

CHAPTER 5. DISCUSSION

The purpose of this study was to investigate the future value of interscholastic participation in extracurricular activities on the individual student level. 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. The previous chapter presented the results from the statistical models used in this study. This chapter summarizes the findings of the study and then discusses the meaning of the results. Next, this chapter highlights the implications of this research on educational policymakers, including a discussion of future research needs.

Discussion of the Findings

There were two primary research questions in this study. These questions were: (a) does a relationship exist between high school student participation in interscholastic activities and postsecondary educational attainment, and (b) does a relationship exist between high school student participation in interscholastic activities and future wage earnings. These questions are discussed below.

Postsecondary Educational Attainment

The findings from the statistical analysis conducted demonstrate that there is no practical relationship between participation in interscholastic activities and future educational attainment. In other words, participation in activities in high school makes an individual student no more or no less likely to achieve a higher or lower degree beyond high school. Even when controlling for parent educational level and family income when the student was in high school, the findings remained unchanged.

These findings represent an analysis of different levels of participation in high school. These included participation in both grades 10 and 12, along with a summary of high school participation. These levels of participation were further subdivided into categories featuring team sports, individual sports, cheer and dance participation, performing arts participation, athletic participation, and total participation. In each case, the findings were consistent: no relationship existed between participation and future educational attainment.

Compared to previous findings in literature, the findings in this study demonstrate only a slight deviation from the individual findings of different analyses as the research indicated moderate to limited correlations. Otto and Alwin (1977) first found a connection between the aspirations of educational attainment of 340 males who participated in high school athletics and noted a slight impact with respect to actual educational attainment. Eide and Ronan (2001) found a slight positive impact when examining participation and its impact on future educational attainment. The two found that those participating in interscholastic athletics were more likely to graduate from college.

Barron, Ewing, and Waddell (2000) examined two different data sets, finding in each a positive relationship between participation in interscholastic athletics and graduation from college. In their study, the three also pointed out that those in athletics in the study, also had a higher class rank.

Lleras (2008) found a similar statistical relationship between participation in interscholastic athletics and graduation from college using the NELS:88 data set. The sample in this study differed from Lleras' work in that it accounts for student participation across both the first and second follow-ups, when students were in the tenth and twelfth grades, contrary to Lleras' work that focused only on participation in the tenth grade.

Troutman and Dufur (2007) also used NELS:88 to study educational attainment. Their work focused on a dichotomous variable, bachelor's degree attainment, as opposed to the measure of educational attainment in this study, which accounted for a educational attainment as a variable across the wide-spectrum of possibilities beyond high school (no degree, certificate, associate's degree, bachelor's degree, through a terminal degree).

In each examination of the research, there were some deviations from the research conducted in this study. First, the sample of this study was far more expansive in size and nationally representative, not just focused on a subset of a school district or section of society. Second, this study featured an analysis of different time periods in high school as well as a wide range of different activities, not just athletic activities. Finally, this study focused on participation, not a stratification of levels of participation (i.e. varsity, JV, etc.). All of these factors led to a study that was much more representative of high schools at the time and presented a picture of reality across the board with respect to participation and future educational attainment.

Future Wage Earnings

The findings from the statistical analysis conducted demonstrate that there is no practical relationship between participation in interscholastic activities and future wage earnings. In other words, participation in activities in high school makes an individual student no more or no less likely to achieve a higher or lower wage beyond high school. Even when controlling for parent educational level and family income when the student was in high school, the findings remained unchanged.

These findings represent an analysis of different levels of participation in high school. These included participation in both grades 10 and 12, along with a summary of high

school participation. These levels of participation were further subdivided into categories featuring team sports, individual sports, cheer and dance participation, performing arts participation, athletic participation, and total participation. In each case, the findings were consistent: no relationship existed between participation and future wage earnings.

The literature surrounding the impact of participation in high school on future wage earnings was even less dramatically in support of participation as a stimulating change agent when compared to future educational attainment. Otto and Alwin (1977) and Eide and Ronan (2001) found at least some connection between participation in activities and future wage earnings, though their analysis of subgroups found some categories with positive results, others with very limited results, positive or negative. Barron, Ewing, and Waddell (2000) found virtually no connection between participation in interscholastic athletics and wage attainment. In other words, they found no connection between the two, consistent with this study.

Lleras (2008) found a similar statistical relationship between participation in interscholastic athletics and future wage attainment using the NELS:88 data set. The sample in this study differed from Lleras' work in that it accounts for student participation across both the first and second follow-ups, when students were in the tenth and twelfth grades, contrary to Lleras' work that focused only on participation in the tenth grade. Lleras (2008) also focused solely on the wage earnings of the individual in 1999. This study utilized a variable focused on the current earnings rate of the respondent in 2000.

In all, it is important to point out the three differences in this study compared to those in literature, highlighted in a previous section. First, the sample of this study was far more expansive in size and nationally representative, not just focused on a subset of a school

district or section of society. Second, this study featured an analysis of different time periods in high school as well as a wide range of different activities, not just athletic activities. Finally, this study focused on participation, not a stratification of levels of participation (i.e. varsity, JV, etc.). All of these factors led to a study that was much more representative of high schools at the time and presented a picture of reality across the board with respect to participation and future wage earnings.

Summary

This study indicated no relationship between participation in interscholastic activities and future educational attainment and no practical relationship between participation in interscholastic activities and future wage earnings. In other words, the impact of participation in high school activities was negligible on future educational and wage attainment. As has been stated throughout this study, very limited research exists surrounding this topic. NELS:88 contained data on a large number of students across a wide variance of populations, mixing both public and nonpublic schools along with students of a variety of demographic categories. The analysis of this dataset provided an opportunity to study this topic in yet another setting, accounting for different independent and dependent variables.

Implications for Educational Practice

The results of this study suggest, in contrast to the assertions by Lleras (2008) and others (Otto and Alwin, 1977; Eide and Ronan, 2001; Barron, Ewing, and Waddell, 2000) that no practical relationship exists between participation in interscholastic activities and future educational attainment and future wage earnings. In other words, the benefits of

participation in interscholastic activities do not extend beyond high school, at least as it relates to educational attainment and future wage earnings.

In *The Case for High School Activities* (n.d.), the National Federation of High School Associations has 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.

Clearly, this research demonstrates that the “long-lasting effects” highlighted by the National Federation does not include the notion that interscholastic participation impacts future educational attainment or future wage earnings.

Research Activities

Only limited research exists on activities and most of that research has been conducted on the impact of activities’ participation on what can best be referred to as present value. In attempting to answer the questions in this study, new questions were raised. In the NFHS’ report, *The Case for High School Activities*, sixty reports are referenced, yet only four provide a connection to the future value of activities’ participation. Many of these sixty reports are referenced in this study and others like it not just because they are quality analyses, but also because they formulate the majority of the body of work related activities today.

Future Value

While this study references several studies that highlight future value (Lleras, 2008; Otto and Alwin, 1977; Eide and Ronan, 2001; Barron, Ewing, and Waddell, 2000), only

limited research on the future value of participation in activities. Much of the research that exists on future value stops at college entrance.

Such research includes that of Howard T. Everson and Roger E. Millsap (2005), who noted increased Scholastic Aptitude Test (SAT) scores for students who had participated in extracurricular activities, particularly minority students. Another study highlighted by the NFHS in *The Case for High School Activities* (n.d.), noted that the American College Testing service found that the one measure of success that proved most reliable was participation in activities, not grades or test scores. In that same report by the NFHS, the College Entrance Examinations Board's SAT scores were examined in much the same way with similar results. Students involved in activities or had jobs or hobbies outside of school were more likely to succeed at their profession (*The case for*, n.d.).

In each of these three cases, supporting participation in activities, it is hard to glean if activities were truly the only factor involved in promoting success. Even when controlling for other factors, it is possible that these students would have been the very students who scored high on these tests.

This study attempted to study the true future impact of interscholastic participation, not immediately after high school, or in high school when you consider that college aptitude tests are administered in the final year of high school in most cases, but rather after high school and after college. Future research in this area needs to be completed not eight years beyond high school, but eighteen and twenty-eight years beyond graduation to provide a better understanding of the long-term effects of participation on an individual. Eight years after college, many individuals may not have reached their life-calling and the impact of that participation years earlier may not yet be realized.

What is success? While this study assumes that success could be measured by future educational attainment and future wage earnings, there are a myriad of possibilities that could determine individual success. Such factors could include job satisfaction, overall life enjoyment, or the individual feeling that an individual's needs, or his or her families' needs are being met. Future research could focus on each of these less quantitative areas and their relation to interscholastic participation.

One final area related to participation includes an analysis of similar activities, not related to interscholastic participation. Research highlights that much is learned through participation to include hard work, time management, self-discipline, and teamwork, to name just a few as defined by the NFHS in *The Case for High School Activities*. However, there are other areas of life that can also promote these characteristics.

Future research in this area should include a comparative analysis of students who maintain jobs during school. It could also include analyses of students involved in school clubs or after school groups such as the Boy Scouts and Girl Scouts. It could also include analyses of students who are forced to stay home and help raise their family given their present lot in life. In each case, the results might be similar, or different when compared to interscholastic participation.

Present Value

The greatest amount of research related to participation in activities centers on present value. Schneider (2008), Sabatino (1994), McNeal (1998), Whitely (1999), Burnett (2000), and others all have touted the present value of participation in activities as it relates to school achievement and success.

There also is research that extends the present value beyond academic success measures to those of individual interpersonal and personal development. This includes the work of Hanson, Larsen, and Dworkin (2003) highlighting the growth of the individual socially and emotionally through participation. Broh (2002) found students involved in activities to be more social human beings. McNeal (1998) extended the work to include the development of values through participation in activities.

In each case, there are reports that support the notion that participation in activities improves academic achievement along with enhancing the interpersonal and personal development of those involved. However, as Jack Roberts, a former national leader in interscholastic athletics, noted in 2000, “for every positive statistic, there’s a negative one; for every positive slant, there’s a negative one; for every positive link, there’s a negative one” (Roberts, 2000). This is evident in the work of O’Reilly (1992) who found less than positive results when examining aspects of participation and academic achievement.

Additional research is needed in this area to promote greater understanding of the impact of interscholastic participation on the present value of academic and personal development. Along with additional research, we need action plans on how to use this information to promote both. For instance, if there is a true connection between in-season participation and academic achievement, schools and school administrators must find ways to make additional offerings available to students that mirror programs already in place. This might include the development of additional sports teams or programs in the arts, or perhaps even clubs that function much the same way as traditional activities. If there is something to be gained through participation, schools and school administrators must find a way to provide more, diverse opportunities to all students.

Likewise, if research on present value uncovers negative connections between participation and academic achievement and personal development, something must be done to combat the negative results. Roberts (2000) cited reports that found males one or two years behind girls in reading and writing, yet these same males outnumbered females two to one in participation. The question why must be asked in this situation. School administrators may no longer take research at face value and accept that activities are positive for all students; school administrators must get inside the numbers and make individual determinations as to the impact of participation on students at their respective level.

Updating the Study

Much has changed in the world of activities in recent years. A study conducted at the conclusion of the 2006–2007 school year by the NFHS found that participation in high school athletics for that same school year rose by over 183,000 students to an all-time high of 7,342,910 students, a proportional increase of 2.49% over the previous year (“High school sports,” 2008, p. 53).

Given this changing environment in participation, the time for an update to this study is now. In such a new study, it would be best to analyze individual sports and activities independently, rather than basing information on a single variable related to participation. This will help promote responses from participants that are more accurate, while generating information that is useful in the study of different activities in different locations.

In addition, the study should be extended well beyond the time period used in NELS:88. This will allow for life changes to take place beyond college and will provide an accurate picture of life for the individual studied. Included in this should be less tangible variable collections that include personal feelings about the current life position.

Summary

In the end, the body of work surrounding research involving participation in activities must be expanded. This study reviewed much of the literature that exists surrounding the subject of interscholastic participation as it relates to benefits for individual students involved. This research must focus on the present value, the future value, and it must be current.

Critically Examine Participation

The National Education Longitudinal Study of 1988 survey focused on a “clustered, stratified national probability sample of 1,052 public and private 8th-grade schools” (NCES, 2002, p. 6), featuring nearly 25,000 students. While this was “representative” of schools across the United States, it may not be applicable in each locale. Consider the state of Texas, where participation in high school football is much more important than other areas throughout the country. Or high school basketball in the inner-city of Chicago or New York, compared to rural areas across our country. Participation carries with it different meanings and different values in different places.

School administrators must understand participation in their locale. This includes a greater understanding of who is participating to include an understanding of the gender, race, SES, and other demographic categories of each participant. By understanding who is participating, and who is not, combined with an understanding of other factors to include academic achievement, personal development, and behavioral issues, school administrators might be able to serve their students. This would include the expansion of activities to serve a certain subset of students or the elimination of other activities that might prove less

beneficial, neither of which can be tied to the success or failure of the group in a competitive sense.

School administrators must understand why students participate. Much like it is expected that individual teachers might understand what motivates students, administrators must understand what motivates students with respect to activities. Are they participating for fun; do they feel this is their path to college; is this their parents' dream; or are they simply out to enjoy the experience and reap the benefits that others have told them participation brings? Each of these is a valid question that leads to a better understanding of the motivations of our youth with respect to activities. By understanding these motivations, school administrators can better communicate expectations, communicate realistic results, and evaluate their programs on the basis of whether or not they are meeting the needs of students.

Finally, school administrators must understand when students participate. Are students only participating at a young age? Are students simply trying out new activities in middle school or high school? Are students run off from activities by the need to be competitive as teams or individuals? Are activities taking too much time away from being a teenager? These questions all point to a greater understanding of the individual student's participation in terms of a time frame. If there is value in participation, administrators must understand these trends related to the timing of participation to promote said positive participation and cease participation producing adverse results.

Together, an understanding of who is participating, why they are participating and when they are participating provides school administrators more of a picture of what is going on in their school with respect to interscholastic activities. If there is value in

participation, there must be accountability with respect to ensuring that the positive aspects of participation are supported and the negative aspects are changed or eliminated.

Define the Purpose of Activities

The purpose of interscholastic activities is different in each setting. Mark Schneider (2008) outlined in *High School Today* that the mission of his activities program is in line with the mission of his school, “preparing today’s students for tomorrow’s world in a caring learning environment” (p. 8). In this setting, there is some value placed on participation, yet in others, budget cuts and tough decisions might make it seem like activities are less important. In San Jose, California, the school superintendent proposed a budget that eliminated athletics altogether at eleven city high schools, noting that he “did it because [he needed] to look at the academic programs we would not have if we keep sports” (Lemire, 2009, p. 18). In each case, a different value was placed on participation in interscholastic activities.

School administrators must decide what the value of interscholastic activities is to their school district and their community. As this study pointed out, the impact of participation on future wage earnings or educational attainment is not statistically correlated. However, there are other benefits that are described in literature. 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, but at what cost.

Individual school administrators must make that determination on their own, using their own district and school as a guide. What is good for their students may or may not be good for all. While the NFHS highlights the benefits of interscholastic activities, citing three main benefits (extracurricular activities support the mission of schools, activities are inherently educational, and activities have long-lasting effects), these blanket statements may or may not apply in each educational setting. Administrators must take the time to analyze their own setting to determine the value of these activities for themselves.

Conclusion

The challenges facing educators today are many. From the challenges of No Child Left Behind, to the call for increased academic rigor in our high schools, coupled with an economy that can best be described as volatile, educators are forced to make tough decisions on everyday.

This study outlines one area where more scrutiny may be warranted. In recent years, the National Federation of High School Associations has produced promotional materials in support of interscholastic activities. In their promotion, they have cited everything from increased academic achievement, in line with the work of Burnett (2000), to improved social and emotional skills for students involved, consistent with the work of Hanson, Larsen, and Dworkin (2003), to values beyond high school, highlighted by work such as that completed by Otto and Alwin (1977). In this study, that final benefit, that of an extension of value beyond high school proved nonexistent.

The message coming out of this study needs to be one of closer scrutiny and one of greater understanding. School administrators and educational policy makers must first understand that there is some value in participation in interscholastic activities. Whether that

value is in the benefits gained by an individual as it relates to his or her academic achievement as was highlighted by Sabatino (1994), or the benefit of interpersonal development as highlighted by McNeal (1998). There is some value in participation, but the measure of that value is neither consistent across individuals or schools nor consistent in terms of the impact felt. Next, school administrators and educational policy makers must scrutinize their own programs. No longer should the broad benefits of participation be accepted by all. Rather, these benefits should be sought at the individual level by administrators, schools, and districts to determine the individual value of activities at the lowest level.

Jack Roberts (2000) closed his address in July of 2000 to a group of educational leaders, many of whom deal with activities on a daily basis by pointing out that “it’s the value of expectations; it’s the value of standards; it’s not merely the value of participation that needs our attention.” If there is a higher standard for those in activities, perhaps the standard for all needs to be raised and perhaps, educational leaders need to ensure that all students, those actively participating and those not, reap the benefits of those expectations.