CHAPTER 1. INTRODUCTION

Educators across the United States today face a myriad of issues, including, but not limited to, the challenges of the No Child Left Behind Act, the call for increased academic rigor in our high schools, and an economy that can best be described as volatile, impacting the funding of all schools. In the face of economic challenge, school administrators often must contend with the difficult task of prioritizing what is important and what is not in terms of educational offerings. As diverse as American schools are, so too are the decisions made in terms of what receives the highest priority in the educational setting. In many cases, the first cut often involves extracurricular activities.

McNeal (1998) pointed out that "educational resources are differentially and inequitably distributed in American high schools" (p. 183). School resource inequity mirrors societal inequity, yet in public education there is an assumption of equality. This can be seen in the different methods in which schools elect to handle activities when money is tight. In Alaska, for the "49,500-student Anchorage School District, the choice was to cut programs" (Reeves, 2006). In San Jose, California, the superintendent proposed cutting athletics at all 11 city high schools (Lemire, 2009). Those programs were in athletics, and the result was the elimination of the programs. In school districts in Ohio, however, similar cuts led to the private funding of athletics, either through donations or student fees. This type of outside funding is common across the country and has created a divide between schools (Reeves, 2006), further highlighting McNeal's notion that "American education institutions reproduce existing inequalities in society" (1998, p. 183).

An obvious question is whether or not there is value in extracurricular activities. Clearly those who supported their athletic programs in Ohio, either through private

donations or by paying a participation fee, felt there was some value in participation in athletics and activities. It is likely that those feelings were present in Alaska's high schools, yet the resources to support the programs in these schools were absent.

For decades, there has been an overwhelming sentiment that participation in athletics and other extracurricular activities is beneficial to the student. In *The Case for High School Activities* (n.d.), the National Federation of State High School Associations (NFHS) identified three general benefits inherent to participation in high school extracurricular activities:

1. Extracurricular activities support the mission of schools.
2. Activities are inherently educational.
3. Activities have long-lasting effects.

Most people feel that athletic activities benefit students in some capacity. These activities are fun, they are enjoyed by many, and they generate a great sense of individual and group accomplishment. Community pride resonates much greater from a victory in a football game than from a victory in a spelling bee or math competition. These feelings of connection and pride in the local high school are present in any community and in any high school across this nation. Extracurricular activities are important to us. However, the question remains whether these activities contribute to the overall education of the individual student.

Many would argue that participation in extracurricular activities provides students an extension of the classroom and teaches life lessons. McNeal (1998) noted that "it is likely that differential access and participation results in a less-than equitable distribution of various social skills" (p. 183). In addition, McNeal wrote that:

> students who are excluded from extracurricular participation may be losing an alternative pathway to increased achievement and self-esteem . . . [and] participation in extracurricular activities may also be an avenue through which parents of higher socioeconomic status (SES) transmit various types of social and cultural capital to their children. (p. 183)

While the NFHS has presented its beliefs outlining the benefits of extracurricular activities, one could expect an organization dedicated to the mission of supporting high schools in the field of extracurricular activities to do just that. The specific benefits outlined in *The Case for High School Activities* (n.d.) included statements that students in high school athletics are less likely to drop out from high school, are less likely to have discipline problems in high school, are less likely to have discipline problems in high school, and have higher grade point averages.

Other studies have produced similar results. A Connecticut College report in 2005 found that youth participation and involvement in extracurricular activities had a positive impact on student achievement. The two studies cited in the report demonstrated that the benefits were greatest for students who participated in the most activities. The studies also showed that eleventh grade students who participated in activities in their junior year of high school had a much more robust, predictable academic and psychological adjustment to what? (Connecticut College, 2005).

Other studies also have found benefits to student participation in athletics. One study conducted on a single-school level examined the impact that participation on a high school soccer team had upon grade point average and attendance for individual students. For example, Silliker and Quirk (1997) found that the 123 high school participants on two soccer

teams had higher grade point averages during the soccer season than during the off-season. The report also noted a higher attendance rate, although it was statistically insignificant. Studies conducted by Sabatino (1994), Whitely (1999), and Burnett (2000) demonstrated similar results.

Studies of postsecondary education also have noted the importance of participation in high school activities related to college admission. Thompson (2008), for example, noted that participation in activities in high school is an important factor that college admission panels consider. He cited that such participation speaks to a student's character and to his or her ability to communicate.

While Sabatino (1994), Whitely (1999), and Burnett (2000) all found some positive correlation in terms of the impact of athletic and extracurricular participation in their research, questions remain when considering causality and the future impact of participation. In 1969, Walter Schafer wrote that:

> interscholastic athletics share with other competitive sports the distinction of being among the least studied of all social phenomena . . . high school sports are marked by rich and abundant folk-wisdom about the reasons for their existence and strength . . . their consequences for society, the community, the school, and participant. (p. 40)

It is this folk wisdom about the reasons for the existence and strength of extracurricular activities, rather than research in the field, that has led to their support for years. Yet, in challenging times, both in society and in the field of education, administrators of secondary schools, district-level managers, and school boards are faced with decisions relating to program cuts. No longer are qualitative statements, unsupported by substantial data, appropriate resources for such decision making. Unfortunately, there are few studies in

existence today that demonstrate a measured understanding of the value of participation in athletics and activities.

Two areas of interest with respect to placing a value on participation in terms of future benefit are educational attainment and wage earnings. Limited research exists that connects either factor to participation in interscholastic activities. The NFHS list of general benefits of extracurricular activities includes a statement that "activities have long-lasting effects" (*The Case,* n.d.). However, there is no reference to what exactly these effects include.

Purpose of the Study

The purpose of this study is to investigate the future value to students of interscholastic participation in extracurricular activities. In this study, two relationships were examined: (a) the relationship between high school student participation and postsecondary educational attainment, and (b) the relationship between high school student participation and future wage earnings. Limited research exists in this area and, with the challenges of student achievement and funding in schools, the issue of the value of student participation is relevant. Continued research in this area is necessary to inform both students and school districts as to the value of participation in high school athletics and activities.

Description of the Design and Methodology

The primary question answered in this study was whether a significant relationship exists between participation in high school athletics and activities and a student's postsecondary educational attainment and future wage earnings. The study began with a four-part review of the research. The first section recounted the history of interscholastic participation in schools. The second section described the present value of student

participation in high school athletics and activities. This information highlighted the research that exists on student participation and was framed around the themes of academic achievement and student development.

The third section of the research review focused on the theory of human capital and its basic notion that “the earnings of more educated people are almost always well above average” (Becker, n.d.). Becker (1992) found both tangible and intangible gains ranging from cultural advancement to improvement in earnings and portability in the workplace. The cost is simply the time spent on these investments, and those individuals studying the theory of human capital in recent years have related this to the field of education. The final section of the review of the research focused on the impact of participation on future aspects of a student’s life. This review was oriented on future wage earnings and future educational attainment.

Data were extracted from the National Education Longitudinal Study of 1988 (NCES, 2002), following the fourth data collection wave that was conducted in the year 2000. The NELS:88 database was selected for this study because its variables were consistent with the purposes of the study and because it contained longitudinal data on a large number of students who participated in athletics and activities in high school. The NELS:88 database also contained follow-up information related to postsecondary educational attainment and wage earnings beyond high school.

Four different modes of analysis were used in this study: (a) the correlation between participation in activities and future earnings, (b) the correlation between participation in activities and educational attainment, (c) bivariate linear regression, and (d) multiple regression,

Correlational studies were used to analyze the variables. Similar to the regression calculations, the independent variable remained participation in interscholastic activities. The dependent variable was future earnings or educational attainment.

Bivariate linear regression was used to study the sum of participation in activities that an individual reported in relation to their future earnings and educational attainment. In this mode, participation was measured as a scale variable indicating the total number of activities in which an individual participated during high school.

Multiple regression techniques were used to study other variables beyond just the sum of participation in activities that an individual reported in relation to their future earnings and educational attainment. Analysis was conducted using the number of activities participated in combined with total family income, the number of activities participated in combined with parent education level, and the number of activities participated in combined with both total family income and parent education level as independent variable combinations.

Organization of the Study

This study is organized into five chapters. Chapter 1 provides an overview of the purpose and design of the study. Chapter 2 reviews the literature related to the present value of participation in athletics and activities, the theory of human capital and its implications in the field of education, and the future value of participation. Chapter 3 discusses the design and methodology of the study and addresses the appropriateness of the statistical model and the research instrument. Chapter 4 presents the results of the statistical analysis. Chapter 5 provides an interpretation of the results obtained and presents recommendations for future practice and study.

Conclusion

In an article in the November, 2008 edition of *High School Today*, a school superintendent discussed the value of combining academics and athletics into his school's mission statement. He noted that "one does not have to sacrifice for the other" (Schneider, 2008, p. 9). Throughout the article, school attendance, grade point average, and team athletic achievement were used to justify the author's point that participation in athletics, at least at his high school, had some value on a student's present achievement level and on the school as a whole.

A review of articles written by school personnel on the same subject in most athletic and school trade publications likely would be very similar. In most cases, the grade point averages of students in athletics and activities would be reported as higher than those of students not involved in activities, and the attendance records of students in athletics and activities would reflect fewer absences than those of students not involved in activities. Based upon that information, many in the field would feel justified in their support of athletics and activities.

Although these quantitative and qualitative reports seem to support positive claims of regarding participation in athletics and activities, many assumptions are made within the preparation and reporting of each study and therefore further study is necessary. The purpose of this study was to use advanced statistical techniques to investigate the future value of interscholastic participation in extracurricular activities rather than accept anecdotal or simple statistical evidence. This study demonstrated to those in the field of education, both administrators and policy makers, that such review was possible. No longer do school

officials need to make tough decisions without significant statistical information related to student participation in athletics and extracurricular activities.