42.8</td>
</tr>
<tr>
<td>Baseball</td>
<td>905</td>
<td>7.4</td>
<td>2.76</td>
<td>5</td>
<td>49.4</td>
</tr>
<tr>
<td>Track</td>
<td>717.75</td>
<td>5.4</td>
<td>2.97</td>
<td>4</td>
<td>36.4</td>
</tr>
<tr>
<td>Band</td>
<td>845</td>
<td>5.6</td>
<td>3.12</td>
<td>21</td>
<td>54.6</td>
</tr>
<tr>
<td>Choir</td>
<td>780</td>
<td>7.5</td>
<td>3.30</td>
<td>11</td>
<td>56.0</td>
</tr>
<tr>
<td>Speech-drama</td>
<td>820</td>
<td>7.2</td>
<td>3.47</td>
<td>34.5</td>
<td>77.7</td>
</tr>
<tr>
<td>Total activities</td>
<td>801.25</td>
<td>6.44</td>
<td>3.13</td>
<td>11.07</td>
<td>49.73</td>
</tr>
<tr>
<td>Total student population</td>
<td>825</td>
<td>12.75</td>
<td>2.76</td>
<td>N/A</td>
<td>76.50</td>
</tr>
</tbody>
</table>

The comparison by activities revealed the following differences in School D: the football players averaged 27.14 more hours per year involved in classroom instruction than the average for the total student population; the basketball players averaged 37.14 more hours involved in classroom instruction; the baseball players averaged 31.04 more hours per year involved in classroom instruction; the track participants averaged 27.24 more hours per year involved in classroom instruction; the band participants averaged 31.94
more hours per year involved in classroom instruction; the choir participants averaged 24.74 more hours per year involved in classroom instruction; and the speech-drama participants averaged 32.94 more hours per year involved in classroom instruction (Figure 34).

**Grade-point average.**—The mean grade-point average for the total population of students from School D was 3.07. The mean grade-point average of the male students involved in the activities program was 3.40.

The comparisons by activity revealed the following differences in School D: the football players had a .24 higher grade-point average than the average for the total student population; the basketball players had a .48 point higher grade point average; the baseball players had a .57 point higher grade-point average; the track participants had a .12 higher grade-point average; the band participants had a .41 higher grade-point average; the choir participants had a .27 point higher grade-point average; and the participants in speech-drama had a .19 higher grade-point average (Figure 35).

**College entrance examination.**—The average SAT score for the total student population from School D was 920. The average SAT score for male students involved in the activities program from School D was 1011.73. This represents a
Fig. 34--Hours missed, School D
Fig. 35--Grade-point average, School D
difference of +91.73 in favor of the activities program participants. The average SAT scores from individual activities were produced from a limited number of scores—of seventy participants selected for the sample, 52 had a score on the SAT.

The comparisons by activity revealed the following differences in School D: the football players averaged 60.00 points higher on the SAT than the total student population; the basketball players averaged 142.00 points higher on the SAT; the baseball players averaged 78.75 points higher on the SAT; the track participants averaged 1.43 points lower on the SAT; the band participants averaged 234.29 points higher on the SAT; the choir averaged 43.86 points higher on the SAT; and the speech-drama participants from School D averaged 72.86 points higher on the SAT (Figure 36, Table XIII).
<table>
<thead>
<tr>
<th>Activity</th>
<th>SAT</th>
<th>Days Missed</th>
<th>GPA</th>
<th>IHMP</th>
<th>Total Hr. Missed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Football</td>
<td>980</td>
<td>4.00</td>
<td>3.31</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Basketball</td>
<td>1062</td>
<td>2.00</td>
<td>3.55</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Baseball</td>
<td>998.75</td>
<td>3.10</td>
<td>3.64</td>
<td>1.5</td>
<td>20.1</td>
</tr>
<tr>
<td>Track</td>
<td>918.57</td>
<td>3.90</td>
<td>3.19</td>
<td>0.5</td>
<td>23.9</td>
</tr>
<tr>
<td>Band</td>
<td>1154.29</td>
<td>2.70</td>
<td>3.48</td>
<td>3</td>
<td>19.2</td>
</tr>
<tr>
<td>Choir</td>
<td>962.86</td>
<td>3.40</td>
<td>3.34</td>
<td>6</td>
<td>26.4</td>
</tr>
<tr>
<td>Speech-drama</td>
<td>992.86</td>
<td>2.60</td>
<td>3.26</td>
<td>7</td>
<td>18.2</td>
</tr>
<tr>
<td>Total activities</td>
<td>1011.73</td>
<td>3.10</td>
<td>3.40</td>
<td>2.86</td>
<td>21.46</td>
</tr>
<tr>
<td>Total student population</td>
<td>920</td>
<td>8.56</td>
<td>3.07</td>
<td>N/A</td>
<td>51.35</td>
</tr>
</tbody>
</table>
CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter includes a summary of the findings of the study and conclusions are drawn. Also, recommendations which seem to be appropriate are included.

Summary

The purposes of this study were to provide information for state officials, school administrators and school boards as they seek to make informed decisions concerning the activities program and its place in the educational system and to determine if involvement in selected school activities had any relationship to the variables: grade-point average, attendance rate and scores on college entrance examinations.

The study was designed to determine if a difference existed between male students who were involved in the activities program and the total student population using the variables grade-point average, attendance rates and scores on college entrance examinations. Four high schools were selected to participate in the study. The four high schools had a total student population of 6,456 students in
grades ten through twelve. Seven activities were identified and ten male participants were randomly selected from each of the seven activities. This process yielded a total sample of 280 male students who participated in the seven selected activities. The researcher visited each school and from permanent records established a rate of attendance, a grade-point average and a score on the SAT for each of the 280 participants. The principals from the four schools were asked to supply an average daily attendance rate for each six weeks of the 1983-1984 school year, a grade-point average for the total school population and the schools' average score on the SAT. Additionally, the principals' support was obtained to assist in establishing the number of hours of class time missed (IHMP) by the male students who participated in each of the activities.

The sample population mean was compared with the mean of the total population from each school and with the means of the total population of all schools. The comparisons were made to reveal differences that existed between schools, within schools and between activities on the variables of attendance rate, grade-point average and scores on the Scholastic Aptitude Test.

The comparisons were reported in tables and differences were graphically illustrated. The tables and illustrations were accompanied by narratives that were written to clarify and explain the graphic illustration of existing differences.
Findings

The reader should consider that the activities involved in this study varied as to the number of total participants. A random sample of forty students was selected from each activity. Had the total number of participants involved in each activity been considered the result of the study may have varied slightly.

Male football participants missed less hours of class time and had generally higher grade-point averages than the total student body at each of the four high schools. However, the male football participants' score on the Scholastic Aptitude Test (SAT) was slightly lower in Schools A and B. The comparison of the total sample of male football participants to the total population of students revealed that male football participants missed less class time, had higher grade-point averages, and slightly lower scores on the SAT (911.75 to 905.98).

Male basketball participants generally missed less class time, had higher grade-point averages and higher scores on the SAT than the average for the total student population at each of the four high schools. The exceptions occurred in School B; the male basketball participants from School B missed more class time and scored lower on the SAT than the average for the total student body from School B. The comparison of the total sample of male basketball participants to the total population of students revealed that
basketball participants missed less class time, had higher grade-point averages and higher scores on the SAT.

Male track participants missed less class time and had generally higher grade-point averages than the average for the total student population at each of the four high schools. However, male track participants in Schools C and D scored lower on the SAT than the average for the total student population in Schools C and D. Male track participants in Schools A and B scored higher on the SAT. The comparison to the total population of students revealed that male track participants missed less class time and had higher grade-point averages. However, male track participants' mean scores on the SAT was lower than the mean for the total population of students (911.75 to 815.33).

Male band participants missed less class time, had higher grade-point averages and generally higher scores on the SAT in Schools A, B, and D. The exception was found in School C; the male band participants in School C scored slightly lower (852 to 845) on the SAT than the average for the total student population from School C. The comparison of the total sample of male band participants to the total population of students revealed that male band participants missed less class time, had higher grade-point averages and scored higher on the SAT than the general population of students.
Male choir participants in Schools A and B missed more class time than the total student population from those schools. Male choir participants from Schools C and D missed less class time than the total student population from those respective schools. Male choir participants had a higher grade-point average than the total student population from each of Schools B, C, and D. The exception was found in School A where male choir participants had a slightly lower grade-point average than the total student body from School A. Male choir participants from Schools A and D had a higher score on the SAT than the total student population from these schools; while male choir participants from Schools B and C scored lower than the school average on the SAT. The comparison of the total sample of male choir participants to the total population of students from the four high schools revealed that male choir participants missed less class time, had higher grade-point averages and had higher scores on the SAT than the average for the total student population.

Male speech-drama participants in Schools A, B, and C missed more class time than the total student population from those schools. Male speech-drama participants in School D missed less class time than the total student population from School D. Male speech-drama participants had higher grade-point averages in each of the four high schools than the total student population from those high
Male speech-drama participants from Schools A and D scored higher on the *Scholastic Aptitude Test* than the total student population from these two schools. Male speech-drama participants from Schools B and C scored lower on the *Scholastic Aptitude Test* than the average for the total student population from Schools B and C. The comparison of the total sample of male speech-drama participants to the total student population of the four high schools revealed that male speech-drama participants missed slightly less class time, had a higher grade-point average and scored higher on the *Scholastic Aptitude Test* than the total student population.

Comparison of the seven activities between activity produced the following results: GPA--highest to lowest: speech-drama, basketball, band, football, baseball, choir, and track. Average hours missed from class--fewest to most: track, football, basketball, band, baseball, choir, and speech-drama. Average score on the SAT--highest to lowest: band, basketball, speech-drama, choir, baseball, football, and track.

The comparison of the total selected sample to the total population of the four high schools revealed that male students who are involved in the activities program missed less class time, had a higher grade-point average and scored higher on the *Scholastic Aptitude Test* than the average for the total student population of the four high schools studied.
Conclusions

The conclusions can be drawn that there is a positive relationship between participation in the activities program by male students and the attendance rate, grade-point average, and scores on the Scholastic Aptitude Test. Male students involved in the activities program spent more time in class involved in instruction than was the average for the total student population. The conclusion is drawn that this extended time involved in classroom instruction helped the participants to maintain a higher than average grade-point average and to score higher on the SAT.

It is concluded that there was no negative relationship between the activities program and the participants' ability to receive a high school education. The final conclusion is that participation in the activities program increases a student's commitment to academic performance or at least does not show a negative relationship concerning the participants' attendance rate, grade-point average, and achievement rate.

Recommendations

The results of this study indicate that many of the perceived problems associated with students participating in the activities program do not exist. The recommendation is made that further research be conducted to expand the database in the area of the activities programs and its effect on
the participants. Specifically, there is a need for further study in the area of the effects of participation in the activities program by female students.

It is recommended that high school administrators and directors of activities programs implement a program that will result in a formal process of record keeping. These data should be used to assess the effects of participation in the activities programs on students.

It is recommended that replication of this study be conducted at medium and small size high schools. It is further recommended that this study be conducted on a matched pair basis.
APPENDIX
Tally Sheet

School ____________________________

SCHOOL-WIDE INFORMATION
School average score on: ACT ____ SAT ____
School average (males only) on: ACT ____ SAT ____

AVERAGE DAILY ATTENDANCE
(for all six weeks)
Total school ADA (grades 10-12) ________________
Total school ADA, males only (grades 10-12) __________

GRADE-POINT AVERAGE
Total school GPA (grades 10-12) ___________________
Total school GPA, males only (grades 10-12) ________
Memo

Date:

From: (Principal of High School)

To: (Head Coach or Director)

Re: Instructional Hours Missed

Please turn in the dates and number of class hours your varsity team (group) missed to participate in (name of activity) during the 1983-1984 school year. Do not include time students missed your activity class.

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of class hours missed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tally Sheet

<table>
<thead>
<tr>
<th>School ___________________</th>
<th>Activity ___________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Student Number</th>
<th>GPA</th>
<th>SAT/ACT</th>
<th>Number Daily Abs.*</th>
<th>IHMP**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Number of daily absences—number of days the student was officially counted absent from school.

**IHMP—number of institutional hours the student missed to participate in the activities program.
BIBLIOGRAPHY

Books


Articles

Bell, James W., "School Dropouts and School Activities," School Activities, 36 (September, 1964), 4-7.


Eidsmore, R. M., "High School Athletes are Brighter," School Activities, 35 (November, 1963), 75-77.


Newspapers

Holloway, Karle, "Texas Education Gets Low Marks," The Dallas Morning News, Dallas, Texas, December 15, 1984, pp. 1A, 7A.


Unpublished Materials


Hedgpeth, Walker David, Jr., "A Comparison Among Students' Extracurricular Involvement, School Attendance, Grade-Point Average and Other Selected Variables as Measured in Four Large Urban High Schools in Texas," unpublished doctoral dissertation, College of Education, East Texas State University, Commerce, Texas, 1981.

Marshall, Baily, personal interview, December 18, 1984, Austin, Texas.
