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**An analysis of selected student characteristics and student participation in school activities in selected Nebraska high schools**

Kettelhut, Douglas Gil, Ed.D.

The University of Nebraska - Lincoln, 1989

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AN ANALYSIS OF SELECTED STUDENT CHARACTERISTICS AND  
STUDENT PARTICIPATION IN SCHOOL ACTIVITIES  
IN SELECTED NEBRASKA HIGH SCHOOLS

by

Douglas Gil Kettelhut

A DISSERTATION

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The Graduate College in the University of Nebraska  
In Partial Fulfillment of Requirements  
For the Degree of Doctor of Education

Major: Interdepartmental Area of Administration,  
Curriculum and Instruction

Under the Supervision of Professor Ward Sybouts

Lincoln, Nebraska

May, 1989

**TITLE**

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**BY**

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AN ANALYSIS OF SELECTED STUDENT CHARACTERISTICS AND  
STUDENT PARTICIPATION IN SCHOOL ACTIVITIES  
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Advisor: Ward Sybouts

High school student participation in school activities was examined in selected Nebraska schools. Selected student characteristics were studied in relationship to the amount of time spent in school activities. A non-experimental method (ex post facto research) was incorporated in the study.

Two hundred ninety high school students in three Nebraska high schools were selected using a stratified sampling technique. Background characteristics and the amount of activity participation of the sampled students were obtained through student records, interviews with principals and counselors, and student questionnaires. Each of the three high schools was analyzed separately and analyzed as a combined unit.

An analysis of variance and multiple regression procedure was used to analyze the data in terms of relationships among variables in the study. Correlational statistics allowed for the scores of predictor variables to correlate the relationships to the criterion variable.

The analysis of the data found that specific predictor variables did have positive correlational results with the amount of student participation in school activities. The analysis also found that when predictor variables were combined in the process of multiple regression that the grade point average of a student was the best predictor for student participation in school activities.

Students in all three high schools demonstrated that grade point average was significant for prediction purposes of participation in student activities. In addition, the number of school absences had a significant correlation with the amount of student participation in school activities. Students that were more likely to be in school were also more inclined to participate in school activities. The sex and grade level of a student also had a relationship to the amount of student participation in activities. Male students participated in activities at the highest level in the tenth grade and declined in participation for each of the next two years. Females had their lowest participation in activities also during their last year in high school.



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## CHAPTER 1

### Introduction

School activity programs are credited with having positive influences upon the youth of America. Students have identified the school activity program in which they were involved as instrumental in their growth and development. The value of these programs has been acclaimed by various sources over the last few years.<sup>1</sup> Unfortunately, all students do not take advantage of the school activity programs which are available to them. Reasons for student non-participation can be potentially attributed to a variety of factors. This study was designed to compare the social, economic, and academic backgrounds of high school students with the amount of their participation in school activity programs.

#### The Context of the Study

The benefits of student participation in school activity programs have been cited in the literature during the past decade. School activity programs have contributed to the development of students' social, personal, and future

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<sup>1</sup>Thomas Harper, "Academic Eligibility Requirements for Student Athletes: Two Points of View, Minimum Academic Standards: No," NASSP Bulletin, Vol. 70 (October 1986): 3.



life.<sup>2</sup> In addition, parents who have been historically interested in the education of their children, as a means for upward mobility in their child's adult life, have also realized the benefits of school activity programs. It was estimated that over half of the parents of children attending school supported the concept of school activity programs and considered such programs to be important to the development of their children.<sup>3</sup>

Research conducted by the American College Testing Service formally established the need and value of school activity programs by exploring factors that relate to predicting success in future adult life for high school students. Factors comprising high school grades, college grades, and scores on college entrance exams did not show any significant correlation to how successful a person might be in adulthood. The only factor that could be used to predict the probability of success in later life for the student was the amount of participation and achievement rate in school activity programs.<sup>4</sup>

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<sup>2</sup>Leo A. Mundy and Jeanne C. Davis, "Varieties of Accomplishment After College: Perspectives on the Meaning of Academic Talent," ACT Research Report, No. 62 (March 1974): 8.

<sup>3</sup>George H. Gallup, "The 10th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools," Phi Delta Kappan, Vol. 60 (September 1979): 40.

<sup>4</sup>Wayne Jennings and Joe Nathan, "Startling/Disturbing Research on School Program Effectiveness," Phi Delta Kappan, Vol. 58 (March 1977): 569.

School activity programs have been a concern of professionals studying public education during the 1980s. In the Governor's report on Nebraska schools, the task force reported a major concern regarding the limited amount of time available for classroom instruction. The task force cited interruptions in the school day for school activities as a major deterrent to student learning time. The authors of the report concluded that while the importance of school activities for the development of the individual was essential, that a much better balance should be established between school activities and academics. The purpose for school activities, as reported in research on the public schools, should exist only within the context and framework of the larger purposes of academic education which encompasses the total curricular program.<sup>5</sup>

Even though the need and value of school activity programs appear to be supported,<sup>6</sup> little information was available on why some students participate and take advantage of these programs while other students do not. A major limitation in school activity programs was reported as a lack of participation by certain students when the evidence suggested that participation in activity programs

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<sup>5</sup>Nebraska Schools: The Report of the Governor's Task Force on Excellence in Education, Lincoln, Nebraska, September 30, 1983, Brenda Warren, Chair, p. 2.

<sup>6</sup>Ward Sybouts and Wayne J. Krepel, Student Activities in the Secondary Schools (Westport, CT: Greenwood Press, 1984), 60-63.

would provide benefits to those students who participated.<sup>7</sup> Educators have been aware that a segment of the student population has not participated in school activities and that there appears to have been little success in getting disinterested students actively involved. Part of the reason for the inability of educators to involve a greater proportion of the students in activities may stem from a lack of a clear understanding of the background and motivation of these students. If school activities can and will make a significant difference in the growth and development of students, then an obligation exists on the part of educators to help students realize the opportunities available.<sup>8</sup> Included with this idea of helping students to grow and develop, educators must be aware of the factors and background information that could influence a student to participate or not participate in school activities.

In attempting to understand who may not participate in school activity programs, educators should try to discover if commonalities or patterns exist in the family and personal backgrounds of non-participants. Factors included in this area would be the status of the parental family, such as divorced or broken homes, the socio-economic level of the family, the academic achievement rate of the student

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<sup>7</sup>Mundy and Davis, 8.

<sup>8</sup>Sybouts and Krepel, 63.

in terms of both grade point averages and standardized testing, and discipline records.

Researchers have indicated several factors will affect the student's school attitude, behaviors, and performance. Children from divorced families have been documented to virtually stop performing, in some instances, in school activities.<sup>9</sup> Children became so acutely depressed because of the separation of their parents that a severe narrowing existed in their interests. The stressful period caused by separation was manifested in notable changes in children's school performance and participation in school activities.<sup>10</sup> With such information available to educators about possible reasons for students not performing in school activities, a more extensive approach can be taken to study and determine how these factors can best be dealt with in terms of positive, productive student outcomes.

The future for educators in trying to provide the best possible educational programs for students, be they of an academic, social, or personal nature, is a constantly changing one. Educators need to undertake a deeper study of the student if appropriate curriculum is to be offered and to ensure that students participate in activity programs, especially if such participation fosters a relationship to

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<sup>9</sup>Robert Allers, "Helping Children Understand Divorce," Today's Education, Vol. 69 (November-December 1980): 28.

<sup>10</sup>Joan B. Kelly and Judith S. Wallerstein, "Children of Divorce," Principal, Vol. 59 (October 1979): 52-55.

future success in life for the student. For example, it is estimated that the number of children living in a divorced family has doubled since 1960. In addition, the projections for the next decade show that half of the children in school will have lived in a one-parent home.<sup>11</sup> Information of this nature will be valuable in understanding the complexity of the changing family role status in this country. Students have new, changing perspectives that educators, at one time, did not have to be greatly concerned with in terms of student success. The reality is that divorced and remarried families are now a part of the normal family in America.<sup>12</sup> This information, based with the socio-economic and academic background of the high school students, should provide educators with a better understanding of how and why students succeed, especially in terms of involvement in school activities.

#### Statement of Purpose

The purpose for conducting this study was to identify the background characteristics, as measured by ten selected variables, of public high school students in three selected Nebraska school districts in relationship to their participation in school activity programs. The ten selected variables used for the study include grade level, sex,

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<sup>11</sup>Ernest L. Boyer, "Reflections on the Great Debate of '83," Phi Delta Kappan, Vol. 65 (April 1984): 529.

<sup>12</sup>Isolina Ricci, "Divorce, Remarriage, and the Schools," Phi Delta Kappan, Vol. 60 (March 1979): 511.

economic status, family background, grade point average in school, standardized test scores, discipline records, class tardies, school attendance records, and amount of employment.

### Research Questions

Through this research study, an attempt was made to provide answers to the following questions concerning the amount of participation in school activities by public high school students based upon the following background characteristics:

1. Does the structure of the family have any relationship to student participation in school activities?
2. Does the economic background of a student have any relationship with participation in school activities?
3. Does the amount of school discipline referrals a student receives have any relationship to participating in school activities?
4. Does the number of tardies have any relationship with participation in school activities?
5. Does the number of absences from classroom attendance have any relationship with participation in school activities?
6. Does the grade point average of a student have any relationship with participation in school activities?

7. Will the results of a student's standardized achievement test scores have any relationship with participation in school activities?

8. To what extent does student employment relate to a student's participation in school activities?

9. Does the sex of the student have any relationship on the amount of student participation in school activities?

10. Does the grade level of the student have any relationship to the student participating in school activities?

The research study also attempted to determine if there is a difference in participation in school activities by individual school so that there may be an indication of whether or not results may be generalized beyond the schools involved.

#### Significance of the Study

The selection of the study was determined by the researcher's involvement in school activity programs and the research concluding that the most significant factor in predicting success in high school aged students for their college career and later life was the amount of participation in school activities. If participating in school activities will help or enhance a student's chance of achievement and enjoyment of life after the high school years, then it is the responsibility of school personnel to know and understand the various factors and consequences

that cause certain students to participate while others do not.

The significance of the study consists of the potential for school administrators, or counselors, to determine which students would be likely to not participate in school activities. If the information is available to help students become more successful, then an obligation and mandate exists for school personnel to use this knowledge to devise a plan of action to involve non-participating students in school activities.

The data presented in the study also provides a format for personnel in other school districts to conduct research concerning their own particular school system to determine if other factors or variables are influencing the participation in school activity programs by their students and to therefore make appropriate program decisions.

#### Definition of Terms

Student Activities. Student activities, programs, or experiences that are part of the total curricular offerings in a school system. Often referred to as "extra-curricular" or "co-curricular," these references apply to such programs that are approved, sponsored, and coordinated by the school system and in which student participation is voluntary.

Traditional Families. Family structure in which both natural parents, or adopted parents, are married and living in a residence with children of that marriage.



Single Parent Families. Family structure in which only one of the natural parents, or adopted parents, are living in the residence with their child or children.

Mixed Families. Family structure in which one of the natural parents, or adopted parents, has remarried and the child or children live in the residence with a step-parent and the natural parent.

Economic Status. Level of income in a family household that either qualifies for federal government assistance, based upon application and acceptance into the public school free and reduced lunch/breakfast program, or does not qualify for federal government assistance because of income level.

Discipline. Referrals of students to the principal's office by certified staff members for conduct or behavior in violation of school rules or expectations.

Tardies. Student failing to report to class by the starting time of the school day while still reporting to school before an absence is rendered for the school day.

Absences. Student not reporting to an assigned class or attendance center during the school day except when excused for school activity purposes or other excused school functions.

Academic Achievement. Student's scholarly performance in the classroom as measured by the accumulated grade point average.

Standardized Test Results. Student results on a nationally normed test of achievement, as measured by composite test score percentiles.

Employment. Work or job held outside the school day in return for financial remuneration.

Grade Level. The year in school and class in which the student is listed for academic and graduation purposes.

Public High School. School available to all citizens, ages five through twenty-one, residing in the school district's legal boundaries and having obtained an academic ranking of the tenth, eleventh, or twelfth grade.

#### Delimitations

The study was delimited to a stratified high school sample from three selected school districts in the state of Nebraska with high school enrollments of 151 students, 433 students, and 1,360 students in grades ten through twelve for the academic school year of 1987-88. An additional delimitation of the study entails that the students used for the study were not compared to high school students from other existing years.

#### Limitations

The study had limitations in the number of students used in the stratified sample from one of the selected high schools in one particular grade level. The total number of students in that particular grade level did not meet the sample number used throughout the rest of the study.

Another limitation was the standardized test score results used for students in grade twelve during the 1987-88 school year. The standardized test score results for this class had to be obtained through eleventh grade records as not all twelfth grade students in the sample had taken a standardized test during the twelfth grade. An additional limitation was the need to use standardized test score composite percentiles and not raw data standardized test scores as all students in the sample did not take the same nationally normed test of achievement. A limitation in the measuring of a student's economic status was dependent upon an application for the federal government's free and reduced lunch/breakfast program.

#### Procedures

A causal-comparative method (ex post facto research) was used to discover possible relationships in the behavior patterns of students participating or not participating in school activities. Several variables were studied to ascertain if any or all have a relationship with student activity participation.

The procedures for the study were carried out in six steps: (1) review of the literature, (2) development of the data collection matrix, (3) identification of the population and sample, (4) collection of the data, (5) analysis of the data, and (6) reporting of the conclusions and developing recommendations.

### Review of the Literature

A review of the literature was conducted to obtain a historical background and subsequent rationales for the development of school activities in secondary schools in this country. Additional studies investigated the research on non-traditional families in America, poverty and socio-economic status, school discipline and dropouts, and academic achievement. Specifically, each of these factors was focused on in relation to students' participation in school activities.

### Development of the Data Collection Matrix

A spread sheet was developed using a word processing software package to record the pieces of data that were collected. Each of the ten independent variables that were studied in relation to student participation in activities was measured in a manner that provided workable data for this study. The dependent variable of the amount of participation in student activities was also measured.

The independent variables were measured as such:

1. Economic status--qualifying or not qualifying for free or reduced lunch/breakfast program,
2. Family status--living in a traditional family background or living in a non-traditional family background with either one parent only or a parent and step-parent,

3. Discipline--number of referrals to the principal's office for violation of school rules,
4. Tardies--number of late reportings to the start of a school day,
5. Absences--number of non-reportings to an assigned class or classes,
6. Academic achievement--grade point average of each student,
7. Standardized test results--percentile scores from a nationally normed test of achievement,
8. Employment--number of hours employed each week in a job outside the school day,
9. Sex--female or male,
10. Grade in school--listing of the grade in high school based upon academic achievement towards graduation requirements.

The dependent variable of the amount of participation in student activities was measured by the total number of non-school hours that a student participated in school activities. Each activity was calculated by using the approximate number of non-school hours that the activity would encompass during its particular season or time span. The activities listed were determined by using all the possible school-sponsored activities that were offered in any of the three high schools used in this study.

### Identification of the Population and Sample

The study was conducted by using data from a stratified sampling of 290 high school students in three selected Nebraska high schools, grades ten through twelve. The high schools in this study were classified as Class A, Class B, and Class C by the Nebraska School Activities Association.

### Collection of the Data

Data were collected from various records maintained by the high schools used in the study, interviews with principals and counselors, and student questionnaires. The information on economic status of the students was obtained through the free and reduced lunch/breakfast records. Family status data were available through students' permanent records. Data concerning discipline and tardies were collected from individual student files in the high school principals' offices. Records on grade point averages and standardized test scores were obtained through the counselors' offices, as was the sex, grade level, and absences of the student. Employment data for each student were gathered through interviews with the school counselors, high school principals, and a student questionnaire. The data on specific participation in school activities were obtained through the students' permanent records and student questionnaires. The data collected were based upon the 1987-88 school year.

With assistance from the University of Nebraska-Lincoln NEAR Center, the collected data were transferred from a micro computer software program to the main frame computer at the University of Nebraska-Lincoln.

#### Analysis of the Data

The relational data were collected and analyzed in terms of relationships among variables in the study. Both an analysis of variance and multiple regression techniques processed the data used in this study. The use of correlational statistics through analysis of variance and multiple regression allowed for the scores of predictor variables to correlate the relationship or non-relationship to the criterion variable. The analysis of the data was obtained through the SPSSX package of statistical design and research.

## CHAPTER 2

### A Review of Selected Literature

The review of selected literature presented in this chapter has been divided into five topics: (1) a historical perspective of student activities, (2) family structures, (3) poverty and socio-economic status, (4) school discipline, and (5) academic achievement and student activities.

#### A Historical Perspective of Student Activities

Student activities play a vital role in the total curriculum offerings in American schools. Student activities are probably the most notable school program before the public view. Attendance by students, parents, relatives, and other interested individuals can be witnessed at many events. The general interest in school activities has increased since the development of public school education in America.

The historical development of sports and related activities can be traced to the beginning of western civilization. As the Greeks began the process leading to current beliefs and pattern of thought, they also originated the Olympic games. The early athletic contests in the areas



of track and field, in which individuals competed against each other in a display of skill and ability, can still be found in school activities today.

The actual beginning of school activities in the United States can be traced to the time of the colonists. After the basic survival functions had been performed, such as clearing the land, building a home, and planting the crops, the colonists then began to focus on the education of their children. The first primary schools founded had a European foundation, as this was the common background and experience of the colonists.<sup>1</sup> The European schools at that time focused not only on handwriting, arithmetic, and grammar, but also encouraged games of competition for boys during recess or noon hour. These traditions followed the colonists from Europe to America and eventually were expanded by the new settlers.

Spelling bees became a popular activity that sometimes attracted the interest of an entire community as students competed against students in one of the first school activities. The spell-downs had as a basis the academic program while encouraging the children to pit their skills and talents against each other. The activity also developed

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<sup>1</sup>Franklin A. Miller, James H. Moyer, and Robert B. Patrick, Planning Student Activities (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1956), 3.

community identity as adult observers and parents were proud of the success of a child from their own town.<sup>2</sup>

Following closely along with spelling bees, teachers became more involved with their students and their lives. Students and teachers took field trips, participated in literary societies for members of the community, formed choirs for both school time and evening, and allowed for daily games during the noon hour. This was the start of what was to be known as extra-curricular activities.<sup>3</sup>

The formal acceptance of high school activities did not emerge until after the development of collegiate activities. Colleges emerged from the time of the Revolutionary War to the time of the Civil War with a traditional, classical curriculum. The new colleges developing in the United States used the curriculum from the prestigious universities that had been previously established in America. The original universities, with their history as quality institutions, focused on academics, religious training, and strict discipline for the students. The programs consisted mainly of studying mathematics, the classical languages, the Bible, and writing. After a period of time, students

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<sup>2</sup>Ward Sybouts and Wayne J. Krepel, Student Activities in the Secondary Schools (Westport, CT: Greenwood Press, 1984), 6.

<sup>3</sup>Fred L. Shickell, "An Analysis of the Time and Times Related Resource Utilization of Student Activities in Selected Nebraska Secondary Schools" (Doctoral Dissertation, University of Nebraska, 1984), p. 14.

desired a broader curriculum. School officials would not allow for the expansion of new studies and programs, which ultimately lead to student unrest. In pre-Civil War colleges student violence erupted. The nature of the outbreaks ranged from the throwing of food in the dining room to killing of a Princeton professor.<sup>4</sup>

Changes were emerging in America and college officials began to understand the need to allow student behavior to also change. The notion of in loco parentis for providing strict student discipline was relaxed. In order to provide an appropriate social setting for students, officials allowed for fraternities and secret societies. The beginning of a less formal curriculum was being tolerated in order to maintain acceptable control over the college students.

Society in America was also changing, which would lead to greater changes in the colleges and universities. The Puritan tradition of work and religious devotion began accommodating a sense of pluralism, which would allow citizens to devote time to leisure. As the nineteenth century came to a close, the general activities of boxing matches, baseball games, horse racing, and horseshoes expanded the way of life for Americans. The new activities inevitably followed students to college and requests for outside college activities soon followed. Football teams

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<sup>4</sup>Ibid., p. 7.

were being permitted in the colleges even though college administrators were still apprehensive about the coming changes. The administrators, however, could not stop the changing times and the emergence of official school activities.<sup>5</sup>

The nature of youth is one of imitation and the desire to experience what their older peers are learning and doing. Activities became the focus of high school aged students as they watched or knew of college students competing in such sports as football. While the actual beginning of collegiate sports can be traced to the post-Civil War era, and although high school activities did not emerge as quickly as college activities, the time frame for secondary school activities was set in motion.<sup>6</sup>

The trend for additional activities continued into the twentieth century. Wrinkle and Gilchrist wrote that physical education was developed by downtown sports enthusiasts who paid a coach to work with high school boys after school.<sup>7</sup> Athletics were becoming a business in America and the effects would be felt in schools. By 1935 95 percent of the high schools were administering school

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<sup>5</sup>Ibid, pp. 8-9.

<sup>6</sup>Sybouts and Krepel, 10-11.

<sup>7</sup>W. L. Wrinkle and R. S. Gilchrist, Secondary Education for American Democracy (New York: Farror and Rinehart, 1942), 339.

activity programs ranging from sports to journalism and forensic competitions.<sup>9</sup>

Society continued to change during the twentieth century with the schools performing more functions for the students. Women that had been at home were shifting into the work place. Children spent more time at school with teachers, coaches, and sponsors. Programs developed for the students after the traditional school day extended their time at school. Parents not at home because of work commitments viewed the school activities as a safe, productive environment for their children. Schools had taken on an expanded role that had not been foreseen with the original start of school activities.

From the research presented on the historical perspective of student activities, it appears that from the early beginnings of school activities to the present era, there have been numerous changes in society. High school students today are living in a new period of time, and with this new age has come the fuller development of school activities.

#### Family Structures

The make-up of the American family today is unlike any other time in history. The traditional family of a father, mother, and children all living together, until the children reach an age that they leave home to start their new

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<sup>9</sup>Shickell, pp. 15-16.

families is becoming a thing of the past. Experts now suggest that nearly 50 percent of the families in the United States will experience a divorce.<sup>9</sup> Currently the traditional family, as it was once known, will be in the minority. "The traditional family consisting of a husband and wife and the children born to their marriage, is no longer the predominant family structure in our society."<sup>10</sup>

The new changes in the American families have brought a major impact upon the schools today. Researchers have indicated that children from non-traditional homes exhibit a variety of behaviors and characteristics that are not conducive to learning. In one study of 8,556 elementary and secondary students conducted by Brown, it was found that a greater probability of problems in school arose from single-parent families and that serious behavioral problems were often associated with one-parent families. In addition, it was reported that:

The Kettering Foundation and the National Association of Elementary School Principals identified 18 items designed to measure school performance and initiated a study to compare the functioning of one-parent versus two-parent children in twenty-six schools. . . . The results indicate that high academic achievers came from two-parent homes while low academic achievers came

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<sup>9</sup>Robert Allers, "Helping Middle Level Early Adolescents From Broken Homes," National Association of Secondary School Principals in the Middle, November 1984: 1.

<sup>10</sup>Douglas S. Pungler, "The Nontraditional Family: Legal Problems for Schools," A Legal Memorandum, National Association of Secondary School Principals, September 1984: 1.

from one-parent homes . . . that tardiness to class was inordinately high in the high school from one-parent families . . . students of one parent families created more discipline problems . . . suspensions of high school students was higher in one-parent families . . . the only students expelled from school were from one-parent homes . . . and that one-parent homes had twenty-five percent of the total schools population, but forty percent of the dropouts.<sup>11</sup>

The changing family structure today puts a new pressure on students previously unknown to the educational field. Many students have the desire to achieve in school but this effort becomes secondary compared to the need to survive what is happening at home. As a result, normal adolescent pressure is magnified by the newly developed stress at home. The evidence of these occurrences appears to be overwhelming.

In a study by a University of Virginia psychologist of 72 middle-class divorced families, it was noted that some boys regressed in school while others became discipline problems. These same boys received less support from peers, parents, and teachers. One boy stated, "I gave up soccer after school because I thought I needed to be at home. I told my mom I just didn't want to play, but I did--I just didn't want her to feel bad."<sup>12</sup>

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<sup>11</sup>B. Frank Brown, "A Study of the School Needs of Children from One-Parent Families," Phi Delta Kappan, Vol. 61 (April 1980): 537-540.

<sup>12</sup>Michael Bauer, "Divorce Cuts Short Carefree Boyhood," The Kansas City Star, 9 March 1980, 1c, cols. 1-2.

Another example of the dilemma youths from a broken home face is found in a longitudinal study in California of children from divorce in which only 34 percent of school-age children were happy and thriving five years after the divorce, while 37 percent were depressed. The report was continued with a warning that it is unrealistic to presume that a child will continue to perform academically while the family is in crisis or when the child's unresolved personal problems arise from the parents' separation. The conclusions from this study mandate that school leaders become involved in the children's lives because of the fact that these personal traumas affect the academic growth and emotional development of the child.<sup>13</sup>

The feeling of despair concerning broken homes and schooling is marked by Boyer in his study of the American high school. He found that the main reason students want to leave school is because they are discouraged and doing poorly. These same students come from broken homes and have low self-esteem. He continues:

In addition to national problems, the high school has also felt the impact of changing family patterns in recent years. The number of children in America who are affected by divorces has more than doubled since 1960. Nearly one out of five families is maintained by a woman who is either divorced, separated, widowed, or has never married. Two-thirds of these mothers work. About

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<sup>13</sup>Ellen Drake, "Helping Children Cope With Divorce: The Role of the School," Children of Separation and Divorce, ed. Irving R. Stuart and Lawrence Abt (New York: Van Nostrand Reinhold Co., 1981), 148-149.



half the children now in first grade will have lived in one-parent homes by the time they graduate from high school. This shift in family life has caused schools to take on burdens and responsibilities of the home.<sup>14</sup>

Wallerstein and Kelly also conducted two separate studies to measure the effects of broken or disruptive homes on school-age children. Again the same results. Children found that the academic and social pressures at the time of the divorce were almost unbearable. This external pressure, real or unreal, was perceived as profound in nature by the children. The children described feeling lonely and as having a sense of having been left outside.<sup>15</sup> In a follow-up study by the same researchers, the findings were similar. It was reported that the poorest students in terms of academic achievement, and usually social interactions, were most often from the chronically chaotic homes. The divorce actions of the parent or parents displayed pathologically disturbed behaviors of such a nature to enmesh the child in the chaos.<sup>16</sup>

Not all experts agree, however, that the most traumatic period in a student's life is during the time of a divorce

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<sup>14</sup>Ernest L. Boyer, High School (New York: Harper & Row, 1983), 37.

<sup>15</sup>Judith S. Wallerstein and John B. Kelly, "The Effects of Parental Divorce: Experiences of the Child in Later Latency," American Journal of Orthopsychiatry, Vol. 46 (April 1976): 264-265.

<sup>16</sup>Judith S. Wallerstein and John B. Kelly, Surviving the Breakup (New York: Basic Books, Inc., 1980), 267.

or the experience of living in a broken home. It has been suggested that there are better living situations than just those from a traditional family. Slater and Haber contest, in their study of continued family conflict on adolescent adjustment and self-concept, that it is better to have a single parent at home with a defined structure, as compared to the home life of a traditional two-parent home with high conflict.<sup>17</sup> Children need a sense of stability and direction and if this is best provided in a non-traditional or broken home, then that is the appropriate living arrangement for the child.

In some cases divorce and severe home conflicts have had a different effect upon the children in terms of their school work. One public school teacher expresses her puzzlement as to the effects of divorce on children through their classroom behavior, "there seems to be no clear-cut pattern when it comes to their reactions in the classroom, in fact some children seem to work harder and get better grades when their parents are on the threshold of divorce."<sup>18</sup> While this initially would seem to denote a positive aspect of student behavior, the underlying reasons would show a different perspective. Children who work

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<sup>17</sup>Elisa J. Slater and Joel D. Haber, "Adolescent Adjustment Following Divorce as a Function of Family Conflict," Journal of Consulting and Clinical Psychology, Vol. 52 (October 1984): 920-921.

<sup>18</sup>Lee Salk, What Every Child Would Like Parents to Know About Divorce (New York: Harper & Row Publishers, 1978), 56.

harder and receive better grades during a time of family conflict may be trying to establish a sense of mastery over their lives or by doing better in school attempt to reduce another potential family conflict. At a time of family disruption, children may blame their own previous actions or behaviors as a source for the parental conflict and therefore attempt to reduce the pending family problems by changing their own behaviors. The child's behavior is rarely the source of the conflict between the parents, but the child does not yet understand this. Consequently the behavior change on the part of the child will not prevent the family discord and the child will either regress to previous behaviors or continue to blame himself/herself for the divorce.

The next outcome for the child, stemming from the family break-up, is that of negative behaviors copied from the parents. Rutter writes, "family discord is important to note because it provides the child with a model of aggression, inconsistency, hostility, and anti-social behavior which he copies."<sup>19</sup> Studies of unbroken families, in which an unhappy marriage existed, demonstrated that boys also exhibited negative behavior similar to those found during times of family break-ups, with these boys being more

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<sup>19</sup>Michael Rutter, "Parent-Child Separation: Psychological Effects on the Children," Journal of Child Psychology and Psychiatry, Vol. 12 (December 1971): 254-255.

likely to become deviant in nature than boys from harmonious homes.

The disruption in a child's home life can occur from any number of family living patterns. Slater and Haber noted that in their studies of high conflict in the home, the child demonstrated lower self-esteem, greater anxiety, and less feeling of control over his/her life.<sup>20</sup> The disruption and conflict in the home can and does occur in traditional families, single-parent families, divorced families, and in certain residential institutions in which a child may be placed. The structure of the home life in this study is not the issue, but instead the existing patterns of behaviors exhibited by the adult or adults in the home on living environment of the child.

Based on the data presented in this section, it appears that no matter how one looks at it, home disruption causes a major problem for children both during the time of divorce and afterwards. Divorce is second only to parental death as a trauma for children.<sup>21</sup> With one million students annually going through family dissolutions and fostering feelings of depression, shame, low self-esteem, sadness, and anger, the need to help these young people is catastrophic. The real problem for teens is that they need a firm family structure

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<sup>20</sup>Slater and Haber, 920-921.

<sup>21</sup>Mary Ann Grossman, "Sadness and Anger the Emotions of Children of Divorce," Omaha World Herald, 4 August 1984, 8, col. 1-4.

to draw from and in many cases this does not exist. Consequently, the pressures put upon the school personnel to establish a working structure for students from disrupted homes takes on greater importance outside just the academic realm.

#### Poverty and Socio-Economic Status

Poverty in America, as evident in the family structure, greatly influences the public schools. While the United States is considered one of the most prosperous nations in the world, poverty and its effects are still present. The statistics point to this dilemma, especially with the rise of minority parents and single parent homes. It is estimated that 3,000 children a day, or 3.1 million, have fallen into poverty since 1979.<sup>22</sup>

In black and hispanic families where a female is head of the household, over 70 percent of these children live in poverty. One in every five children in this country lives below federal economic guidelines.<sup>23</sup> With this information facing public school officials, different programs and processes will be needed in order to meet the needs of students residing in poverty.

Poverty has an immediate impact on children and performance in school. In a study of 400,000 students in

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<sup>22</sup>American Children in Poverty (Washington, D.C.: Children's Defense Fund, 1984), 22-23.

<sup>23</sup>Ibid., 22-23.

America, Coleman wrote that poverty puts children at a disadvantage in both verbal and non-verbal skills by the time the children enter grade one. The disadvantages of poverty did not cease for children in terms of academic performance as the students continued their formal education. Results from standard achievement tests taken at grades six, nine, and twelve demonstrated that children from a poverty background scored at least 1.1 standard deviations below the other students in the study. The deficiency in academic achievement also increased at each grade level with the twelfth grade showing the largest disparity between the two groups of children.<sup>24</sup> The increased amount of formal education did not result in a narrowing of academic performance from entry level at grade one through the exit level at grade twelve.

Children of poverty learn early in life that they are different from other children. When they come to school, their clothing and school supplies are often a first indicator they are not in the norm. Quietly these students internalize perceived differences which effects their self-esteem and consequently their academic school work and social behaviors. Garbarino reported that "children from economic deprivation feel deprived and consequently respond

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<sup>24</sup>James S. Coleman, Equality of Educational Opportunity (Washington, D.C.: U.S. Government Printing Office, 1966), 21.

with frustration and hostility."<sup>25</sup> Immediately the school is put into the position of dealing with the behaviors exhibited by the children of poverty. The parents of the children are not always a reliable resource in determining avenues to solve discipline problems. The parents of poverty-bound children have historically experienced similar situations in their own education and are often preoccupied with basic family survival demands.

Family economic pressures are often felt by the students as they become young adults. Students with a background of low family income and parents with minimum formal education tend to be associated with fewer grades completed in school. The dropout rate seems to be tied directly to family income as poor youths may be under strong pressure to leave school and get a full-time job.<sup>26</sup> However, the problem for public school personnel does not cease at the time of the drop out. Statistically dropouts, who become unemployed or employed in low-paying jobs, have little hope for job and salary advancement with their minimal amount of formal education. As dropouts get married and have children, their children are born into what sociologists term the cycle of poverty. Again public school

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<sup>25</sup>James Garbarino, "Child Welfare and the Economic Crisis," Child Welfare, Vol. 63 (January-February 1984): 4.

<sup>26</sup>Stanley H. Masters, "The Effects of Family Income on Children's Education: Some Findings on Inequality of Opportunity," The Journal of Human Resources, Vol. 4 (Spring 1969): 163.

personnel face similar problems with the second generation poverty bound children as they did their parents, with no tangible solutions in sight.

A study performed by Sewell of 65 high school dropouts that were enrolled in an experimental career awareness program pointed out the dilemma facing the educational system. In the Sewell study of dropouts from low socioeconomic status, "the findings with respect to intellectual ability lend support to the generalization that the dropout is less intelligent than the general population."<sup>27</sup> Sewell went on to report that the level of self esteem, in school only, is low and that dropouts do not believe the educational process is geared to facilitate and promote their vocational aspirations.

Sewell's study does not provide further insight into the dropout's decision making process. Whether the decision to drop out is based upon thought and attention or the student's lack of thoughtful consideration and poor motivation is yet to be determined.

With the changing complexity of society during the last half of the current century, especially in terms of technological advances and the need for highly skilled and trained workers, students are being left behind the rest of the population. Historically, during the 1900s, males

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<sup>27</sup>Trevor E. Sewell et al., "High School Dropout: Psychological, Academic, and Vocational Factors," Urban Education, Vol. 16 (April 1981): 73-75.



stayed in school when jobs were scarce and left the school system when jobs were plentiful, but this is no longer appropriate in terms of economic development.<sup>28</sup> In addition to the economic problems, student dropouts constitute an individual and a social problem resulting in societal burdens requiring public assistance.

The crime rate for dropouts is another indication of the social problems that now must be dealt with by public governmental agencies.<sup>29</sup> Monies being spent for the prevention of illegal activities and to provide general assistance to people without proper education and training causes less financial resources for institutions such as the public schools. If resources could be used in the prevention of the social and economic problems that develop with students of poverty, then less resources would be needed later to resolve the effects of socio-economic developments.

Another factor of the socio-economic status of students in their success in the American educational system concerns their experiences with school activity programs. In a research study conducted by Lehman, he concluded that family income and the educational attainment of the family had

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<sup>28</sup>Beverly Duncan, "Dropouts and the Unemployed," Journal of Political Economy, Vol. 73 (April 1965): 133-134.

<sup>29</sup>Russell W. Rumberger, "Dropping Out of High School: The Influence of Race, Sex, and Family Background," American Educational Research Journal, Vol. 20 (Summer 1983): 211.

exerted positive effects on student participation in school activities. The higher the amount of formal education the parents obtained, which correlates positively with family income, the greater the likelihood of the child participating in school activities. Correspondingly, there was clear evidence that residence in a poverty tract was associated with substantially reduced participation levels in school activity.<sup>30</sup> A similar study pointed out the same conclusions in determining students' attitudes and participation in school as family income changes. Conlissie wrote that as parental income increases, then a significant increase occurs in the children's school attendance and performance. As the parental income declined, the academic performance started to falter. "This pattern shows that if a child starts to fall behind in his schooling, he will tend to fall further and further behind as time passes, and eventually he will tend to drop out of school sooner than the average."<sup>31</sup>

The results of poverty are well documented, especially in terms of school-age children. Public school officials have a large task ahead in trying to combat years of recurring patterns of poverty in family histories. Children

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<sup>30</sup>Herbert H. Lehman, "Some Determinants of Youth School Activity," The Journal of Human Resources, Vol. 7 (Summer 1972): 378.

<sup>31</sup>John Conlissie, "Determinants of School Enrollment and School Performance," The Journal of Human Resources, Vol. 4 (Spring 1969): 156-157.

are but a mere subset of the whole culture and will more often than not mirror the behaviors, attitudes, and life styles of their parents. Consequently, poverty can contribute to negative self images and general frustration with school and lead to poor academic performance and becoming a possible dropout. What school officials can do will probably not be measured alone in terms of educational resources. Poverty is a societal problem and schools are just one part of the larger structure. Without help and assistance from all facets of the social system, school personnel can, at best, struggle to help individual students, but will not remedy this dilemma by themselves. Poverty is just another of the many factors facing the public schools today.

From the data on poverty and socio-economic status, one might conclude that poverty has an impact upon students and their ability to succeed in school. Students with a background and family history of poverty are not as likely to take advantage of school offerings and programs.

#### School Discipline

Every Gallup Poll on American education for the last 15 years has identified school discipline as one of the top ten problems facing the public school system. In recent years school discipline has been perceived as the major problem

confronting education by the American public.<sup>32</sup> In addition, current methods of discipline do not seem to be appearing in the American public. "Public school boards, administrators, teachers, and even the President of the United States seem to be dissatisfied with discipline in the schools."<sup>33</sup> Why does school discipline continue to be an ever present factor when the main emphasis of education is academic growth of the student?

One of the prime reasons for school discipline problems has to stem from discipline problems at home and therefore are carried on into the school. Over two decades ago Sybouts wrote, "it can be concluded that type of home was closely related to the pattern of adjustment to school as manifest in the frequency and severity of discipline cases."<sup>34</sup> More recent observers have suggested students that come from homes in which strife and conflict is a constant dilemma also created this same scenario at school. Students merely pattern actions and behaviors, not to mention attitudes, from those learned at home. When the family cannot manage acceptable relationships among

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<sup>32</sup>James Levin et al., "A Strategy for Classroom Resolution of Chronic Discipline Problems," NASSP Bulletin, Vol. 69 (March 1985): 11.

<sup>33</sup>James A. Burn, "Discipline: Why Does It Continue to Be a Problem?", NASSP Bulletin, Vol. 69 (March 1985): 1.

<sup>34</sup>Ward Sybouts, "School Discipline and Home Background," Personnel and Guidance Journal, Vol. 45 (March 1967): 686.

themselves, because of discord or disorganization, then these children have similar problems fostering positive or acceptable relationships among those at school.

Another possible answer to why the schools are so involved in discipline comes from Wolfgang and Glickman. In their studies they wrote about the teachers and the classrooms of the past. Previously teachers worked with students from a staid, homogeneous population that could be expected to behave in a manner similar to previous students. The children in a particular school often came from families of similar culture, race, and religious backgrounds and socio-economic class. Techniques used by the teachers to achieve orderly classrooms could be expected to work in a similar fashion with other students. The students of today are from diverse backgrounds. The advent of mandatory school busing, increased family mobility, and the emergence of special education has created a new school population, different from that of the past. Consequently, using the same methods of classroom management as previously performed have failed. "The use of the same approach to every child will be stifling and inadequate"<sup>35</sup> in terms of classroom management because of the different nature of the various children.

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<sup>35</sup>Charles H. Wolfgang and Carl D. Glickman, Solving Discipline Problems (Boston: Allyn and Bacon, Inc., 1980), 3-4.

The increase in discipline problems appears to be a recent trend in education. But is that so? Socrates wrote in the approximate year of 400 B.C.:

Our youths love luxury. They have bad manners, contempt for authority; they show disrespect for their elders, and love to chatter in place of exercise. Children are now tyrants, not the servants of their household. They no longer rise when their elders enter the room. They contradict their parents, chatter before company, gobble up their food, and tyrannize their teachers.<sup>36</sup>

While it would appear that a certain amount of discipline problems involving young people have always been present and will always be present, a further investigation needs to be done to ascertain if, in recent years, there are additional or new reasons for discipline problems. Gold and Mann view the discipline and delinquency situations as being directly manifested from a lack of success in the academic areas of school. "Students may be disruptive because of their frequent experiences of failure in school."<sup>37</sup> Students not successful in school tend to associate with other delinquent students because of a need for peer support. As the peer pressure and expectations from this group of students strengthen, then the disruptive student becomes more so until the time of dropping out of school or school expulsion arises. The good news is the documentation

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<sup>36</sup>James P. Raffini, Discipline (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980), 5.

<sup>37</sup>Martin Gold and David W. Mann, "Alternative Schools for Troublesome Secondary Students," The Urban Review, Vol. 14 (Fall 1982): 314-315.

that if students begin to be more academically successful, then they will select less delinquent friends.

The idea of peer acceptance cannot be underestimated. A student's search for identity is not an easy one. The search for acceptance is often a lonely, frightening process, filled with disenchantment. When students do not find support from families, or what might be termed as acceptable peer groups, then the students will often turn to another source of support. In this case the source of acceptance can be other delinquent students that may be experiencing the same feelings of despair. At this point students often internalize a feeling of complete discouragement and resign themselves to life as a failure, with their peer group association also being one of failure.<sup>38</sup>

While family background and lack of academic achievement have been given as reasons for student misbehavior, others see a potential variety of causes, though not in terms of specifics. "Misbehavior in the school or classroom is often only a symptom of a larger problem troubling the student and thereby causing difficulty for that student, the teacher, and other students."<sup>39</sup> Since

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<sup>38</sup>Raffini, p. 19.

<sup>39</sup>Donald R. Grossnickle and Frank P. Sesko, Promoting Effective Discipline in School and Classroom (Reston, VA: National Association of Secondary School Principals, 1985), 45.

each child is an individual, each case of disruptive behavior would have to be studied on an individual basis. What motivates one person to respond in a particular fashion may have no bearing on another individual. The need becomes one of attempting to discover the real problem of why a student acts up and to look at the student pattern of behavior to see if problems are "hiding beneath the surface."<sup>40</sup>

Whatever the specific reasons for a disruptive student, the consequences are usually twofold; one problem is that of becoming a school dropout and the other of developing unacceptable social behavior. The background characteristics of such high school students are:

- (1) serious problems with school work,
- (2) tardiness or irregular attendance,
- (3) grade retention,
- (4) nonparticipation in extracurricular activities, and
- (5) disruptive behavior at school.<sup>41</sup>

Student dropouts often have different cultural values in terms of attitudes and ideas than the authorities at school. The need for conformity to obedience, docility, and scholarship is not present. The lack of similar values lead to feelings of estrangement from school matters and

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<sup>40</sup>Fred Bartosh and John Barilla, "Discipline-Still Number One on the Administrators List of Problems," NASSP Bulletin, Vol. 69 (March 1985): 7-8.

<sup>41</sup>Lisa Beck and Joseph A. Muia, "A Portrait of a Tragedy: Research Findings on the Dropout," The High School Journal, Vol. 64 (November 1980): 66.



participation in extra-curricular activities is almost non-existent. Other noted characteristics of the dropout include:

- (1) Socio-economic status of the parents,
- (2) family size,
- (3) intelligence, and
- (4) personality.<sup>42</sup>

The reasons for a school dropout are varied as are the causes but the results are usually the same, that of high unemployment, isolation from family problem behaviors, and criminal records. The problem is serious as a 1982 report contained a statement that the dropout rate was 26 percent in the total United States and at a 50 percent rate in urban centers.<sup>43</sup> Without significant changes in the social system, there appears to be no forthcoming reduction of the dropout rate, especially in large cities.

American school dropouts are statistically involved, at a higher than normal rate, with criminal behavior and actions. School dropouts were less involved with school activities during their high school years, causing an excess amount of idle time. This idle time has been concluded to be a major cause of youth lawlessness. The idle, bored, uninvolved youth has time "on his hands" without any

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<sup>42</sup>Starke R. Hathaway et al., "Follow-Up of the Later Careers and Lives of 1,000 Boys Who Dropped Out of High School," Journal of Consulting and Clinic Psychology, Vol. 33 (June 1969): 379.

<sup>43</sup>Richard E. Maurer, "Dropout Prevention: An Intervention Model for Today's High School," Phi Delta Kappan, Vol. 63 (March 1982): 470.

constructive means of guidance and direction. The lack of formal structure has led to private activities that are often associated with criminal action."<sup>44</sup>

While many criminal behaviors take place after the student has dropped out, a significant amount of crime occurs during the time the student is still in school. Baker's research pointed to the idea that "school crime and disorder pose major challenges to America's schools."<sup>45</sup> The evidence available suggested that in many schools the rate of uncivil and criminal behavior was too excessive and that criminal behaviors do disrupt the learning process.

Dropouts, delinquency, crime, family unrest, all of these factors and more have created discipline problems for public school officials. Answers to these problems are not easy. Many of the solutions must be dealt with by society in general, not just the public schools. What can the public school do to reduce the problem of disruptive students? Mahan and Johnson made the suggestion to "encourage co-curricular activities for as many students as possible, increasing these programs as needed."<sup>46</sup> They

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<sup>44</sup>Bruce Biddle et al., "The Structure of Idleness: In-School and Dropout Adolescent Activities," Sociology of Education, Vol. 54 (April 1981): 117-118.

<sup>45</sup>Keith Baker, "Research Evidence of a School Discipline Problem," Phi Delta Kappan, Vol. 66 (March 1985): 487.

<sup>46</sup>Guy Mahan and Charles Johnson, "Portrait of Dropout: Dealing with Academic, Social, and Emotional Problems," NASSP Bulletin, Vol. 67 (April 1983): 82.

believed that the students who participate are less likely to drop out and cause problems in the school. Other researchers verify this stand by studying juvenile court records and discovering that "athletes are less often delinquent than non-athletes."<sup>47</sup> If school leaders want to prevent delinquency, it is concluded that general student participation in school activities will alter the unrest in a school by providing guidance and direction for the students.

Not all researchers believe in the approach of stopping potential discipline problems by encouraging students to participate in school activities. They take a much different view as to the solutions available to the schools. Bauer concluded that student misbehavior was one of the most serious problems facing the schools today. His premise states that a few disorderly students can disrupt the entire process of education for the majority of students. Therefore, if schools require students to take the responsibility for their own actions, and suffer the consequences if they do not, then at least the majority of students can succeed.<sup>48</sup>

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<sup>47</sup>Walter E. Schaffer, "Some Social Sources and Consequences of Interscholastic Athletics: The Case of Participation and Delinquency," International Review of Sport Sociology, Vol. 4 (1969): 78-79.

<sup>48</sup>Gary L. Bauer, "Restoring Order to the Public Schools," Phi Delta Kappan, Vol. 66 (March 1985): 488.

In a study of over five thousand junior and senior high school students, the notion was again advanced that "the greatest likelihood of a school succeeding in immediately reducing its level of violence hinges on increasing efforts in student governance and rule enforcement."<sup>49</sup> The approaches of strict adherence to school rules and consequences for rules broken at least provides another direction or philosophy in curbing school discipline problems. Which of the solutions that will work best is probably based upon unique circumstances to each school, but one answer to such a varied problem is unlikely to be a cure-all.

Based on the data presented on school discipline, it appears that students with school discipline problems are not as likely to be as successful in school as compared to students that do not have discipline problems. Students with a history of school discipline problems are not as likely to participate in school activities.

#### Academic Achievement and Student Activities

During the 1980s, many studies of American public school education were performed, leading to several reform proposals. The tenure of the time was the potential crisis of our country if the future citizens were not educated properly. What is meant to be educated properly was as

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<sup>49</sup>Robert J. Rubel, "Violence in Public Schools: HEW's Safe School Study," NASSP Bulletin, Vol. 62 (March 1978): 82-83.

varied as the number of reports that were generated. Still, many of the reports did have themes that eventually led to state legislatures attempting to improve the quality of the public school system. One of the common themes dealt with academic achievement of the student and why students succeeded or failed in their academic endeavors.

The first of the reports published in the 80s, and one commonly read, spoke of the impending crisis in the public school system. Even the name of the report, A Nation At Risk, seemed to draw inferences of potential doom for our country. Statements made in the study, based upon the collective view of its authors, pointed to the following negative facts:

Average achievement of high school students on most standardized tests are now lower than 26 years ago when Sputnik was launched.

About 13 percent of all 17 year olds in the United States can be considered functionary illiterate. Functional illiteracy among minority youth may run as high as 40 percent.

Many 17 year olds do not possess the "higher order" intellectual skills citizens should expect of them. Nearly 40 percent cannot draw inferences from written material;

only one-fifth can write a persuasive essay; only one-third can solve a mathematics problem requiring several steps.<sup>50</sup>

Two questions arose from the material presented about the troublesome nature of the public school system in America. The first question was what significance exists between academic achievement in high school and success in later life? The second question was what can cause students to do better in terms of academics? The reason for the first question came from the A Nation At Risk report. If students were actually doing as poor as the report stated, then what effect would this lack of academic preparation have on the future of our country? And did the current academic status have any bearing with the future?

In 1974 the American College Testing Program wanted to determine how accurate American College Test (A.C.T.) scores and high school grades did in predicting later success in adult life, or adult accomplishments. The results were that no statistical correlation existed between academic achievement and adult accomplishment. Instead the best predictor of adult success was the amount of time and leadership that was vested in high school activity programs.<sup>51</sup> This conclusion, if correct, would answer the first question from the A Nation At Risk report, that school

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<sup>50</sup>David P. Garoner, A Nation At Risk (Washington, D.C.: National Commission on Excellence in Education, 1983), 8-9.

<sup>51</sup>"Study Seeks Signposts for Success in College," Omaha World Herald, 15 October 1985, p. 9, col. 1-2.

academics will not necessarily determine future success or failure of the country.

An interesting development from the American College Testing Program study could help answer the second question as to what could help students perform at a higher academic rate. There are numerous studies that have been conducted to try and determine the answer. In a questionnaire mailed to over four thousand junior high principals in the United States, three-fourths responded as to the values of school activities. Leading the list of reported values was stimulating scholastic achievement. Other reported values include:

1. Teaching constructively the need for self-discipline.
2. Constructive influence in character development.
3. Desirable social conduct and adjustment.
4. Favorable attitude towards school.
5. Team work.
6. An antidote to potential delinquency.<sup>52</sup>

It appears that students that perform in school activities do better in their academic pursuits. Eidsmore reports that athletes who are highly competitive in their chosen sport are also above the average of their fellow students in academic performance. In the Eidsmore study, he clearly indicated that players on the football team were

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<sup>52</sup>Ellsworth Tompkins and Virginia Roe, Interscholastic Athletic Programs in Junior High Schools (Washington, D.C.: National Association of Secondary School Principals, 1958), 30.

superior to the average of their classroom colleagues in academic performance.<sup>53</sup>

The theme was again shown in a four-year study of urban high school students. The athletes' annual accumulated group mean for grade point average was consistently higher than the non-athletes' group mean. The notion that student activities help academic success was clearly present. The fact that participation took a significant amount of after school hours did not hinder the academic progress but instead could be linked to success.<sup>54</sup>

If student activities are noted as helping or at least positively related to academics, then it should also be shown what additional benefits, to the student, are derived from these activities. The potential benefits can play a vital role in the development of the student for later life.

Life is often a series of interactions with fellow human beings. In order to be productive in most jobs, people must be able to relate to others in a positive manner involving human relations. Gholson wrote that a high grade point average can be obtained without a great deal of human contact but student activities provide for the opportunities for students to interact and learn from each other. Student

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<sup>53</sup>Russell M. Eidsmore, "High School Athletes Are Brighter," Journal of Health-Physical Education-Recreation, Vol. 35 (May 1964): 53-54.

<sup>54</sup>Thomas L. Edwards, "Scholarships and Athletics," Journal of Health-Physical Education-Recreation, Vol. 38 (March 1967): 75.



activity programs are able to create a fusion among school and community with such practices carried on into life after high school.<sup>55</sup>

Another benefit from activity programs that greatly influences future behaviors of students is the reduction of delinquency records and illegal actions. Research has pointed out that students involved in such school activities had a lower incidence of delinquency. Specifically, participation for students can provide relief from boredom and unstructured time while teaching moral lessons, interpersonal skills, and perceived peer status.<sup>56</sup> If delinquency is stopped at an early age, or never allowed to develop, then the chance for life success is obviously better than one cloaked with a history of criminal activities. In addition, activities can also provide an avenue for pupils to "prove themselves" in a positive setting as opposed to a negative or delinquent generating settings.

In determining one's chance for success, an overwhelming factor must be that of attitude. Positive attitudes towards school and work are often credited with positive outcomes. Student activities are a means for

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<sup>55</sup>Ronald Gholson, "Student Achievement and Co-curricular Activity Participation," NASSP Bulletin, Vol. 69 (October 1985): 20.

<sup>56</sup>Daniel M. Landers and Donna M. Landers, "Socialization Via Interscholastic Athletics," Sociology of Education, Vol. 51 (1978): 302-303.

establishing and maintaining such beliefs and feelings. In studies of students that participated in activities, the results stated that the "respondents who were identified as having previously participated in high school athletics were significantly more positive in their attitude than those who had not participated."<sup>57</sup> In addition, the same attitudes have been expressed by parents, teachers, and school administrators. The groups have been able to witness the difference that student activities make in an individual child's life. The additional contact students have with advisors, teachers, and coaches through activities provided such benefits as cooperation, leadership, achievement, thinking skills, and oral expression.<sup>58</sup>

#### Summary of the Literature

From the literature it can be demonstrated that school activities can be of help to students who have not previously participated in school activities. Research has shown numerous times that student participation in school activities lead to positive outcomes in academic school achievement and to a personal feeling of self-worth. Participation in school activities has shown students to

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<sup>57</sup>Robert H. Lohrberg, "An Analysis of Attitude Toward Selected Aspects of Boys' Interscholastic Athletics in Lincoln, Nebraska" (unpublished Doctoral dissertation, University of Nebraska, 1974), p. 119.

<sup>58</sup>Fred L. Shickell, "An Analysis of the Time and Time-Related Resource Utilization of Student Activities in Selected Nebraska Secondary Schools" (unpublished Doctoral dissertation, University of Nebraska, 1984), p. 61.

have less discipline problems at school and in the community. Students that dropped out of school also had less involvement with school activities. Students that experienced a break up of the family home were more likely to cease participation in school activities as compared to their classmates. All of the factors discussed in the review of literature, family structure, socio-economic status, discipline, and academic achievement pointed out that children from a safe, stable, and positive environment have a greater opportunity of success in school and life in general. School activities can also provide a safe and positive environment for children to grow and improve. The opportunities to work and play with peers in school activities have been shown to help children overcome personal difficulties and keep children out of potential trouble.

The study by the American College Testing Program, in which a positive relationship between participation in school activities and success in personal life beyond the school years was demonstrated, could be a rationale for the encouragement of student activities. The goals for education should include the growth and development of students in both academic and personal achievement. The use of school activities is an avenue for student growth and development. If participation in school activities can help students to maximize their potential for life and help to

provide a needed structure, then the program of school activities is meeting a need of students.

The value of student activities can be summarized in the statement that student activity programs provide significant learning experiences for some youth and help some youth to develop value patterns.<sup>59</sup> It is these value patterns that can stay with a person their entire life and form the basis for future decisions. Life is often a process of trial and error, while learning from experience. If a student is able to use decision making process in the public schools, then the experience gained from such endeavors can carry the person through a lifetime of decisions. The need for school activity programs in terms of academic achievement alone is valuable, but the additional worth takes place when all other benefits are known. To say that the experiences gained in public school activities could be a leading indicator of a student's life demonstrates the importance of school activities in public schools.

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<sup>59</sup>Ronald G. Joekel, "Student Activities and Academic Eligibility Requirements," NASSP Bulletin, Vol. 69 (October 1985): 3.

## CHAPTER 3

### Methodology

#### Purpose of the Study

The purpose of the study was to identify the background characteristics, as measured by ten selected variables, of public high school students in three selected Nebraska school districts in relationship to their participation in school activity programs. The ten selected variables used in the study include grade level, sex, economic status, family background, grade point average in school, standardized test scores, discipline records, class tardies, school attendance records, and amount of employment.

#### Research Questions

In the study the following questions concerning the amount of participation in school activities by public high school students based upon the following background characteristics were addressed:

1. Does the structure of the family have any relationship to student participation in school activities?
2. Does the economic background of a student have any relationship with participation in school activities?

3. Does the amount of school discipline referrals a student receives have any relationship to participating in school activities?

4. Does the number of tardies have any relationship with participation in school activities?

5. Does the number of absences from classroom attendance have any relationship with participation in school activities?

6. Does the grade point average of a student have any relationship with participation in school activities?

7. Will the results of a student's standardized achievement test scores have any relationship with participation in school activities?

8. To what extent does student employment relate to a student's participation in school activities?

9. Does the sex of the student have any relationship on the amount of student participation in school activities?

10. Does the grade level of the student have any relationship to the student participating in school activities?

The study also addressed if there is a difference in participation in school activities by individual school so that there may be an indication of whether or not results may be generalized beyond the schools involved.

### Population and Sample

The population studied was high school students in three selected Nebraska high schools, grades ten through twelve. The respective student enrollments, grades ten through twelve, for the high schools studied were 1,360, 433, and 151 for the school year 1987-88. The high schools were classified for Nebraska school activity programs as Class A, Class B, and Class C (Nebraska School Activities Association Directory, 1987-88). The three selected Nebraska high schools were all members of Class III school districts (Nebraska Department of Education Information Services, 1988). The three high schools selected for the study represent different student population enrollment which allows for comparisons among the schools in terms of generalizing results beyond the three selected schools.

A stratified sample of the student population consisted of 33 students from each of the three grade levels at each of the three high schools. The sample number from each of the three high schools was selected in order to have an equal number of subjects from each school at each grade level. The procedure allows for determining if there were differences in results based upon school size. The sample size of 33 students per grade level, or 99 students per school, was determined by establishing the smallest number of students in a particular grade level from the high school with the smallest population enrollment. In the study the

eleventh grade student population in the smallest high school sampled had a total enrollment of 33 students, even though not all 33 students would be able to be used for this study because of missing data related to the independent variables. The sample size exceeded the minimum of cases needed for causal-comparative research.<sup>1</sup>

The three high schools selected for the study were within a 40-mile radius of each other. The three high schools have no direct school activity programs scheduled between themselves.

#### Instrumentation

A non-experimental, or ex post facto, research design was used in the study. The manipulation of variables or the assigning of subjects to specific conditions was not possible. Non-experimental research has been found to be of high significance in behavioral research and was applicable for this study.<sup>2</sup>

A data collection matrix format was used in the study to record information on student records. A spread sheet was developed using a word processing software package to record the pieces of data that were collected. Ten

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<sup>1</sup>Walter R. Borg and Meredith D. Gall, Educational Research (New York: Longman, Inc., 1983), 257-259.

<sup>2</sup>Fred N. Kerlinger, Behavioral Research: A Conceptual Approach (New York: Holt, Rinehart, and Winston, 1979), 116-117.



independent variables and a dependent variable were measured to study possible relationships among the variables.<sup>3</sup>

The independent variables were selected by researching the information that was kept on public high school students by most school systems and by identifying topics in the literature that focused on variables that could possibly influence the independent variable of participation in school activities.

The following independent variables were selected, researched, and listed on the data matrix:

1. Economic status--qualifying or not qualifying for free or reduced lunch/breakfast program.
2. Family status--living in a traditional family background or living in a non-traditional family background with either one parent only or a parent and step-parent.
3. Discipline--number of referrals to the principal's office for violation of school rules.
4. Tardies--number of late reportings to the start of a school day.
5. Absences--number of non-reportings to an assigned class or classes.
6. Academic achievement--grade point average of each student.

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<sup>3</sup>Dennis E. Hinkle, William Wiersma, and Stephen G. Jurs, Basic Behavioral Statistics (Boston: Houghton Mifflin Co., 1982), 11-12.

7. Standardized test results--percentile scores from a nationally normed test of achievement.
8. Employment--number of hours employed each week in a job outside the school day.
9. Sex--female or male.
10. Grade in school--listing of the grade in high school based upon academic achievement towards graduation requirements.

The dependent variable of the amount of participation in student activities was measured by the total number of non-school hours that a student participated in school activities.

Participation in school activity programs was determined by using all the school-sponsored activities that were offered in any of the three high schools used in the study. Each school activity was assigned a specific number of non-school hours as calculated by the approximate number of hours spent in the activity. The calculations were determined with the assistance of sponsors, coaches, school activity directors, and principals. The calculations were based upon practice time, game time, travel time, and meeting time. Each calculation was for the maximum number of hours the activity would encompass during the season or year. All calculated hours were rounded to the nearest multiple of five. The following school activities and their calculated hours of non-school time are as follows:

<u>Non-School Time</u>	<u>Hours</u>
Football	- 150
Soccer	- 125
Volleyball	- 165
Swimming	- 175
Cross Country	- 50
Tennis	- 150
Golf	- 150
Basketball	- 300
Wrestling	- 200
Baseball	- 150
Track	- 80
Gymnastics	- 200
National Honor Society	- 10
Student Council	- 50
Medical Careers Club	- 15
Math Club	- 15
Science Club	- 15
Art Club	- 10
Foreign Language Club	- 15
Future Business Leaders of America	- 60
Future Farmers of America	- 100
Future Homemakers of America	- 60
Cheerleaders/Pep Club	- 150
Drill Team	- 25
Band	- 125

<u>Non-School Time</u>	<u>Hours</u>
Show Choir	- 25
Speech Team	- 45
Debate	- 50
One-Act	- 25
Musical/Drama	- 60
Letterman Club	- 10

#### Procedures

The three high school principals from the three selected high schools were contacted and given an explanation of the research study. Information relating to the confidentiality of both the high schools' and the pupils' names was provided. A list of the needed information was given to the principal. Permission was granted by each principal in order to conduct the study.

The data on high school students were obtained through school records, a student questionnaire, and interviews with principals and counselors.

The majority of the following data was gathered through the use of the student's cumulative school file: (1) family status, (2) absences, (3) academic achievement, (4) standardized test score, (5) sex, (6) grade in school, and (7) activity participation in groups, teams, or clubs. All of the information on the economic status of the student was obtained through the records of application for the free or reduced federal lunch/breakfast program. Data for

discipline referrals and tardies were gathered through records kept at the principal's office. The information on employment outside the school day was obtained through interviews with principals and counselors or with a survey instrument. Additional needed information on activity participation in groups, teams, or clubs was gathered through a survey instrument when the data had not been recorded on the student's cumulative school file.

The data were collected on the independent variables using the following definitions and coding:

1. Sex--male or female.
2. Grade Level--tenth, eleventh, or twelfth.
3. Economic Status--accepted application to the national free and reduced lunch/breakfast program or no indication of participation in the program.
4. Family Status--traditional, single parent, or mixed family.
5. Absences--number of times a student had not reported to school.
6. Tardies--number of times a student had not reported to class.
7. Discipline--number of referrals to the principal's office for conduct or behavior problems.
8. Employment--number of hours of work outside the school day in return for financial remuneration using multiples of five.

9. Academic Achievement--grade point average based on a 0.0 to 4.0 scale.
10. Standardized Test Results--composite test score percentiles on a nationally normed test of achievement with a range of 1 percent to 99 percent.

The data were collected on the dependent variable of the amount of participation in student activities by adding together the assigned hours for each individual activity that the student participated in during the school year.

#### Data Analysis

Data collected from the school records, interviews with principals and counselors, and the student questionnaire were used to analyze the research questions in the study.

The collected data were separated into different data categories. The independent variables of sex, economic status, and family status were classified on a nominal scale. The independent variable of grade level was classified on an ordinal scale. The independent variables of discipline referrals, tardies, absences, academic achievement, standardized test scores, and hours of employment were classified on a ratio scale.<sup>4</sup>

The different classification of the data categories resulted in two different data analyses for the independent variables. The independent variables classified on a

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<sup>4</sup>Hinkle, Wiersma; and Jurs, pp. 13-15.

nominal and ordinal scale were categorical variables and were analyzed by using the techniques of analysis of variance (ANOVA). Analysis of variance enables a determination of whether mean scores on one or more factors differ significantly from each other, and whether the various factors interact significantly with each other. The method of inferential statistics allows for the testing of the null hypothesis.<sup>5</sup>

The independent variables used for the analysis were grouped into two separate two-way interactions. One of the two-way interactions was grouped using the independent variables of economic status and family status with the dependent variable of hours of activity participation. The second two-way interaction was grouped using the independent variables of grade in school and sex with the dependent variable of hours of activity participation. The selection of the specific independent variables used for the two-way interaction analysis was determined by grouping the independent variables together that had similar characteristics. The interpretation of how the variables were similar or different, in terms of grouping, was the responsibility of the researcher.<sup>6</sup>

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<sup>5</sup>Borg and Gall, pp. 378-379.

<sup>6</sup>C. Chatfield and A. J. Collins, Introduction to Multivariable Analysis (London: Chapman and Hall, 1980), 106.

The independent variables classified on a ratio scale were analyzed by using the inferential statistical procedures of multiple regression. Multiple regression is an appropriate parametric test for both experimental and non-experimental data. It is suited to the analysis of mixed data, data from research in which there are one or more attribute variables when there is one dependent variable.<sup>7</sup> In prediction studies multiple regression is used to determine whether two or more of the predictor variables in a study can be combined to predict the criterion better than any one predictor variable does alone.<sup>8</sup> The independent variables in this study were discipline referrals, tardies, absences, academic achievement, and standardized test scores. The dependent variable was the number of hours of participation in school activities.

The data were analyzed in four different procedures in order to answer the research question of differences in participation in school activities by individual schools so that there may be an indication of generalizing the results beyond the three schools involved in this study. Each of the three individual high schools were analyzed separately in terms of reported data for their particular high school. A fourth analysis was provided using the collective data on

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<sup>7</sup>Kerlinger, pp. 172-173.

<sup>8</sup>Borg and Gall, pp. 584-585.



all three high schools in order to develop a composite profile.

The analysis of the data was derived through the SPSSX package of statistical design and research. The SPSSX package is used for social service research.

The results of collected data are presented in the following chapter of the research study.

## CHAPTER 4

### Presentation and Analysis of Data

#### Introduction

The purpose for conducting the study was to identify the background characteristics, as measured by ten selected variables, of public high school students in three selected Nebraska school districts in relationship to their participation in school activity programs. The ten selected variables used for the study included grade level, sex, economic status, family background, grade point average in school, standardized test results, discipline records, class tardies, school attendance records, and amount of employment.

Ten questions provided a basis for the study:

1. Does the structure of the family have any relationship to student participation in school activities?
2. Does the economic background of a student have any relationship with participation in school activities?
3. Does the amount of school discipline referrals a student receives have any relationship to participating in school activities?
4. Does the number of tardies have any relationship with participation in school activities?

5. Does the number of absences from classroom attendance have any relationship with participation in school activities?

6. Does the grade point average of a student have any relationship with participation in school activities?

7. Will the results of a student's standardized achievement test scores have any relationship with participation in school activities?

8. To what extent does student employment relate to a student's participation in school activities?

9. Does the sex of the student have any relationship on the amount of student participation in school activities?

10. Does the grade level of the student have any relationship to the student participating in school activities?

The study also attempted to determine if there is a difference in participation in school activities by individual school, so that there may be an indication of whether or not results may be generalized beyond the schools involved.

The data for the study were collected from three Nebraska Class III schools. A stratified sample of high school students in grades ten, eleven, and twelve was used for the study.

The data were collected through records maintained by the high schools, interviews with principals and counselors,

and student questionnaires. The collected data were recorded on a spread sheet using a word processing software computer package.

This chapter presents the research questions, the data collected, and the analysis performed to respond to the questions. The research questions were analyzed on both an individual school basis and on a combination basis of all three high school results combined.

#### Research Question Results

##### Structure of the Family and Economic Status

**Does the structure of the family have any relationship to student participation in school activities?**

**Does the economic background of a student have any relationship with participation in school activities?**

For the purpose of the study, the structure of the student's family was separated into three categories. A student was listed as living in a traditional family, a single parent family, or a mixed family.

For the purpose of the study, the economic background of the student's family was reported in two categories. A student was listed as either qualifying for the federal government school food assistance program or not qualifying/applying for the program.

The category responses from the two independent variables of family structure and economic background are

reported in Table 1 and Table 2. Both tables are reported by individual high schools and the high schools combined.

Table 1  
Category Responses to Family Structure in  
Selected Nebraska High Schools

Subject	<u>Traditional Family</u>		<u>Single Parent Family</u>		<u>Mixed Family</u>	
	N	%	N	%	N	%
Small High School	62	67	15	16	15	16
Medium High School	77	78	12	12	10	10
Large High School	85	86	5	5	9	9
Combined High Schools	224	77	32	11	34	12

Table 2  
Category Responses to Economic Status in  
Selected Nebraska High Schools

Subject	<u>Government Assistance</u>		<u>No Assistance</u>	
	N	%	N	%
Small High School	17	18	75	82
Medium High School	11	11	88	89
Large High School	6	6	93	94
Combined High Schools	34	12	256	88

The large high school was in a suburban setting representing a middle to upper socio-economic class. In addition, the school bordered a large U.S. military base with many military officers and their families living in the school district. The middle and small high schools were located in towns 15 to 20 miles outside an urban setting, representing a middle class socio-economic level.

A two-way statistical interaction procedure using analysis of variance allowed for the comparison of mean scores between the independent variables of family structure and economic background with the dependent variable of hours of activities.

Table 3 reports the results of the information between the two independent variables with the hours of student activity participation.

Table 3

Two-Way Interaction Between Family Structure  
and Economic Status With Hours of Student  
Activity Participation in Selected  
Nebraska High Schools

	<u>Traditional</u>		<u>Single</u>		<u>Mixed</u>	
	M	N	M	N	M	N
Government Assistance	89.21	(19)	140.91	(11)	163.75	(4)
No Assistance	176.79	(205)	159.29	(21)	204.17	(30)

The process of analysis of variance allowed for the determination of the significance of F for correlational statistics among the variables. The alpha level for the procedures was set at .01. Table 4 reports the results.

Table 4  
Significance of F for Two-Way Interactions  
of Family Structure and Economic Status  
With Student Activity Participation  
in Selected Nebraska High Schools

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Two-Way Interaction	179888.142	5	35977.628	1.099	.361

The significance of F at the .361 predictor level was not statistically significant. The relationship of family status and economic status on the amount of school activity participation was not a reliable determination of student participation in school activities for the study.

#### Grade Level and Sex of Student

**Does the grade level of the student have any relationship to the student participating in school activities?**

**Does the sex of the student have any relationship on the amount of student participation in school activities?**

For the purpose of the study, the grade levels used were the tenth, eleventh, and twelfth grades. The category responses from the two independent variables of grade level and sex of student are reported in Table 5 and Table 6. Both tables are reported by individual high schools and the high schools combined.

Table 5  
Category Responses to Grade Level in  
Selected Nebraska High Schools

Subject	<u>Tenth Grade</u>		<u>Eleventh Grade</u>		<u>Twelfth Grade</u>	
	N	%	N	%	N	%
Small High School	33	36	26	28	33	36
Medium High School	33	33	33	33	33	33
Large High School	33	33	33	33	33	33
Combined High Schools	99	34	92	32	99	34



Table 6  
Category Responses to Sex of Students in  
Selected Nebraska High Schools

Subject	Male		Female	
	N	%	N	%
Small High School	52	57	40	43
Medium High School	45	45	54	55
Large High School	52	53	47	47
Combined High Schools	149	51	141	49

A two-way statistical interaction procedure using analysis of variance allowed for the comparison of mean scores between the independent variables of grade level and sex of the student with the dependent variable of hours of activities. Table 7 reports the results of the interaction between the two independent variables with the hours of student activity participation.

Table 7

Two-Way Interaction Between Grade Level and  
Sex of Student With Hours of Student  
Activity Participation in Selected  
Nebraska High Schools

	<u>Tenth Grade</u>		<u>Eleventh Grade</u>		<u>Twelfth Grade</u>	
	M	N	M	N	M	N
Male	250.67	(45)	159.60	(50)	147.13	(54)
Female	166.30	(54)	194.05	(42)	117.00	(45)

The process of analysis of variance allowed for the determination of the significance of F for correlation statistics among the variables. The alpha level for the procedure was set at .01. Table 8 reports the results.

Table 8

Significance of F for Two-Way Interaction of  
Grade Level and Sex of Student With  
Student Activity Participation in  
Selected Nebraska High Schools

Source of Variation	Sum of Squares	DF	Mean Square	F	Significance of F
Two-Way Interaction	477596.399	5	95519.280	3.013	.011

The significance of F at the .011 predictor level was not statistically significant. The relationship of grade level and sex of student on the amount of school activity participation was not a reliable determination of student participation in school activities. Table 7 does indicate that tenth grade male students had a 57.1 percent drop-off from the mean number of activity participation hours after the tenth grade (250.67 to 159.60). In addition, Table 7 indicates a 65.9 percent drop-off from the mean number of activity participation hours for females between their eleventh and twelfth year of school (194.05 to 117.00).

Mean and Standard Deviation of Variables  
in Multiple Regression Model

The six independent variables and the dependent variable used in the study, through a multiple regression formula, are listed in Table 9 through Table 12. The variables are reported in terms of mean and standard deviation for each of the three high schools in the study and the combined high schools.

Table 9

Mean and Standard Deviation in Multiple Regression  
Model for Small Nebraska High School

Variable	Mean	SD
Discipline	.844	1.817
Tardies	5.700	6.401
Absences	10.556	6.121
G.P.A.	2.499	.724
Achievement Test	56.044	25.486
Employment	8.500	9.524
Hours of Activities	253.167	216.292

Table 10

Mean and Standard Deviation in Multiple Regression  
Model for Medium Nebraska High School

Variable	Mean	SD
Discipline	.323	.843
Tardies	2.313	3.209
Absences	7.455	5.754
G.P.A.	2.563	.929
Achievement Test	68.737	24.078
Employment	12.222	10.576
Hours of Activities	162.475	168.160

Table 11

Mean and Standard Deviation in Multiple Regression  
Model for Large Nebraska High School

Variable	Mean	SD
Discipline	1.152	1.815
Tardies	5.081	4.072
Absences	8.414	6.429
G.P.A.	2.628	.698
Achievement Test	61.909	26.441
Employment	9.141	10.352
Hours of Activities	106.869	123.480

Table 12

Mean and Standard Deviation in Multiple Regression  
Model for Combined Nebraska High Schools

Variable	Mean	SD
Discipline	.771	1.585
Tardies	4.323	4.906
Absences	8.753	6.219
G.P.A.	2.565	.792
Achievement Test	62.424	25.782
Employment	10.000	10.275
Hours of Activities	171.701	181.466

The means and standard deviations for the variables used in the multiple regression model were listed for each of the three high schools in the study and the combined high schools. Results were different for each of the three schools used in the study. The number of discipline referrals was highest in the large school with a mean of 1.152 as compared to the medium high school with the lowest number of discipline referrals at a mean of .323. The number of school tardies was highest in the small high school at a mean of 5.700 while the lowest mean number of tardies was 2.313 at the medium high school. The number of student absences from school was greatest at the small high school with a mean of 10.556 as compared to the lowest mean of 7.455 in the medium high school. The grade point average of the students was highest in the large high school with a mean of 2.628 while the small high school had the lowest mean at 2.499. Achievement test score results were highest at the medium high school with a mean of 68.737 and the lowest mean was in the small high school at 56.044. The hours of student employment were lowest at the small high school with a mean of 8.500 as compared to the high of 12.222 in the medium high school. The hours of activities were highest in the small high school with a mean of 253.167 and the lowest mean number of activities was 106.869 in the large high school.

The small high school had the highest mean number of hours of activities, the lowest mean number of outside employment, the lowest mean grade point average, the lowest achievement test scores, the highest mean number of tardies, and the highest mean number of absences.

The medium high school had the highest mean achievement test score results and the highest mean number of outside employment. The medium high school had the lowest mean number of discipline referrals, tardies, and absences.

The large high school had the highest mean number of discipline referrals and grade point average. The large high school had the lowest mean number of hours of activities.

The school with the highest amount of student activity participation, the small high school, had low student employment but school tardies and absences were high.

#### School Discipline Referrals

**Does the amount of school discipline referrals a student receives have any relationship to participating in school activities?**

The number of school discipline referrals was counted for each student in the study based upon school discipline records. Tables 13 through 16 provide the student frequency count of discipline referrals along with the percentile of discipline referrals for each of the three high schools in the study and the combined high schools.

Table 13  
School Discipline Referrals for  
Small Nebraska High School

Discipline Referrals	Frequency	Percentage
0	58	63.0
1	17	18.5
2	8	8.7
3	4	4.3
4	1	1.1
7	1	1.1
8	1	1.1
10	1	1.1
12	1	1.1

Table 14  
School Discipline Referrals for  
Medium Nebraska High School

Discipline Referrals	Frequency	Percentage
0	81	81.8
1	10	10.1
2	5	5.1
3	1	1.0
4	1	1.0
5	1	1.0



Table 15  
School Discipline Referrals for  
Large Nebraska High School

Discipline Referrals	Frequency	Percentage
0	192	53.5
1	23	23.2
2	5	5.1
3	8	8.1
4	2	2.0
5	2	2.0
6	4	4.0
7	1	1.0
8	1	1.0

Table 16  
School Discipline Referrals for  
Combined Nebraska High Schools

Discipline Referrals	Frequency	Percentage
0	192	66.2
1	50	17.2
2	18	6.2
3	12	4.5
4	4	1.4
5	3	1.0
6	4	1.4
7	2	.7
8	2	.7
9	0	.0
10	1	.3
11	0	.0
12	1	.3

Using the statistical process of correlational analysis, the independent variable of school discipline referrals was analyzed to determine if the variable could be used as a predictor variable for the dependent variable of hours of student participation in school activities. The alpha level for the procedure was set at .01. Table 17 lists the results of the correlation between discipline referrals and hours of student activity participation for each of the three high schools and the high schools combined.

Table 17

School Discipline Referrals Correlation  
With Hours of Student Activities in  
Selected Nebraska High Schools

Subject	Correlational Results of School Discipline Referrals With Hours of Student Activities
Small High School	-.165
Medium High School	-.135
Large High School	-.201
Combined High Schools	-.164

Correlational results from the three individual schools were not significant for school discipline referrals to be considered a predictor variable for student activity

participation. The combined high school correlation of  $-.164$  was statistically significant, with a low correlation, for school discipline referral to be considered a predictor variable for student activity participation. The combined high school correlational results indicates when students' discipline referrals were low, or as the number of discipline referrals declined, students had a greater amount of hours of participation in school activities.

#### School Tardies

**Does the number of tardies have any relationship with participation in school activities?**

The number of tardies received by a student was counted for each student in the study. The information was available in student files or through records kept at the high school office. Tables 18 through 21 provide the student frequency count of school tardies along with the percentage of school tardies for each of the three high schools in the study and the combined high schools.

Table 18  
School Tardies for Small Nebraska High School

School Tardies	Frequency	Percentage
0	22	23.9
1	8	8.7
2	8	8.7
3	7	7.6
4	6	6.5
5	6	6.5
6	3	3.3
7	6	6.5
8	2	2.2
9	3	3.3
11	6	6.5
12	1	1.1
13	1	1.1
14	3	3.3
15	1	1.1
16	2	2.2
17	2	2.2
18	1	1.1
21	2	2.2
27	1	1.1
28	1	1.1

Table 19

## School Tardies for Medium Nebraska High School

School Tardies	Frequency	Percentage
0	48	48.5
1	11	11.1
2	5	5.1
3	7	7.1
4	5	5.1
5	10	10.1
6	2	2.0
7	3	3.0
8	1	1.0
9	1	1.0
10	1	1.0
11	3	3.0
12	2	2.0

Table 20

## School Tardies for Large Nebraska High School

School Tardies	Frequency	Percentage
0	6	6.1
1	13	13.1
2	11	11.1
3	13	13.1
4	6	6.1
5	12	12.1
6	10	10.1
7	6	6.1
8	3	3.0
9	5	5.1
10	5	5.1
11	2	2.0
12	3	3.0
13	1	1.0
14	2	2.0
25	1	1.0

Table 21  
School Tardies for Combined Nebraska High Schools

School Tardies	Frequency	Percentage
0	76	26.2
1	32	11.0
2	24	8.3
3	27	9.3
4	17	5.9
5	28	9.7
6	15	5.2
7	15	5.2
8	6	2.1
9	9	3.1
10	6	2.1
11	11	3.8
12	6	2.1
13	2	.7
14	5	1.7
15	1	.3
16	2	.7
17	2	.7
18	1	.3
21	2	.7
25	1	.3
27	1	.3
28	1	.3

Using the statistical process of correlational analysis, the independent variable of school tardies was analyzed to determine if the variable could be used as a predictor variable for the dependent variable of hours of student participation in school activities. The alpha level for the procedure was set at .01. Table 22 lists the results of the correlation between school tardies and hours of student activity participation for all three high schools and the high schools combined.

Table 22

School Tardies Correlation With Hours of  
Student Activities in Selected  
Nebraska High Schools

Subject	Correlational Results of School Tardies With Hours Student Activities
Small High School	-.161
Medium High School	-.270
Large High School	-.145
Combined High Schools	-.134

Correlational results from the small, large, and combined high schools were not significant for school tardies to be considered a predictor variable for student activity participation. The correlation of  $-.270$  in the medium high school was statistically significant, with a low correlation, for the number of school tardies to be considered a predictor variable for student activity participation. The medium high school correlational results indicate when students' school tardies were low, or as the number of school tardies declined, the students had a greater amount of hours of participation in school activities.

### School Absences

**Does the number of absences from classroom attendance have any relationship with participation in school activities?**

The number of absences accumulated by a student was counted for each student in the study. The information was available in student files. Tables 23 through 26 provide the student frequency count of school absences along with the percentage of school absences for each of the three high schools in the study and the combined high schools.

Using the statistical process of correlational analysis, the independent variable of school absences was analyzed to determine if the variable could be used as a predictor variable for the dependent variable of hours of student participation in school activities. The alpha level for the procedure was set at .01. Table 27 lists the results of the correlation between school absences and hours of student activity participation for all three high schools and the high schools combined.

Correlational results from the large high school was not significant for school absences to be considered a predictor variable for student activity participation. The correlations of  $-.270$  in the small high school,  $-.345$  in the medium high school, and  $-.195$  in the combined high schools were statistically significant, with low correlations, for the number of school absences to be considered a predictor



Table 23

## School Absences for Small Nebraska High School

School Absences	Frequency	Percentage
0	2	2.2
1	1	1.1
2	2	2.2
3	5	5.5
4	8	8.8
5	3	3.3
6	3	3.3
7	5	5.5
8	10	11.0
9	5	5.5
10	6	6.6
11	3	3.3
12	5	5.5
13	5	5.5
14	6	6.6
15	2	2.2
16	9	9.9
18	3	3.3
19	2	2.2
20	2	2.2
21	1	1.1
25	1	1.1
27	1	1.1
32	1	1.1

Table 24

## School Absences for Medium Nebraska High School

School Absences	Frequency	Percentage
0	4	4.0
1	5	5.1
2	7	7.1
3	9	9.1
4	8	8.1
5	8	8.1
6	12	12.1
7	9	9.1
8	3	3.0
9	9	9.1
10	4	4.0
11	4	4.0
12	2	2.0
13	3	3.0
14	1	1.0
15	2	2.0
16	2	2.0
17	2	2.0
19	1	1.0
23	1	1.0
24	1	1.0
27	1	1.0
30	1	1.0

Table 25

## School Absences for Large Nebraska High School

School Absences	Frequency	Percentage
0	4	4.0
1	7	7.1
2	5	5.1
3	9	9.1
4	6	6.1
5	9	9.1
6	6	6.1
7	8	8.1
8	6	6.1
9	3	3.0
10	5	5.1
11	4	4.0
12	2	2.0
13	3	3.0
14	8	8.1
15	1	1.0
16	1	1.0
17	2	2.0
18	3	3.0
20	2	2.0
22	3	3.0
26	1	1.0
33	1	1.0

Table 26

## School Absences for Combined Nebraska High Schools

School Absences	Frequency	Percentage
0	10	3.5
1	13	4.5
2	14	4.8
3	23	8.0
4	22	7.6
5	20	6.9
6	21	7.3
7	22	7.6
8	19	6.6
9	17	5.9
10	15	5.2
11	11	3.8
12	9	3.1
13	11	3.8
14	15	5.2
15	5	1.7
16	12	4.2
17	4	1.4
18	6	2.1
19	3	1.0
20	4	1.4
21	1	.3
22	3	1.0
23	1	.3
24	1	.3
25	1	.3
26	1	.3
27	2	.7
30	1	.3
32	1	.3
33	1	.3

Table 27  
School Absences Correlation With Hours of  
Student Activities in Selected  
Nebraska High Schools

Subject	Correlational Results of School Absences With Hours Student Activities
Small High School	-.270
Medium High School	-.345
Large High School	-.195
Combined High Schools	-.195

variable for student activity participation. The small high school, medium high school, and combined high schools correlational results indicate when students' absences from school were low, or as the number of school absences declined, students had a greater amount of hours in participation in school activities.

#### Grade Point Average

**Does the grade point average of a student have any relationship with participation in school activities?**

The grade point average of each student in this study was recorded. The information was obtained from the students' cumulative file records. Tables 28 through 31 provide the student frequency count for grade point average along with the percentile of students obtaining that grade

point average. The grade point averages for these tables have been recorded to the nearest whole number. Each of the three high schools in the study and the combined high schools are listed.

Table 28

## Grade Point Average for Small Nebraska High School

G.P.A.	Frequency	Percentage
0.0	0	0
1.0	8	8.7
2.0	36	39.1
3.0	42	45.7
4.0	6	6.5

Table 29

## Grade Point Average for Medium Nebraska High School

G.P.A.	Frequency	Percentage
0.0	2	2.0
1.0	8	8.1
2.0	40	40.4
3.0	31	31.3
4.0	18	18.2

Table 30  
Grade Point Average for Large Nebraska High School

G.P.A.	Frequency	Percentage
0.0	0	0
1.0	5	5.1
2.0	38	38.4
3.0	42	42.4
4.0	14	14.1

Table 31  
Grade Point Average for Combined Nebraska High Schools

G.P.A.	Frequency	Percentage
0.0	2	0.7
1.0	21	7.2
2.0	114	39.3
3.0	115	39.7
4.0	38	13.1

Using the statistical process of correlational analysis, the independent variable of grade point average was analyzed to determine if the variable could be used as a predictor variable for the dependent variable of hours of

student participation in school activities. The alpha level for the procedure was set at .01. Table 32 lists the results of the correlation between grade point average and hours of student activity participation for all three high schools and the high schools combined.

Table 32  
Grade Point Average Correlation With Hours  
of Student Activities in Selected  
Nebraska High Schools

Subject	Correlational Results of Grade Point Average With Hours of Student Activities
Small High School	.306
Medium High School	.422
Large High School	.359
Combined High Schools	.312

The correlations of .306 in the small high school, .422 in the medium high school, .359 in the large high school, and .312 in the combined high schools were statistically significant, in the moderate correlations, for grade point average to be considered a predictor variable for student activity participation. The correlational results indicate for the three separate high schools and for the combined high schools that as a student's grade point average



increases, the student's amount of hours of participation in school activities increases.

#### Standardized Achievement Test Scores

**Will the results of a student's standardized achievement test score have any relationship with participation in school activities?**

The standardized achievement test score of each student in the study was recorded. The information was obtained from the student's cumulative file records. Tables 33 through 36 provide the student frequency count for the standardized achievement test score results along with the percentile of students obtaining similar standardized achievement test score results. The standardized achievement test scores for the tables have been rounded to the nearest multiple of ten. Each of the three high schools in the study and the combined high schools are listed.

Table 33  
Standardized Achievement Test Scores for  
Small Nebraska High School

Percentile of Test Score Results	Frequency	Percentage
1-9	4	4.4
10-19	8	8.9
20-29	5	5.6
30-39	8	8.9
40-49	5	5.6
50-59	17	18.9
60-69	12	13.3
70-79	11	12.2
80-89	15	16.7
90-99	5	5.6

Table 34  
Standardized Achievement Test Scores for  
Medium Nebraska High School

Percentile of Test Score Results	Frequency	Percentage
1-9	2	2.0
10-19	3	3.0
20-29	4	4.0
30-39	6	6.1
40-49	6	6.1
50-59	10	10.1
60-69	9	9.1
70-79	20	20.2
80-89	17	17.2
90-99	22	22.2

Table 35

Standardized Achievement Test Scores for  
Large Nebraska High School

Percentile of Test Score Results	Frequency	Percentage
1-9	3	3.0
10-19	6	6.1
20-29	6	6.1
30-39	7	7.1
40-49	6	6.1
50-59	13	13.1
60-69	17	17.2
70-79	8	8.1
80-89	16	16.2
90-99	17	17.2

Table 36

Standardized Achievement Test Scores for  
Combined Nebraska High Schools

Percentile of Test Score Results	Frequency	Percentage
1-9	9	3.1
10-19	17	5.9
20-29	15	5.2
30-39	21	7.3
40-49	17	5.9
50-59	40	13.9
60-69	38	13.2
70-79	39	13.5
80-89	48	16.7
90-99	44	15.2

Using the statistical procedure of correlational analysis, the independent variable of standardized test scores was analyzed to determine if the variable could be used as a predictor variable for the dependent variable of hours of student participation in school activities. The alpha level for the procedure was set at .01. Table 37 lists the results of the correlation between grade point average and hours of student activity participation for all three high schools and the high schools combined.

Table 37  
Standardized Test Scores Correlation With  
Hours of Student Activities in  
Selected Nebraska High Schools

Subject	Correlational Results of Standard Test Scores With Hours of Student Activities
Small High School	.263
Medium High School	.241
Large High School	.309
Combined High Schools	.204

Correlational results from the small high school and medium high school were not significant for standardized test scores to be considered a predictor variable for student activity participation. The correlations of .309 in

the large high school and .204 in the combined high schools were statistically significant, with low correlations, for test scores to be considered a predictor variable for student activity participation. The large high school and combined high schools correlational results indicate as students' standardized achievement test scores increase, the students' amount of hours of participation in school activities increase.

#### Student Employment

**To what extent does student employment relate to a student's participating in school activities?**

The amount of student employment, outside the school day, was measured in hours by a student survey and interviews with counselors and principals. Employment categories were listed in multiples of five and are recorded in Tables 38 through 41. Each of the three high schools in the study and the combined high schools are listed.

Table 38

## Student Employment in Small Nebraska High School

Hours of Employment	Frequency	Percentage
0-4	46	50.0
5-9	3	3.3
10-14	10	10.9
15-19	11	12.0
20-24	17	18.5
25-29	1	1.1
30-34	4	4.3

Table 39

## Student Employment in Medium Nebraska High School

Hours of Employment	Frequency	Percentage
0-4	32	32.3
5-9	6	6.1
10-14	10	10.1
15-19	14	14.1
20-24	22	22.2
25-29	8	8.1
30-34	4	4.0
35-39	2	2.0
40-44	1	1.0

Table 40

## Student Employment in Large Nebraska High School

Hours of Employment	Frequency	Percentage
0-4	47	47.5
5-9	1	1.0
10-14	16	16.2
15-19	13	13.1
20-24	11	11.1
25-29	5	5.1
30-34	2	2.0
35-39	4	4.0

Table 41

## Student Employment in Combined Nebraska High Schools

Hours of Employment	Frequency	Percentage
0-4	125	43.1
5-9	10	3.4
10-14	36	12.4
15-19	38	13.1
20-24	50	17.2
25-29	14	4.8
30-34	10	3.4
35-39	6	2.1
40-44	1	.3

Using the statistical procedure of correlational analysis, the independent variable of student employment was analyzed to determine if this variable could be used as a predictor variable for the dependent variable of hours of student participation in school activities. The alpha level for the procedure was set at .01. Table 42 lists the results of the correlation between student employment and hours of student activity participation for each of the three high schools and the high schools combined.

Table 42  
Student Employment Correlation With  
Hours of Student Activities in  
Selected Nebraska High Schools

Subject	Correlational Results of Student Employment With Hours of Student Activities
Small High School	.023
Medium High School	-.184
Large High School	-.194
Combined High Schools	-.112

Correlational results from the three high schools and the combined high schools were not significant for student employment to be considered a predictor variable of student activity participation.



Correlation Among Independent Variables

The six independent variables used in the multiple regression formula were school discipline referrals, tardies, absences, grade point average, standardized test scores, and hours of employment. The correlation between each of the independent variables and the dependent variable of hours of student participation in school activities has been reported. The correlations among the independent variable for the combined high schools are listed in Table 43.

Table 43  
Correlations Among Independent Variables  
for Combined Nebraska High Schools

	Discipline	Tardies	Absences	G.P.A.	Test Scores	Employment
Discipline	1.000	.374	.441	-.382	-.298	.020
Tardies	.374	1.000	.422	-.222	-.134	-.001
Absences	.441	.422	1.000	-.388	-.277	.029
G.P.A.	-.382	-.222	-.388	1.000	.697	-.051
Test Scores	-.298	-.134	-.277	.697	1.000	.002
Employment	.020	-.001	.027	-.051	.002	1.000

The correlations among the independent variables provided additional information about the study. The correlation between grade point average and standardized test scores was .697 for the combined high schools. The high correlation indicated that as grade point averages increased, the scores from standardized tests increased. The correlation indicates that academic achievement, in terms of grade point average and standardized tests, are positively related. The relationship between absences and discipline had a moderate correlation of .441. The correlation indicated that as school absences increased, the number of discipline referrals increased. The relationship indicated that students with a high number of discipline referrals would be more likely to have a higher number of school absences. A similar relationship was found between school absences and tardies. The moderate correlation of .422 indicated that students with a higher number of tardies would have a greater amount of school absences. The high negative correlations were recorded between grade point average and absences, and grade point average and discipline. The respected moderate correlations of  $-.388$  and  $-.382$  indicated that as a student's grade point average decreased, the number of school absences and discipline referrals increased. The relationship demonstrated that students not doing well in school on an academic basis were more likely to be absent from school and be in trouble with

authorities at school. The variable lacking correlational relationship with any other variable was employment outside the school. The results of the variable indicated that little, if any, significance existed between employment and any other variable. The correlational results of .020, -.001, .029, -.051, and .002 demonstrated the lack of a relationship between employment and the other five variables.

#### Analysis of Independent Variables on Student Activity Participation

The statistical procedure of multiple regression was used to analyze how the independent variables of discipline referrals, school tardies, school absences, grade point average, standardized achievement test scores, and student employment interacted among each other in order to determine a predictor model for student participation in activities. The multiple regression procedure was conducted on each of three high schools in the study and on the high schools combined together. The alpha level for all the procedures was set at .01.

The multiple regression results for the small high school are listed in Table 44. The small high school had one predictor variable on the amount of student participation in activities. The independent variable of grade point average, with the significance of  $F$  at .0034, was statistically significant in predicting student participation in activities. The five other independent

variables were not predictor variables because the significance of F was above the .01 alpha level for each variable.

Table 44  
Multiple Regression of Independent Variables  
With Student Activity Participation  
in Small Nebraska High School  
(Variable--Grade Point Average)

Multiple R	R Square Change	F Change	Significance of F
.30567	.09343	9.06956	.0034

  

Variable	F	Significance of F
Discipline	.048	.8276
Tardies	.779	.3800
Absences	2.651	.1071
Test Scores	.451	.5037
Employment	.581	.4478

The multiple regression results for the medium high school are listed in Table 45. The medium high school had one predictor variable on the amount of student participation in activities. The independent variable of grade point average, with the significance of F at .0000, was statistically significant in predicting student

participation in activities. The five other independent variables were not predictor variables because the significance of F was above the .01 alpha level for each variable.

Table 45

Multiple Regression of Independent Variables  
With Student Activity Participation  
in Medium Nebraska High School  
(Variable--Grade Point Average)

Multiple R	R Square Change	F Change	Significance of F
.42186	.17797	20.99986	.0000

  

Variable	F	Significance of F
Discipline	.929	.3376
Tardies	5.216	.0246
Absences	2.031	.1574
Test Scores	.816	.3686
Employment	.959	.3299

The multiple regression results for the large high school are listed in Table 46. The large high school had one predictor variable on the amount of student participation in activities. The independent variable of grade point average, with the significance of F at .0003,

was statistically significant in predicting student participation in activities. The five other independent variables were not predictor variables because the significance of F was above the .01 alpha level for each variable.

Table 46  
Multiple Regression of Independent Variables  
With Student Activity Participation  
in Large Nebraska High School  
(Variable--Grade Point Average)

Multiple R	R Square Change	F Change	Significance of F
.35852	.12854	14.30724	.0003

  

Variable	F	Significance of F
Discipline	.218	.6416
Tardies	.040	.8415
Absences	.257	.6135
Test Scores	.789	.3765
Employment	1.122	.2922

The multiple regression results for the combined high schools are listed in Table 47. The combined high schools had one predictor variable on the amount of student participation in activities. The independent variable of

grade point average, with the significance of F at .0000, was statistically significant in predicting student participation in activities. The five other independent variables were not predictor variables because the significance of F was above the .01 alpha level for each variable.

Table 47

Multiple Regression of Independent Variables  
With Student Activity Participation  
in Combined Nebraska High Schools  
(Variable--Grade Point Average)

Multiple R	R Square Change	F Change	Significance of F
.31195	.09731	30.83250	.0000
Variable	F	Significance of F	
Discipline	.755	.3856	
Tardies	1.382	.2408	
Absences	2.035	.1548	
Test Scores	.110	.7407	
Employment	2.924	.0884	

## CHAPTER 5

### Summary, Conclusions, and Recommendations

#### Summary of the Study

The purpose for conducting this study was to identify the background characteristics, as measured by ten selected variables, of public high school students, in three selected Nebraska school districts, in relationship to their participation in school activity programs. The ten selected variables used for the study include grade level, sex, economic status, family background, grade point average in school, standardized test scores, discipline records, class tardies, school attendance records, and amount of employment.

In the study the literature was examined regarding the historical background and rationale for the development of school activities in secondary schools. The literature was also examined to investigate the research on non-traditional families in America, poverty and socio-economic status, school discipline and dropouts, and academic achievement.

A popular view of many parents and educators is that school activities are beneficial for high school students. Supporting the popular opinion regarding the value of school activities is the research conducted by the American College



Testing Service in which it was concluded that the most significant factor in predicting success of high school age students who went on to college was the amount of participation in school activities. If participating in school activities will help or enhance a student's chance of success, the school personnel should understand the various factors that relate to certain student participation or non-participation in school activities.

The population for the study was 290 high school students in three selected Nebraska high schools, grades ten through twelve. The three high schools selected for the study represented different student population enrollments which allowed for comparisons among the schools in terms of generalizing results beyond the three selected schools. A stratified sample of the student population consisted of 33 students from each of the three grade levels at each of the three high schools. Eleven different variables were researched on each student in order to conduct the study.

The data were collected and analyzed in terms of relationships among variables in the study. The statistical procedures of analysis of variance and multiple regression allowed for the scores of predictor variables to correlate the relationship or non-relationship to the criterion variable.

### Results

The results of the study indicated that certain predictor variables had a positive or negative correlation to the criterion variable of student activity participation. The correlations of a predictor variable to the criterion variable were also influenced by the particular size of the high school or when the three high schools were combined for the purpose of multiple regression research.

The predictor variables used in analysis of variance, grade level and sex of the student, economic status and family status, did not demonstrate a significant correlation between the predictor variables and the criterion variable of hours of student activity participation. The four research questions developed from the four predictor variables used in the analysis of variance concludes:

1. Does the structure of the family have any relationship to student participation in school activities?

The results from the study indicated no relationship.

2. Does the economic background of a student have any relationship with participation in school activities? The results from the study indicated no relationship.

3. Does the sex of the student have any relationship on the amount of student participation in school activities? The results from the study indicated no relationship.

4. Does the grade level of the student have any relationship to the student participating in school

activities? The results from the study indicated no relationship.

The predictor variables used in the multiple regression formula, discipline referrals, school tardies, absences, grade point average, standardized achievement test scores, and amount of employment, demonstrated correlations with the criterion variable of hours of student activity participation in certain cases.

The six research questions developed from the six predictor variables used in the multiple regression formula concludes:

1. Does the amount of school discipline referrals a student receives have any relationship to participating in school activities? The results from the study indicated no relationships in the small, medium, or large high schools. The results did indicate relationships between discipline referrals with the combined high schools. The correlation indicated as school discipline referrals decline, the amount of student participation in school activities increased for the combined high schools.

2. Does the number of tardies have any relationship with participation in school activities? The results from the study indicated no relationships in the small, large, or combined high schools. The results did indicate a relationship between school tardies with the medium sized high school. The correlation indicated as school tardies

decline, the amount of student participation in school activities increased in the medium sized high school.

3. Does the number of absences from classroom attendance have any relationship with participation in school activities? The results from the study indicated no relationship in the large high school. The results did indicate relationships between school absences with the small, medium, and combined high schools. The correlation indicated as absences decrease, the amount of student participation in school activities increased in the small, medium, and combined high schools.

4. Does the grade point average of a student have any relationship with participation in school activities? The results from the study indicated a relationship between grade point average with all of the high schools in the study. As the grade point average of a student increased, the amount of participation in school activities increased for the student in the small, medium, large, and combined high schools.

5. Will the results of a student's standardized achievement test scores have any relationship with participation in school activities? The results from the study indicated no relationship in the small and medium sized schools. The results did indicate relationships between standardized test scores with the large and combined high schools. The correlations indicated as the

standardized test scores increased, the amount of student participation in school activities increased in the large and combined high schools.

6. To what extent does student employment relate to a student's participation in school activities? The results from the study indicated no relationships in any of the high schools with the amount of student employment and participation in school activities.

The six predictor variables were combined for the process of multiple regression to determine how the predictor variables influenced each other in relationship to the criterion variable. The procedure was used with the small, medium, large, and combined high schools to determine if there was a difference among schools based upon size of the student enrollment. The results from the study conclude:

1. In the small high school, the only predictor variable that related to the criterion variable of hours of student participation in activities was grade point average of the student. As the grade point average of a student increased, the number of hours of the participation in school activities increased.

2. In the medium high school, the only predictor variable that related to the criterion variable of hours of student participation in activities was grade point average of the student. As the grade point average of a student

increased, the number of hours of the participation in school activities increased.

3. In the large high school, the only predictor variable that related to the criterion variable of hours of student participation in activities was grade point average of the student. As the grade point average of a student increased, the number of hours of the participation in school activities increased.

4. In the combined high schools, the only predictor variable that related to the criterion variable of hours of student participation in activities was grade point average of the student. As the grade point average of a student increased, the number of hours of the participation in school activities increased.

The study provided a depth of information concerning students' backgrounds and how the various factors influenced their participation in school activities. Specifically, the variable demonstrated an insight into predictions of which students may or may not be active in school activities. The knowledge that different background factors existed and interact differently with the criterion variable is the essence of the study. Through the examination of the data, a description of how different student backgrounds react with activity participation was provided.

### Conclusions

Four conclusions have been inferred from the study. The conclusions were reached from the analysis of the data as described in this section. The four conclusions are:

1. Grade point average was the best predictor of a student's participation in school activities. In each of the three high schools used in the study, and when the three high schools' results were combined together, the variable of grade point average was the only variable that was significant for prediction purposes when analyzed in relation to all the combined variables.

The procedure of multiple regression demonstrated the statistical significance of grade point average at the .01 level. All other variables failed to meet the criteria of the .01 level to be considered a predictor variable for student participation in school activities.

The literature demonstrates the relationship between academic achievement and school activity participation. In a study conducted in 1964, researchers were already finding evidence that players on an athletic team were superior to the average of their colleagues in academic performance.<sup>1</sup> In another research study of two thousand students by the Stanford University Department of Communication, students'

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<sup>1</sup>Guy Mahan and Charles Johnson, "Portrait of Dropout: Dealing with Academic, Social, and Emotional Problems," NASSP Bulletin, Vol. 67 (April 1983): 82.

grades were examined over a two-year period. The researchers found that students "who fare the worst in school (grades) are the ones who watch TV because there's nothing better to do."<sup>2</sup> The report went on to note that after-school jobs had a negative effect on grades, but that after-school hours spent in sports or adult-controlled activities resulted in higher grades for the students.

In a study of approximately one thousand students in a Nebraska high school, it was revealed that a higher proportion of honor roll students had participated in one or more extra-curricular activities as compared to students with lower grade averages. "The most revealing part of the study, was that students with two or more F grades participated in few activities."<sup>3</sup>

The literature indicates that grades and activity participation have a positive relationship. A theory for the relationships is put forth to school boards across the nation by Wright. He concluded that "faculty sponsors of activities encourage or insist upon regular school

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<sup>2</sup>Sandy Dornbush, Helping Your Kid Make the Grade (Reston, VA: National Association of Secondary School Principals, 1986), 9-11.

<sup>3</sup>"Fremont Study Finds Activities, Jobs Don't Impair Students' Performance," The Lincoln Star, 19 August 1987, p. 14.



attendance and satisfactory academic performance."<sup>4</sup>

Following up with the relationship between grades and activity participation, a study conducted by Holland and Andre concludes that extra-curricular activities and outcome variables were positively correlated or positively related, such as academic ability and grades. The appendix of their study, though, "reveals that we did not state that participation caused the observed results."<sup>5</sup>

The conclusion that grade point average was the best predictor of a student's participation in school activities is based upon a relationship between the variables and is not considered to be a cause and effect event. The possibilities exist that grade point average influences student activity participation or that the amount of student activity participation influences a student's grade point average. The results from this study does not indicate or attempt to indicate any type of a causal relationship. The study does indicate, though, a general relationship between the two variables.

2. School absences, while not being a predictor variable in the multiple regression model, had a correlation with the amount of student participation in school

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<sup>4</sup>William F. Wright, "Measuring the Effectiveness of Education," The Board (Manhattan, Kansas: The Master Teacher), 4.

<sup>5</sup>Alyce Holland and Thomas Andre, "Beauty Is In the Eye of the Reviewer," Review of Educational Research, Vol. 58 (Spring 1988): 115.

activities. The results from three of the four high schools studied demonstrated a statistically significant relationship between school absences and activity participation. Students that were more likely to be in school were also more inclined to participate in after school activities. Whether the school activities get the students to school, because students cannot usually participate in practice or events if they were not in regular attendance for the school day, is not known from this study. An inference could be made, however, that students with the motivation to be in school would also be motivated to take advantage of many of the curricular programs the school system has to offer. The other approach could be that student activity programs do motivate students to attend school so that the students would be eligible to participate in the activities. In addition, students that are not in regular school attendance could have a more difficult time in maintaining their position in a school activity. Competition for the right to represent the school in the activity would not be to the advantage of a student with high absences. Either way, students with a lower number of school absences have a greater likelihood in participation in activities. This was true for the small, medium, and combined high schools. The large high school demonstrated a move towards the same direction as the other high schools, but it was not statistically correlated.

School activity participation would seem to support school attendance and, contrary to some claims, school activities do not take students away from activities to the detriment of the student.

3. The sex and grade level of the student had a relationship to the amount of student activity participation. The procedure of analysis of variance was close to demonstrating a statistical significance for the two predictor variables. The result from the two-way interaction demonstrated a significance of  $F$  at .011, with the significance level set at .01. Further study of the interaction shows that male students participated at the highest level of school activities in the tenth grade. The amount of participation declined for the male students in each of the next two grade levels. The mean number of hours in school activities for a male went from 250.61 hours to 159.60 hours to 147.13 hours for the tenth, eleventh, and twelfth grade respectively. Female students showed similar overall results, but did have an increase in the mean number of hours of activity participation during the eleventh grade. The twelfth grade showed the smallest mean number of activity hours for females. Males and females had the lowest mean number of activity participation in their senior year.

4. Results from the study can be generalized to be similar for all the high schools in the study, and when the

high schools in the study were combined into one sample. The results of the study can only be generalized to the three high schools that were analyzed and not for all high schools in the United States.

While the predictor variables results were not always significant or not significant to the criterion variable, based upon size of the high school, the indication is that the results may be generalized beyond the high schools in the study to other high schools with a similar student population. High schools from an urban or rural setting may have different results from the three suburban high schools used in the study.

#### Recommendations

Several recommendations are made based on the results and experiences associated with the study. The recommendations are reported in two categories: recommendations for further research and recommendations for the profession.

The background characteristics of high school students, in terms of participation in school activities, should be expanded. Other predictor variables, aside from the ten used in the study, could be researched. Examples of other variables that could impact upon student activity participation would include but not be limited to: parental attitude towards school, student's perception of parental interest and support for the student in terms of school work

and behaviors, peer influence or perceived peer influence, self-concept, and educational aspirations. Further study of the subject could lead to possible predictor variables that have not been discussed in this study.

Different types of high schools could be researched. In the present study, the three high schools were not similar in size but were similar in other terms. The three high schools in the study could be considered suburban high schools outside of a large urban area. The mean number of students from a lower socio-economic level was not reflective of the U.S. population with less than 12 percent of the total student population studied falling into the poverty category. In addition, the family structure of less than 23 percent of the students living in a non-traditional family was not reflective of the average student population in the United States. Also, while a racial background description was not conducted in the study, it was apparent the great majority of students were Caucasian and not reflective of the overall racial composition in the United States. High schools with a more accurate description of the United States population should be studied to ascertain if results can be generalized to all high schools. The possibility exists that large urban high schools and small rural high schools may be similar in determining significant predictor variables or there may be no correlations between the different backgrounds of the students and their

participation in school activities. Studies of different types of schools and students should be conducted.

A study could be conducted of students not in high school. The predictor variables used in the study may and probably do have an influence on students before they enter high school. Variables such as the family structure and socio-economic level have an impact upon students at an earlier age than high school. Studies of students in junior high/middle schools could be of more value than studies of high school students. Virtually all public junior high/middle schools have an activity program that mirrors the activity programs at the high school level. Participation in school activities may have some impact and influence at an earlier level. Further explanation or study of the subject could be carried to the elementary level as school programs are well established for younger students. All the programs may not be sponsored by the school, for example, Little League baseball, Girl Scouts, youth soccer, but the reasons for children participating or not participating might have an effect, at this time, upon later activity participation. Further study at this level could provide insight into how and when students are influenced into making the decisions they do to participate or not participate, or if the students are even making a conscious decision.

The profession should closely monitor students in terms of grade point average and school absences. Students with lower grade point averages or excessive school absences should be encouraged to participate in school activities if they are not actively involved. Principals and counselors should also monitor all students that do not participate in school activities and ascertain if the student could benefit from such an activity. Possibly a school activity of any kind or nature could be required, or at least highly recommended for student participation, to students that do not participate in activities. The recommendation for student participation could also be provided to the parents of these children so that parents could understand the benefits of the program and encourage their children to actively participate.

One further recommendation would be for more high school officials to offer intramural programs for students. The study showed that the number of hours of participation in school activities declined as the student progressed academically in high school. Varsity sports, often with limited rosters, must reduce or "cut" the number of students that attempt to make the team. Seniors are in the position of making the team or being "cut" as they are ineligible for junior varsity teams. An intramural program would provide an opportunity for high school students to compete and be active when these students cannot make the varsity teams.

The level of play is not the crucial issue, but the availability or opportunity of access for students to be involved in student activities is the important issue.



Appendix A  
Letters Mailed to High School Students

August 25, 1988

Dear Student:

As part of a research project through the University of Nebraska at Lincoln, I have been studying high school students in relation to their participation in school activities.

You have been randomly selected to be part of this study, but your name will never be used in this project. All students will remain anonymous and will be assigned a special code number. Your high school will not even be identified in this project.

Your help is needed in answering the following questions:

1. Please check all of the activities that you were involved in during the last school year (1987-88) only.

Band	_____	Gymnastics	_____	P-Club	_____
Baseball	_____	Basketball	_____	Cross Country	_____
Cheerleader	_____	Class Officer	_____	Drama Club	_____
DECA	_____	Tennis	_____	Drill Team	_____
FBLA	_____	FHA	_____	French Club	_____
Forensics Club	_____	Soccer	_____	Football	_____
Golf	_____	Swimming	_____	NHS	_____
Pep Club	_____	Spanish Club	_____	Speech	_____
Yearbook	_____	Student Council	_____	Track	_____
Vocal Music	_____	Volleyball	_____	Wrestling	_____

2. Did you work or hold a job outside the school day, or on weekends, in which you received wages? (Circle the correct answer)

Yes (please go to the next question)      No (thank you, you are done)

3. If you circled yes, please circle the closest estimate as to how many hours you worked each week?

0 - 5      6 - 10      11 - 15      16 - 20      21 - 25

26 - 30      31 - 35      36 - 40      Over 40

Thanks for your time and effort.

Yours truly,

Gil Kettelhut  
Doctoral Student

## Appendix B

### Values of Correlation Coefficient for Significance

Values of Correlation Coefficient Required for Significance  
At the 5 Percent and 1 Percent Levels for Samples of Various  
Sizes (N)<sup>1</sup>

N	5%	1%	N	5%	1%	N	5%	1%	N	5%	1%
10	.632	.765	21	.433	.549	34	.339	.436	65	.244	.317
11	.602	.735	22	.423	.537	36	.329	.424	70	.235	.306
12	.576	.708	23	.413	.526	38	.320	.413	75	.227	.296
13	.553	.684	24	.404	.515	40	.312	.403	80	.220	.287
14	.532	.661	25	.396	.505	42	.304	.393	100	.197	.256
15	.514	.641	26	.388	.496	44	.297	.384	125	.176	.230
16	.497	.623	27	.381	.487	46	.291	.376	150	.161	.210
17	.482	.606	28	.374	.479	48	.284	.368	200	.139	.182
18	.468	.590	29	.367	.471	50	.279	.361	400	.098	.128
19	.456	.575	30	.361	.463	55	.265	.345	1000	.062	.081
20	.444	.561	32	.349	.449	60	.254	.330			

<sup>1</sup>E. F. Lindquist, Statistical Analysis in Educational Research  
(Boston: Houghton Mifflin Co., 1940), 212.

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