The Impact of Extracurriculurs on Academic Performance and School Perception Mark Furda and Michael Shuleski

Abstract

As a result of budget cuts, accessibility to school extracurricular activities has been hindered. Students in one high school were classified as participants in extracurricular activities or nonparticipants. The groups were surveyed about perceptions of school; student grade point averages were obtained. Four independent samples t-tests were conducted to compare differences in school perception and differences in grade point averages. The results of all three t-tests relating to school perception demonstrated significantly more positive perceptions among participants than non-participants. The results of the t-test comparing grade point averages show a significantly higher grade point average among participants when compared to nonparticipants.

Keywords: Extracurricular activities; school improvement; school funding; school perception

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With schools facing continual budget cuts, extracurricular activities such as athletics, arts, and clubs, are in ever increasing danger of being cut (Carter, 2011; DeNisco, 2013; Hoff, 2007; Kronholz, 2012; Statz and Lamote, 2001). The National Center for Educational Statistics (1999) reported that students who participated in extracurricular activities faired significantly better than those who did not. Students had fewer absences, higher grade-point averages and higher math and reading assessments among other indicators. Unfortunately, the number of activities for students to participate in does not seem to address the desires of all students. If schools were to find activities that reached the entire student body, research it seems, would point to higher achievement across the board. This study aims to add to the body of research that examines the impact of extracurricular activities on students. It also attempts to determine whether a sense of belonging to a school can be correlated to the activities in which a student participates.

More specifically, this study looks at the effect extracurricular activities have on gradepoint average and student perception of school. A survey was administered to determine students' gender, grade point average, the activities in which students participated, and student sense of belonging in the school. The sample population consisted of all eleventh grade students attending a rural high school in Western Pennsylvania.

This purpose of this study is to determine if students involved in extracurricular activities such as athletics, clubs and the like, have higher academic performance as measured through grade point average when compared to peers who do not participate. In addition, the study seeks to determine if students who participate in these same extracurricular activities will show a more favorable perception of the school than their non-participating peers. The two research questions this study seeks to answer are listed below and are accompanied by their null hypothesis.

RQ1: Is there a difference between the grade point averages of students in this study who participate in at least one extracurricular activity versus students in this study who participate in zero extracurricular activities?

Ho1: There is no a difference between the grade point averages of students in this study who participate in at least one extracurricular activity versus students in this study who participate in zero extracurricular activities.

RQ2: Do students in this study who participate in at least one extracurricular activity have a more favorable perception of school than students in this study who participate in zero extracurricular activities?

Ho2: There is no difference among the perceptions of school between students in this study who participate in at least one extracurricular activity and students in this study who participate in zero extracurricular activities.

The author determined that the results supported the hypothesis that students who participated in extracurricular activities demonstrate higher academic success as well as greater connectedness to the school.

Review of Literature

As schools look to tighten their budgets, programs that do not directly impact academic success are often the first to get cut. If the program does survive, the cost associated with it may get passed along to the families of the participants (Carter, 2011; DeNisco, 2013; Hoff, 2007; Kronholz, 2012; Statz and Lamote, 2001). This creates a burden and barrier for these families, ultimately having a negative impact on the number of participants. This literature review discusses why this is a grave error by school districts and demonstrates how extracurricular activities benefit students academically and socially.

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The relationship between extracurricular participation by adolescents and their academic outcomes and school-related affect were examined in an action research study by Knifsend and Graham (2001). This study not only examined the number of extracurricular activities, but the domains (academic/leadership groups, arts activities, clubs, and sports) and breadth of participation. The population was a multi-ethnic sample of 864 eleventh grade students, predominantly from low-income backgrounds. The data collected were grade point average and the results of a questionnaire that measured the population's sense of belonging and academic engagement. The results seemed to indicate that the number of extracurriculars an adolescent is involved in does positively impact academic achievement and has an overall positive school effect. Moreover, the study indicates that moderate participation in multiple domains seemed to vield the desired outcome of both higher grade point average and an increased sense of belonging. However, too many activities could have a negative outcome by being too demanding on the students' time as well as not allowing them to truly gain a sense of belonging to one group. The results of this study suggest that schools should be persuaded to increase the scope and student involvement in extracurricular activities, especially in urban or low-income schools.

Vasudevan, Rodriguez Kerr, Hibbert, Fernandez and Park (2015) focused on recently arrested adolescents in New York City. Based on the amount of research showing that school dropouts have a greater chance of being incarcerated, New York has shifted funding away from juvenile facilities and incarceration for adolescents. Instead, money has been redirected towards after-school programs to try and facilitate a sense of belonging. Just as youths can form affiliation with a gang, the hope is that these students can form an affiliation and a sense of belonging to an institution that may provide a different path for their life to take. The program gave students a way to express themselves through various outlets such as art, photos, videos and

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writing. The instructors were nurturing and attempted to make the participants feel accepted. While this longitudinal study is in its early stages, results suggest what the students thought about their school day and why so many of them chose to leave it behind. The students felt they were on the fringe of society and had little hope of making it through the day with any positive experiences. By giving them a voice and a way to express themselves, the participants developed a sense of belonging and hope. The study examined a group of students that many in society prefer to ignore. Rather than investing in programs that can help these adolescents down positive paths, those in the system often choose to deal with them via incarceration. It is a reactive, rather than proactive stance. At the root of the issue for these students is having no real identity. Their sense of belonging, which everyone strives for, gets misplaced and they become involved in risky behavior. It is these youngsters that schools and communities need to find extracurriculurs for the most. Schools should work to increase the sense of student belonging in school, rather than stand by passively while these students find a place of belonging outside of school that is often unhealthy and destructive. Not only do the individuals involved benefit, but society as a whole benefits as well.

The National Center for Education Statistics (1995) issued a report on the findings from the National Longitudinal Study (NELS) of 1992 that surveyed public high school seniors. The article's focus was to show the results of students that participated in extracurricular activities and their school engagement in comparison to their peers. The data indicated that students who participated in extracurricular activities exhibited higher indicators of school success than those who did not. Unexcused absence rates were lower and student grade point averages were higher.

Girod, Martineau, and Zhao (2004) conducted an exploratory study to investigate the impact an after-school computer clubhouse named KLICK! (Kids Learning In Computer

Clubhouses) would have on teens' disposition toward school, and whether it would help teens learn a breadth and depth of computer skills. The population consisted of students involved in the program as well as a control group that did not participate in KLICK! Pretest and posttest surveys were administered to 159 total students, 81 of which participated in the program. Seventy-eight students were part of the control group. All students involved were drawn from the same school and had similar ethnic backgrounds. The results were marginal except for those students who previously valued school the least, but participated in KLICK!. The researchers speculate that this result can be attributed to the KLICK! program, which provided teens an opportunity to participate in an alternative environment free from the normal control of a school. Furthermore, the researchers believe the students could rebuild their confidence which subsequently would increase their value of school. The second goal of the study, which was to have students self-report their experience with computer technology (CT) yielded unremarkable results. Students involved in the program increased their CT experience more than nonparticipants. However, the results for those who participated in the program was significant for students who previously had low GPA's.

Fredricks and Eccles (2005) hypothesized that "extracurricular participation leads to more favorable outcomes because it facilitates membership in a prosocial peer group" (p. 508). This study was broken into two parts. The first was to build upon previous studies by examining the positive and negative development across four extracurricular domains: team sports, school involvement activities, performing arts, and academically-oriented clubs. The second, and primary focus, was to see if there was a social aspect that played a role in the positive and negative development of students. The study population used was 498 students in grades nine, ten and twelve. The sample was drawn from three primarily middle class areas so that income would not be a factor in student participation or lack thereof. The results of the study were

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consistent with prior research. There was evidence of participation in extracurricular activities relating positively to school engagement. Additionally, the results showed that students who were involved in extracurricular activities had more friends than nonparticipants. The results of the study demonstrated that the students had more academic and prosocial friends when they were involved with school extracurricular activities compared to those students not involved.

Other research reports the benefits extracurricular activities provide to high school students directly and indirectly (Kronholz, 2012). One particular report makes reference to numerous studies showing research that clearly illustrates the importance of these activities to student academic and social development while in high school and beyond. The article's other purpose was to bring to light an impending crisis that schools are facing. Schools are being asked to tighten their budgets, often at the expense of extracurricular activities deemed unnecessary. Faced with a decision of limiting money going directly towards education or indirectly to extracurriculars, administrators and school boards readily choose the latter. The consequences of limiting participation in extracurriculars not only impact the students directly, but the community as well. One school administrator made a profound statement regarding increasing class size versus cutting activities. He stated, "You can cope with an extra kid in your class, but at 2:10 when school lets out, what do they (the students) do?" (p. 9).

The article was meant to bring to light a disservice many districts are doing to their students and their community. The ramifications of decreased funding will be negatively experienced disproportionately by families who are already experiencing financial distress. With some schools having families pay hundreds to thousands of dollars, depending on the sport or number of sports in which a child participates, parents simply cannot afford for their children to play. When students fail to participate in an organized club or activity after school, they find other ways to spend their time which often provide little positive adult guidance and supervision.

Since students of low socioeconomic backgrounds are more likely to be negatively impacted by pay-to-play or fee based participation policies, these students fail to reap the academic and social benefits of participation. The end result is an increase in the achievement gap.

The impact of particular types of extracurricular activities for students was the focus of one notable longitudinal study (Eccles & Barber,1999). The sample consisted of approximately 1,800 students. The study gathered initial data of the students in sixth grade and concluded when most of those same students were 25 or 26 years old. The two foci of the research were peer association due to involvement, and activity-based identity formation. The results supported what the researchers hypothesized: adolescents who participated in prosocial, non-academic activities during their school age years had the most consistent positive outcomes and the lowest rate of at-risk behavior.

Research has shown that transitioning to middle school is a tumultuous time for many students and can be associated with negative outcomes. The sample for this study was obtained from one southeastern middle school and consisted of 173 sixth-grade students. The genders were split nearly evenly, and 57% of the students were Caucasian. A relationship seems to exist between these transitioning students, and how participating in extracurricular activities can positively impact academic achievement and school connectedness (Akos, 2006). This critical phase in the lives of students, when physical, cognitive, social, and emotional changes occur, begins to determine the trajectory of their development later in life.

Graham, Taylor and Hudley (2015) designed an intervention to increase social and academic outcomes in African American boys in elementary school. The 64 participants in the study were randomly assigned to a treatment group or to a control group. The treatment consisted of a 12-week afterschool intervention that had a total of 32-lessons afterschool. The objective was to design an intervention that would positively impact third to fifth grade African

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American students who were previously classified as aggressive. The researchers chose this particular sample for several reasons. The key motive was the knowledge that African American students who exhibit adjustment problems and aggressive behavior in elementary school are more likely than other racial/ethnic groups to become involved in the juvenile justice system at a later age. This intervention was unique because the researchers did not focus on improving academics. Rather the focus was on the student's intrinsic motivation to succeed. The results showed positive gains by the students, but the authors noted several limitations to their research which require further research. Nonetheless, the results hold promise.

Klesse (1994) suggests extracurricular activities motivate many students to perform at higher levels in the classroom. He also found a positive relationship between extracurriculurs and success in high school. Additionally, the author posits that participation in co-curriculur activities holds many non-cognitive benefits.

Another study (Barr, Birmingham, Fornal, Klein & Piha, 2006) discussed the impact three high school afterschool programs had on increasing student success. The three programs were located in different cities and focused on student interests and real world application for high school students. The authors cite a trend towards declining afterschool activity participation by this group. Additionally, the authors note that afterschool programs for high school students are in a dramatic shortage across the country, failing to give students the opportunities they desperately need. At the conclusion of multiyear evaluations, the study concluded there were several benefits directly and indirectly related to these programs. Indirect benefits indicated that students participating in these programs had significantly better attendance than their peers. In addition, graduation rates of participants were higher than nonparticipants, and standardized test success was higher as well for the participant group. Several students interviewed mentioned that they would come to school more frequently due to the desire of attending the afterschool

program. When the programs were run by teachers, the students also found themselves looking at the teachers with more respect than they had prior to participation in the program. These results suggest not only an academic benefit associated with extracurricular participation, but also a positive sense of school connectedness.

Hall and Charmaraman (2011) conducted a case study designed to discover how a boys' empowerment group could help participants avoid risk taking behaviors. The premise behind the study was described by the authors as "The process of establishing a healthy male identity can be difficult for many boys" (p. 49). This is especially true for those whose communities are already plagued by violence. The program lasted one year and was comprised of 15 mostly African American boys, whose ages were twelve to fifteen. The students met once per week and an emphasis was placed on group learning and team-building activities. The researchers gathered data through observations and interviews. They determined the program did have success in changing the students' attitudes in school as well as their relationships with peers.

Yancey cites a study by the Department of Health and Human Services that reports students who spend no time in extracurricular activities are 57% more likely to have dropped out of school (2007). In addition, the author reports that the study concluded students not participating in extracurriculurs were considerably more likely to have been engaged in risky behaviors pertaining to health.

Some research suggests a positive relationship between extracurricular athletics and academic achievement at the middle school level (Stevens & Schaben, 2002). This age group is one that is often overlooked by researchers who study the impact of athletics on student achievement. The sample consisted of 136 eighth grade students. Seventy-three labeled themselves as athletes; 63 as non-athletes. There were slightly more male athletes than non-athletes, and slightly more female non-athletes than athletes. The overall number of males and

females was 68 for each gender. Information was obtained through a survey, and achievement data provided by the school district included the students' grade point averages and scores on standardized tests such as the California Achievement Test (CAT). Several comparisons were conducted. Athletes were compared to non-athletes, male athletes compared to male non-athletes, female athletes versus female non-athletes, and female athletes versus male athletes. The results suggest that the athletes academically outperformed non-athletes. In each of the first three aforementioned trials, the athletes had significantly higher GPA's/CAT scores than non-athletes. The fourth trial showed female athletes having significantly higher GPA's/CAT scores than male athletes.

One study (Sitkowski, 2008)) focused on high school sophomores and seniors. The researcher found that those participating in athletics had lower dropout rates and were less likely to consume alcohol. Sitkowski also suggests the results indicate greater levels of confidence, self-discipline, and responsibility among the athletes in the study when compared to non-athletes. Additionally, the study revealed that male athletes performed better academically during their seasons when compared to achievement levels during the off-season. Finally, the same study found that athletes demonstrated higher scores on state achievement tests than their non-athlete counterparts.

Other studies have shown that students who participate in physical activity have greater academic achievement than their peers. Fox, Barr-Anderson, Neumark-Sztainer, and Wall (2010) performed research to determine whether it was physical activity, or the participation on a sports team that was the determining factor in increased academic achievement. The study surveyed 4,746 students. Students self-reported their weekly hours of physical activity, sport team participation, and academic letter grades. The results suggest that both athletic activity and sport team participation were independently associated with higher GPA for females. For males,

only athletic participation was independently associated with higher GPA. The results, while not conclusive, suggest a positive relationship between participation in physical activity and level of academic achievement.

Some research focuses specifically on the impact of student participation in interscholastic sports. Participants may have higher GPA's, better attendance, and greater connectedness to their school than peers not participating. Lumpkin and Stokowski (2011) authored an article that emphasizes the role that coaches have for students to obtain these gains, as well as the promotion of social growth of participants. A coach's role may seem to vary from sport-to-sport, but the authors suggest that they have one role that is more important than the rest. That role is to "emphasize the character development of their athletes by serving as positive role models" (p. 125). By behaving ethically themselves, coaches promote like behavior by their athletes. It is often said that the actions of a coach are more important that their words. This study illustrated the potential benefits of participating in extracurricular athletics when a child has a coach that demonstrates good moral behavior. Although not easily recognized, students can benefit by becoming well rounded members of society.

Academic eligibility is a necessary partner with athletics sponsored by school districts. However, this practice may have negative impacts on some students and schools (Hoch, 2008). The results of many studies, some of which have been referenced in this article, concluded that involvement in extracurricular activities, such as athletics, may have academic and social benefits. Students participating in athletics frequently tend to have higher rates of attendance, higher grades, and better behavior than their non-participating peers. The author claims that removing students from participating due to their grade point average removes them from the one incentive that they have for improving. In Baltimore County, schools determine eligibility of students based on the previous quarter's GPA. The author states, "This is the group of young

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people who may need the carrot of athletics the most" (p. 13). This study challenges schools to look at athletics as a tool for improving academic achievement of their participants. Most, if not all schools, have eligibility standards in place. Are they designed with the best interests of students in mind? If schools simply lock students out of participating, the affected student will likely continue on in school without any of the benefits that participation can provide. In addition to changing eligibility practices, schools and individual athletic teams need to foster an environment that promotes academic growth. Tutoring sessions can be implemented by athletic directors or coaches prior to or after practice. Practice time would not be sacrificed, and students would get the additional instruction necessary.

A review of literature reveals a variety of studies that suggest extracurricular activity participation results in many academic and non-academic benefits. School officials that eliminate such activities, or require participation fees as a reaction to budget constraints, may be doing students and the community more harm than they realize. In contrast, schools should look for ways to increase participation in school sponsored after-school activities as a means to increase academic achievement and promote positive social and emotional development through school connectedness.

Methodology and Procedures

In this basic research design, a non-experimental survey was used. Additionally, this study has a descriptive research design with the use of grade point average data. The questionnaire consisted of ten items that were either multiple choice or responses measured according to a Likert Scale.

All junior year (11th grade) students attending a Western Pennsylvania public high school were invited to participate in the study. Consent forms were given to each of the participants who then completed the survey during an extended homeroom at the beginning of the school

day. A total of 148 students completed the survey. One hundred sixteen participants were categorized as extracurricular participants; while 32 were identified as extracurricular non-participants. Once the surveys were completed, student grade point averages were obtained by the researcher from the high school administrative office. The data was analyzed and interpreted by the researcher. At the conclusion of the study, results of the research were made available to the high school and participants upon request.

Results

The data, consisting of a survey and the students' grade point averages, were amassed for a total of 148 students out of a possible 169 (87.6%). The first two questions of the survey identified the students for the purpose of obtaining their grade point average, while the third separated the participants into the two main categories of the study. The categories were those who participated in one of over forty extracurricular activities sponsored and offered by the school, and those who chose not to participate. The two categories will be identified in the tables and charts as "Participants" and "Non-Participants". One hundred sixteen out of 148 students participated in at least one extracurricular activity (78.4%), while 32 did not (21.6%). The remaining results of the survey are included in this chapter. Only questions pertinent to the survey have been included.

Table 1 displays the results of the question "I enjoy going to school". The table indicates that 48.3% of those students participating in extracurricular activities agree with the statement, while 16.4% disagree, and 35.3% remained neutral. Of those students not participating in extracurricular activities, 34.4% indicate that they agree with the statement, while 34.4% disagree, and 31.3% had a neutral opinion.

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	SA (5)	A (4)	N (3)	D (2)	SD (1)
Participant	3 (2.5%)	53 (45.7%)	41 (35.3%)	14 (12.1%)	5 (4.3%)
Non-Participant	2 (6.3%)	9 (28.1%)	10 (31.3%)	6 (18.8%)	5 (15.6%)

Table 2 displays the results of the question "I feel as though I fit in at school". The table indicates that 76.7% of those students participating in extracurricular activities agree with the statement, while 6.9% disagree, and 16.4% remained neutral. Of those students not participating in extracurricular activities, 65.6% indicate that they agree with the statement, while 21.9% disagree, and 12.5% had a neutral opinion.

Table 2

I feel as though I "fit in" at school.

	SA (5)	A (4)	N (3)	D (2)	SD (1)
Participant	16 (13.8%)	73 (62.9%)	19 (16.4%)	7 (6.0%)	1 (0.9%)
Non-Participant	2 (6.3%)	19 (59.4%)	4 (12.5%)	4 (12.5%)	3 (9.4%)

Table 3 below displays the results of the question "I have a positive opinion of this school". The table indicates that 56.9% of those students participating in extracurricular activities agree with the statement, while 17.2% disagree, and 25.9% remained neutral. Of those students not participating in extracurricular activities, 37.5% indicate that they agree with the statement, while 31.3% disagree, and 31.3% had a neutral opinion.

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	SA (5)	A (4)	N (3)	D (2)	SD 91)
Participant	13 (11.2%)	53 (45.7%)	30 (25.9%)	18 (15.5%)	2 (1.7%)
Non-Participant	2 (6.3%)	10 (31.3%)	10 (31.3%)	8 (25.0%)	2 (6.3%)

Table 4 below displays the results of the question "I will miss this school when I graduate". The table indicates that 38.8% of those students participating in extracurricular activities agree with the statement, while 21.6% disagree, and 39.7% remained neutral. Of those students not participating in extracurricular activities, 34.4% indicate that they agree with the statement, while 43.8% disagree, and 21.9% had a neutral opinion.

Table 4

I will miss this school when I graduate.

	SA (5)	A (4)	N (3)	D (2)	SD (1)
Participant	9 (7.8%)	36 (31.0%)	46 (39.7%)	19 (16.4%)	6 (5.2%)
Non-Participant	2 (6.3%)	9 (28.1%)	7 (21.9%)	7 (21.9%)	7 (21.9%)

Table 5 below displays the results of the question "I enjoy going to school". The table indicates that 82.8% of those students participating in extracurricular activities agree with the statement, while 0.0% disagree, and 17.2% remained neutral. Of those students not participating in extracurricular activities, 78.1% indicate that they agree with the statement, while 0.0% disagree, and 21.9% had a neutral opinion.

	SA (5)	A (4)	N (3)	D (2)	SD (1)
Participant	22 (19.0%)	74 (63.8%)	20 (17.2%)	0 (0.0%)	0 (0.0%)
Non-Participant	6 (18.8%)	19 (59.4%)	7 (21.9%)	0 (0.0%)	0 (0.0%)

I want to see students in this school be successful compared to other schools.

The grade point averages of all students participating in the survey were retrieved. Although the grade point average is on a 4.0 scale, students are able to obtain GPA's that are higher due to weighted classes. The average GPA for students who participated in extracurricular activities was 3.456 indicated. The average GPA for non-participants was 2.578.

Table 6 displays the results of an independent sample t-test. The purpose of the test is to determine if a significant relationship between the grade point averages of participants and non-participants exists. The data was tested with a two-tail, two-sample test where equal variances were assumed. The data was then tested a second time where equal variances were not assumed. In both cases, the trials resulted in a t-value less than .05 suggesting a significant difference between the grade point averages of extracurricular participants and non-participants.

Independent	samples	t_test
independent	samples	i-iesi

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	Levine	s Test							
	for Equality of								
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	F	Sig.	t	df	tailed)	Mean Dif.	Dif.	Lower	Upper
GPA	11.649	.001	-7.380	146	.000	8776741	.1189277	-1.112716	642631
Equal									
Variance									
Assumed									
GPA			-6.176	40.475	.000	87766741	.1421142	-1.164792	590555
Equal									
Variance									
Not									
Assumed									

The data collection process resulted in satisfactory participation by students in the junior class. Out of 169 possible participants, 148 students both completed the survey and were enrolled at their current high school for at least one year.

Discussion and Conclusions

The study sought to determine whether high school juniors who participated in at least one school sponsored extracurricular activity could be distinguished from their peers who did not participate in one. First, the study examined the two groups based on academic achievement using grade point averages. Second, the research compared the perceptions of school between members of each group.

For the purpose of comparing the academic achievement of the two groups, the researcher chose to use the most recent and complete data available, which was the students'

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GPA from their previous academic year. Those students who participated in the survey but did not attend the school district during the previous academic year were omitted. The results shown in Figure 2 were that the 32 students who did not participate in an extracurricular activity had a mean GPA of 2.578. The range of this subgroup was a high of 3.978 and a low of 1.336. When compared to the scores of those who participated in extracurricular activities, the results in Figure 1 showed a significant increase in academic achievement which was verified with 99.995% confidence by way of a t-test. The 116 participants had a mean GPA of 3.456 with the range of scores falling between a high of 4.183 and a low of 1.544. When comparing the subgroups' mean GPAs as well as the range of scores, the data indicates that those who participate in at least one extracurricular activity show increased academic achievement compared to their peers who do not participate.

Table 1 displayed the results of the survey statement "I enjoy going to school" answered according to the Likert Scale. The results were used to determine whether students who participated in an extracurricular activity, had a more positive perception of their school than their counterparts who did not participate. The data was in agreement with the hypothesis in that 48.3% of participants agreed with the statement while only 34.4% of non-participants agreed. Furthermore, participants who disagreed with the statement was only 16.4% while non-participants disagreed at a rate of 34.4%.

The results displayed in Table 2 are Likert Scale results to the statement "I feel as though I fit in at school". As with Table 1, these results were gathered for the purpose of identifying which group had a more positive perception of their school. Participants answered having 76.7% in agreement with the statement, while disagreeing at a rate of 6.9%. This was more favorable than the results of non-participants who answered at a rate of 65.6% in agreement and 21.9% disagreeing with the statement.

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Table 3 displayed results of the survey statement "I have a positive opinion of this school". The results of this statement were more profound than the others when comparing participants to non-participants. Participants agreed with this statement at a rate of 56.9% compared to non-participants who agreed at a rate of 37.5%. Just as telling is the number in disagreement of the statement from each subgroup. Participants disagreed at 17.2% while nearly one-third (31.3%) of non-participants disagreed.

The results displayed in Table 4 seek to determine which group has a more favorable opinion of school by responding to the statement "I will miss this school when I graduate". The results again supported the hypothesis, but at a less significant rate when comparing those in agreement. Participants agreed at a rate of 38.8% while non-participants agreed at a nearly equal rate of 34.4%. Those who disagreed with the statement show a much wider gap between participants and non-participants. While only 21.6% of participants disagreed with the statement, close to half (43.8%) of non-participants disagreed with the statement.

Table 5 displayed the final statement from the student survey which sought to support the hypothesis that students who are involved in extracurricular activities would have a more favorable perception of school than their peers who did not. The statement asked, "I want to see students in this school be successful compared to other schools" and focused on what can be classified as school pride. The data showed interesting results when comparing participants and non-participants. Both groups responded in agreement with the statement at high rates. Participants agreed at 82.8% while their non-participating peers agreed at a 78.1% rate, which again supported the hypothesis. What is interesting, however, is the number of each group that responded in disagreement. Both participants and non-participants had zero students answer the statement in disagreement.

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An analysis of the data in this study indicates the grade point averages of students participating in at least on extracurricular activity are significantly higher than non-participants. Therefore, the null hypothesis is rejected. Additionally, the student survey results suggest that those who participate have a more favorable opinion of the school than those who do not participate in any extracurricular activities. The results in Tables 1 and 3 seem most notable. Table 1 indicates that 48.2% of students participating in extracurricular activities express some level of agreement when asked if they enjoy going to school, while 34.4% of non-participants indicated some agreement that they enjoy going to school. Table 3 shows that when asked about whether or not they have a positive opinion of the school, 56.9% of students participating in extracurricular activities indicated some level of agreement, while 37.6% of non-participants indicated some agreement. However, the analysis of data is too general to either accept or reject the null hypothesis. A more detailed statistical analysis is required to make a more robust determination. Students participating in extracurricular activities were lumped into a single group. Therefore, there is no data to indicate the impact of the number of extracurricular activities on student GPA and school perception. Future research may include an analysis to examine if a specific number of activity involvement relates to a higher GPA and most positive perception of school.

Limitations

This study contains several limitations. First, an unequal sample size is apparent among survey respondents (extracurricular participants and non-participants). An imbalance of 116 to 32 exists, which may limit the statistical significance of the results. In addition, the study was limited to a total of 148 participants from one grade level in a single high school setting. This limited sample size makes it more difficult to generalize conclusions to a wider population. Another limitation is linked to the actual number of activities each extracurricular participant

reported. The study does not distinguish between those students participating in one activity with those participating in more than one. Therefore, the results do not provide data or insight pertaining to the actual number of extracurricular activities a student is involved in and student GPA or school perception. Finally, there is no effort in the study to distinguish between types of extracurricular activities.

Implications

With budgets continually shrinking and schools focusing greater attention on high stakes testing, "non-essential" extracurricular activities offered to students are either being cut or students are required to pay out-of-pocket in many school districts. Policy makers are understating the impact extracurricular activities can have to student academic success. By focusing all of their monetary resources directly at improving high stakes testing, they may be overlooking other factors that lead to students being successful in school.

Students in public schools come from a wide breadth of socioeconomic backgrounds and have an even greater range of ideals and beliefs. The results of this study as well as other studies suggest that students who participate in at least one extracurricular activity perform academically higher than their peers. If funding for these extracurricular activities goes away, participation levels may drop. This is especially true for those students whose families live at or below the poverty level and can not afford pay-to-play or to enroll their children in similar activities outside of school.

Rather than trying to convince policy makers to avoid cuts to extracurricular activities, the results of the study suggest that there should be an emphasis on increasing the number of extracurriculars offered by schools. If schools can determine how to reach students who feel disenchanted or not accepted by the school through extracurricular activities, the research shows that the students may have a better perception of their school environment and subsequently

greater academic achievement. To do so, schools need to survey the student body to determine what interests non-participants have and whether offering an extracurricular activity would be feasible, both logistically and monetarily. Based on the research of this author and others, the data points emphatically at getting students involved in an extracurricular activity.

The greatest obstacle in maintaining the current extracurriculars while adding additional ones is two-fold. There is the obvious issue of money, especially when adding new extracurriculars. Depending on the type of activity, there will likely be an overhead cost similar to starting a new business. To solve this problem, school officials may attempt to utilize booster programs and corporate sponsors. Regardless of whether the activity is of the arts, athletics or any other variety, there is likely a business catering to that genre.

The second obstacle is finding qualified and motivated adults to act as coaches, sponsors, and the like. As veterans of the public school arena, the authors understand the difficulty of finding qualified, motivated adults to mentor students in an extracurricular activity. For some, the time spent compared to the money earned does not provide enough of an incentive. Furthermore, the school day does not coincide ideally with most professional's schedules excluding teachers. The financial issue can again be rectified by via booster programs or corporate sponsors, but that is a slippery slope. Instead, the authors look to greater tax incentives being given to the adult volunteers. Currently there are a few tax write-offs which help defray the costs but they come nowhere near equalling the expenses and time of the individual.

Recommendations

A pressing question that needs answered is whether students who perform academically better than their peers were also doing so prior to participating in extracurriculars. Are extracurricular activities the cause of greater academic achievement or are they merely a byproduct of a student already having success academically and emotionally in school? It is

possible that due to their success, these students could already have a favorable perception of school which then leads to their participation. This possibility needs to be noted as a factor in this study's results and could be the cause of error. A multiyear longitudinal study would be an ideal way to determine if this theory carries any weight.

Further research could also be done by taking a closer look at various subgroups. This could be race, sex, socioeconomic factors and which particular activity they participate in. In addition, this study merely looked at whether students participated or not. Some students spent less than one hour per week on their extracurricular while others responded in the survey that they spent over ten hours per week. It is possible that there may be a sweet spot for the time devoted to extracurricular activities and that by participating in too many, there may begin to be an adverse effect on their academic achievement.

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