

Participation in Team Sports and Good Grades:  
A Correlative Study

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Andy J. Clayton

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FACULTY APPROVAL

Participation in Team Sports and Good Grades:  
A Correlative Study

Approved for the Faculty

\_\_\_\_\_, Faculty Advisor

\_\_\_\_\_, Date

## ABSTRACT

This study was conducted to explore whether a positive correlation exists between the participation of students in team sports and their grades in the four core classes: math, science, social studies, and language arts. Weekly grade checks and team sport participation data were collected at a small middle school in southeastern Washington. The results of study suggest that there was a positive correlation between team sport participants and their grades.

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## CHAPTER 1

### Introduction

#### Background for the Project

Participation in team sports has been one of the few aspects of the middle school experience that remains constant through the middle school years. Team sports play a large role in the positive middle school experience (Eccles & Fredericks, 2008). The researcher attempted to answer the following question in the research paper: Is there a correlation between engaged participation in team sports and higher student grades?

Most middle school students have an increased number of social and academic changes in the transition from elementary school to high school (Eccles & Fredericks, 2008). Class schedules, increased number of teachers, increased individual responsibility to attendance and school work, etc. These changes along with the social transformations of being a pre-teen, or a teenager, can have a negative effect on any student's academic achievement. Around the age of 6, an increasing number of youth begin participating in structured team sports. Some youth had the choice of participation, and others did not.

Howie, Lukacs, Pastor, Reuben and Mendola (2010) found that approximately 59% of youth from aged 6-11 participated in some sport (p. 121). Over the first few years of team sports involvement, youth begin to create likes, dislikes, and interests for certain sports, or aspects of sports. The end of this period is also the start of deeper engagement for a particular sport, or set of sports.

#### Statement of the Problem

This study explores the idea that students that participate in school based team sports have higher grades than students that do not participate in school based team sports. The data collected compares student grades of participants and non-participants of team sports, within three different sport seasons at the middle school level.

#### Purpose of the Project

The researcher attempted to identify the correlation between the participation of team sports and higher grades, but to also understand if engaged participation in the sport had a positive impact on grades. In regards to organized activities,

“Participation has been positively linked to academic outcomes including higher grades....” (Eccles & Fredericks, 2008, p. 1030).

### Delimitations

The study was executed in a small middle school in Southeastern Washington. There were 146 seventh and eighth grade students used, including males and females. The school house students from grades six to eight, with a total enrollment of 219 students. The study compared grades of team sport participants with grades of non-participants. The study took place over six months, from September 2012 to March 2013. There were three nine-week seasons where team sport participation data and grades were collected.

### Assumptions

The researcher assumed that the participants in the study represented all possible participants that met the criteria of the research. The researcher assumed that all participants were given the same opportunities to participate in team sports. The researcher also assumed that the grading practices of the teachers in the school, as well as the collection of weekly grade checks, was consistent and fair. Lastly, the researcher assumed

that the treatment of grades and the execution of instruction were fair.

### Hypothesis

The researcher was intending to evaluate whether there was a statistically significant correlation between team sport participation and grades.

### Null Hypothesis

There is no statistical significance in the correlation between grades and team sport participation.

### Significance of the Project

The researcher attempted to find the correlation between participation in team sports and grades in order to determine if school-sanctioned team sports help, or hinder, young student athletes at a small middle school in Southeastern Washington.

### Procedure

The researcher obtained and defined a list of 146 seventh and eighth grade students that met all criteria for participation in the study. To meet all criteria students must have been enrolled in the four core classes of math, science, language arts, and social studies. Next, other lists of student participants in school-

sanctioned team sports were obtained from coaches of respective sports. The final data collected was weekly grade checks for all students in the study from September 2012 to March 2013. The data was synthesized and analyzed and

### Definition of Terms

Pearson  $r$ - The Pearson  $r$  is a value that represents the correlation between two variables, such as participation in team sports and good grades.

team sports- Team sports are defined as structured sports where two or more students compete together for a desired, or positive, outcome.

middle school- Middle school is an intermediate school that consists of grades six, seven, and eight. In some cases middle schools can include grades five and, or, nine with the six through eight levels.

math- A class that can include seventh grade math, eighth grade math, or algebra I.

engaged- Team sport participants that were consistently at practice and games, and performed with maximum effort on a daily basis.

disengaged- Team sport participants that missed practices, and, or, games often, and performed at less than maximum effort on a daily basis.

Acronyms

O.S.P.I.- Office of the Superintendent of Public Instruction

L.A.- Language Arts

S.S.- Social Studies

## CHAPTER 2:

### Review of Selected Literature

#### Introduction

This project includes multiple themes found in the reviewed literature that display the importance of student participation in school-related extracurricular activities. The following literature explored the positive educational and social outcomes from student involvement in extracurricular activities. The researcher organized the major themes in order to demonstrate that engaged participants in team sports do better in multiple facets of the educational and social realms in which they reside.

Five themes dominated the reviewed literature on the correlation of athletic participation and academic achievement: (1) involvement with pro-social groups, (2) individual and school identity, (3) relationships with peers, (4) relationships with non-familial adults, and (5) academic outcomes and future aspirations (Eccles & Fredericks, 2008; Eccles, Barber, Stone & Hunt, 2003). The literature suggests that high academic



achievement is evident if all of these factors are a part of a student's athletic involvement.

### Pro-Social Groups

Team sports are defined as structured sports where two or more students compete together for a desired, or positive, outcome. This is equivalent to the main idea of pro-social groups. Students that participated and belonged to a group of peers with similar interests and desires have exhibited increased positive educational and social outcomes in all similar research. Team sports allow students to engage in group tasks that require communication and problem solving skills to develop and flourish with increased experience in that respective sport. Pro-social groups, like teams and other organized groups of students and advisors, help students to develop emotionally and interpersonally because of the group setting. Shared emotions among peers, whether negative or positive, helped create a sense of belonging to the team, or group (Eccles & Fredericks, 2008). On the foundation of this project, Fujita (2005) suggests that more structured time in groups is associated with higher grades.

## Individual and School Identity

A student's identity shifts from parental association in elementary school to individual identity in middle school, and ultimately, to school identity later in middle school and into high school. Although both identities, individual and school, can happen simultaneously for most middle school students, there is a definite shift from elementary to middle school, when students begin to individuate from parents (Eccles & Fredericks, 2008). In middle school, social pressure from peers became evident by the change in behavior. Students begin to dress and communicate differently than in previous years. Their perception of reality and fiction is somewhat skewed because of the influence of media and what society deemed popular. This is when middle school students began to engage in identity exploration (Eccles & Fredericks).

This identity exploration was necessary for middle school students to develop a sense of worth and value, while also looking to belong to a larger entity, a school. The literature exhibits several possible outcomes when students do find their identity; such as, interests and likes of team sports, which

ultimately results in higher academic achievement. Students that participated in team sports, or other pro-social groups, tended to have higher levels of connectedness, which resulted in higher academic achievement (McNeely, Nonnemaker & Blum, 2002).

### Relationships with Peers

Middle school students that participate in any extracurricular activity have already developed relationships with some peers. The continued development of relationships with known peers and new developments within a diverse population of peers helps create a foundation for pro-social groups (Eccles & Fredericks, 2008). Acceptance from peers was necessary for students to perform in a team setting. Middle school students had several opportunities to develop relationships with peers, but none was more important than those developed in an emotionally and socially charged setting, like a volleyball court or football field. Eccles and Fredericks suggested that youth participants in any extracurricular activity were more likely to have friends that are doing better in school, plan on attending college, and have other future aspirations than those of non-

participants. Positive peer relationships develop and flourish in the team sport setting because of similar interests and shared emotional experiences.

### Relationships with Non-Familial Adults

Middle school students have always had the transitional period of being dependent on familial adults to the individuation from them. When the individuation happens, those students looked for emotional and academic support from non-familial adults. In regards to this project, the non-familial adults were coaches and advisors from extracurricular activities, or those associated with their school.

In most cases with students that participate in team sports, they hold coaches in high regards, especially when respect is earned. Coaches have the ultimate duty to uphold the respect and to offer the necessary support so that the students can develop appropriately. Coach's help student-athletes capitalize on social norms (Eccles & Fredericks, 2008). The exhibition of social norms by students translated into increased maturity, which led to higher performance levels in the classroom, and on the field (Cutler, 2009). The association with

coaches, and other non-familial adults, provided the opportunity for middle students to observe a professional at work, providing emotional and academic support while making a positive impact on them. Cutler exclaims that team sport participants spend a significant amount of practice time under direct, personal, supervision. Cutler also stated that student-athletes "have learned to be focused and effective in their sport because someone beyond themselves enforces their practice, aims their efforts, and provides ongoing....feedback". This intrinsically helped motivate the students to perform better in, and out of, the classroom. "Those students who have translated what they have learned on the practice field to other aspects of their lives are excellent students of any subject" (Cutler).

#### Academic Outcomes and Future Aspirations

Most of the reviewed literature suggests that participation in extracurricular activities is associated with positive educational outcomes. More participation by middle school students in team sports indicated more academic success, the likelihood of attending college, and the predictor of having a job with a future (Eccles, Barber, Stone & Hunt, 2003). "Students who

participated in co-curricular activities are three times more likely to have a grade point average (G.P.A.) of 3.0 or better” than students who did not participate in those activities (Fujita, 2005). Eccles and Fredericks (2008) argued that participation in school based activities positively linked to higher indicators such as: grades, test scores, school value, school engagement, and educational aspirations. The literature was encompassed by all of these indicators, and other external factors, and was associated with desired educational outcomes, including higher grades and future aspirations.

### Summary

The research literature suggested the following five themes: involvement with pro-social groups, individual and school identity, relationships with peers, relationships with non-familial adults, and academic outcomes and future aspirations. The themes indicated that with team sport involvement comes positive traits and, or, skills for student athletes. Furthermore, social involvement, relationships, and ultimately academic success and the increased likelihood of future success can be learned from participation in team sports.

## CHAPTER 3:

### Methodology and Treatment of Data

#### Introduction

The slight majority of middle school students in the country take part in organized team sports (Eccles & Fredericks, 2008). All schools have eligibility policies regarding grades and participation in school related activities and sports. These policies have been shaped by ongoing research about the effectiveness of participation on positive academic outcomes. Based on the themes in the research, middle school team sports have offered students the opportunity to be engaged in a structured environment that provides further opportunities to develop: communication skills, leadership skills, personal responsibility, peer responsibility, problem solving skills, discipline, healthy habits, relationships with pro-social peers and non-familial adults, individual and school identity, post-high school aspirations, academic support, and academic success .

#### Methodology

The purpose of the research is to gather existing data in order for the researcher to understand if a correlation between the

engaged, disengaged, and non-participants in team sports and their grades exists. This data collection covers a six month period and includes three sports' seasons at the middle school. This project is a correlative study which fits into the quantitative method of research.

The researcher collected several pieces of data. One piece of data includes participation information from football, volleyball, basketball, dance, and wrestling coaches. The coaches provided a list of sport participants for their respective sport. Another set of data includes weekly grades from all team sports participants and non-participants, which were collected by the teachers every Thursday at the middle school. These grade checks were a normally occurring practice at the school. The middle school teachers are required to use the same grading scale for consistency across subjects and grade levels. The grades are based on a four-point scale. For every A, A-, or B+ grade, or 100%-87%, a score of a "4" was given. For every B, B-, C+, or C grade, or 86%-74%, a score of "3" was given. For every C-, D+, or D grade, or 73%-60%, a score of "2" was given. For every F grade, or 59% or lower, a score of "1" was



given. While interesting and potentially illuminating, the researcher had no need to interpret any narrative data as it was outside the scope of this research question; thus the researcher dismissed the use of qualitative methodology. The collection of numerical data for the purpose of determining if a correlation of grades and team sport participation would suggest that the research methodology chosen was appropriate.

### Participants

The participants in this study were seventh and eighth grade students from a small middle school in southeastern Washington. Both males and females were included in the research. There were 146 total students, in which 71 of them did not participate in any team sports. The other 75 students were either engaged or disengaged while participating in school-sanctioned team sports.

The sample size (n=146) included all but fourteen students from the seventh and eighth grades; which were not part of the four core classes because of severe disabilities. Other excluded students either enrolled late in the study or withdrew early in the study and were not counted towards full time enrollment at the

school. There were three seasons of school-sanctioned team sports, with each season consisting of at least one sport a female and male could participate in. Season 1 consisted of football and volleyball. Season 2 consisted of boys' basketball and dance. Season 3 consisted of girls' basketball and wrestling. The study compared grades between team sport participants and non-participants over the three sport seasons.

### Instruments

The researcher collected predesigned school weekly grade reports from teachers that included grade data for all students. Also, team sport participation data was collected from the coaches of the relative sports.

### Design

The researcher designed the study to be correlative in nature. Each participant, or student, in the study had taken four core classes including language arts (L.A.), science, math and social studies (S.S.). The researcher used only the core class grades for this study. Over each season, the students collected grade checks for all classes every Thursday that school was in session. Each participant had at least eight weeks, or nine

weeks maximum, of grade checks that were used for each core class, over each season.

The data was inserted into the formula for the Pearson  $r$  test for correlation (Gay, Mills and Airasian, 2009, p. 201). The correlation for the team sport participation and grades earned were tested for statistical significance; the researcher tolerated a  $p=.05$  (or 5% due to chance). The choice of  $p=.05$  is within generally acceptable tolerances (2009, p. 329).

### Procedure

In order to begin the study, the researcher gained permission from the building principal and the district superintendent to use this data. This data was collected as a school practice and not specifically for this project. Once permission was granted, the researcher requested a list of seventh and eighth grade students from the building secretary. The researcher, with help from the building secretary, removed students from the list that weren't enrolled for all three seasons in the study. It was also determined that a few students were not enrolled in all of the core classes because of disabilities and remedial support. The list was fine tuned to 146 students across

the two grade levels; 76 seventh graders and 70 eighth graders. All personally identifiable data was coded and this data was secured in a locked file cabinet to protect the identities.

The researcher then collected lists of active participants in each sport. The head coach of each sport identified the participants that were either engaged, or disengaged, in their respective sport. The term "engaged" was operationalized to include participants that were consistently at practice and games, and performed with maximum effort on a daily basis. The term "disengaged" referred to participants that missed practices, and/or games often, and performed at less than maximum effort on a daily basis.

The last portion of data came from grade checks provided by all advisory staff members that were responsible for collecting such data on a weekly basis. For each student, there were at least eight weeks of grades for each core class.

#### Treatment of Data

The researcher created a four-point scale for a range of letter grades. For every A, A-, or B+ grade, or 100%-87%, a score of a "4" was given. For every B, B-, C+, or C grade, or

86%-74%, a score of "3" was given. For every C-, D+, or D grade, or 73%-60%, a score of "2" was given. For every F grade, or 59% or lower, a score of "1" was given. For each student, each core class was given an average score based on the nine weeks of grade checks for that class. Next, the four averages for the core classes were added and divided by four, the number of core classes, which would then give one composite score for each student. Table 1 gives an example of how an individual student's composite score was calculated.

Table 1.

Example of Student Composite Score

Core Class	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Avg. Score
Science	A 4	A 4	B- 3	B 3	C+ 3	B- 3	C+ 3	B+ 4	B+ 4	3.44
Math	B+ 4	B+ 4	B- 3	C+ 3	B+ 4	B 3	B- 3	C+ 3	B- 3	3.33
Social Studies	A 4	A 4	A 4	A- 4	A- 4	B+ 4	A- 4	A- 4	A- 4	4.00
Language Arts	B+ 4	B 3	C+ 3	C+ 3	C 3	C- 2	D+ 2	D+ 2	C- 2	2.67
Total of Averages										13.44
13.44 (total of averages) ÷ 4 (core classes)= 3.4 (composite score)										

## Summary

The researcher collected grade checks and team-sport participation data from all students in seventh and eighth grades from September 2012 to March 2013 at a small school in southeastern Washington. The results of the data collection were analyzed and synthesized using Pearson  $r$  values for statistical significance in correlation.

## CHAPTER 4:

### Analysis of the Data

#### Introduction

The weekly grades of all seventh and eighth grade students were collected in order to compare those grades of team-sport participants and non-participants. The data was analyzed using numerical statistics and statistical tables; specifically Pearson product-moment correlation test and a correlation table for statistical significance (Gay, Mills and Airasian, 2009, p. 201).

#### Description of the Environment

The research was executed in a small rural middle school in Southeastern Washington from September 2012 to March 2013. The total school enrollment was at 219 students. There were 111 boys and 108 girls enrolled full time. The Office of the Superintendent of Public Instruction published that the middle school had approximately 71% of the kids who were on the free or reduced lunch meal program (O.S.P.I., 2012). The ethnic demographics of the school were 54.1% white, 42.2% Hispanic, and less than 4% were categorized as two or more races (2012).

There were sixteen total teachers in the building, with thirteen of them that taught core academic classes. 43.8% of the teachers hold at least a Master's Degree and all teachers are considered Highly Qualified. All student research participants maintained consistent class schedules from September 2012 to March 2013.

#### Hypothesis/Research Question

The researcher was interested in determining if there was a statistically significant correlation between team sport participation and grades.

#### Null Hypothesis

There is no statistical significance in the correlation between grades and team sport participation.

#### Results of the Study

The data was analyzed using a Pearson  $r$  test for correlation. During Season 1, 44% of the students ( $n=146$ ) participated in school-sanctioned team sports. The participants had an average grade score of 3.0, while the non-participants held a 2.4. For Season 2, there were less participants, 30%, but still held the 3.0 grade score compared to a 2.5 grade score by non-participants. Season 3 had 29% of the students



participated in school-sanctioned team sports; they held a 2.9 grade score, compared to a 2.4 grade score of non-participants.

Table 2.

Cumulative Season Data

	Season 1		Season 2		Season 3	
DNP	2.4	DNP	2.5	DNP	2.4	
P	3.0	P	3.0	P	2.9	
Total-n	146	Total-n	146	Total-n	146	
Participation	44%	Participation	30%	Participation	29%	
n = total participants in study						
DNP = Did not participate in school-sanctioned team sports						
P = Participated in school-sanctioned team sports						

Table 2 displays the baseline data that was collected for each season in the study. The analysis provides support for the hypothesis with a variance between 0.6 and 0.5 for the grade scores for each season. The Pearson *r* was arranged to accept

5% due to chance. The results indicate that the likelihood due to chance is very low. The Pearson  $r$  value for all research participants and their grades was .39; a statistically significant  $r$  value at  $p=.05$  for this population is .19 (Gay, Mills and Airasian, 2009, p.558).

### Findings

The results suggest that students that participated in school-sanctioned team sports performed better in their core classes than students who did not participate in the team sports. The size of the school and consistency between core classes and teaching methods allows for less control between a variety of external factors. However; the results could vary if the study was performed in larger schools with less consistency between core classes and teaching methods.

Based on the results of this foundational study, the null hypothesis is rejected. The results would then favor supporting the hypothesis with further research.

### Discussion

The findings of the research provide some evidence that participating in school-sanctioned team sports has a statistically

significant positive correlation with academic achievement, or as defined in this project, good grades. A 3.0 grade point average is considered to be good grades because it means the student is well above average; average grades are considered a 2.0 based on a traditional grading scale (Fujita, 2005).

In previous research it was discovered that when students share emotions, as they do in team sports, it helps them create a sense of belonging to the team (Eccles & Fredericks, 2008). If this is true, then higher level of connectedness from team sports, can result in higher academic achievement (McNeely, Nonnemaker & Blum, 2002).

Previous research and this study are consistent in suggesting that participation in school-sanctioned team sports and good grades have a positive correlation (Cutler, 2009).

### Summary

Based on the research and initial results, it suggests that there is evidence that this correlative study of students participating in school-sanctioned team sports from September 2012 to March 2013 and higher grades, has defined this study as support for rejecting the null hypothesis. Students that

participated in team sports at the study location had an overall higher grade average for each of the four core classes: science, math, language arts, and social studies.

The results suggest that the hypothesis may have support; albeit due to such a small sample size and other variables that may be present, it should be considered as a very preliminary analysis. It does appear that students who participate in school-sanctioned team sports have higher grades than students who do not participate in team sports.

The research question pursued was is there a statistically significant correlation between team sport participation and good grades? The results suggest a Pearson  $r$  value of .39, which is a statistically significant relationship. As cited earlier, at  $p=.05$  the  $r$  value statistic for significance is  $\geq .019$  (Gay, Mills and Airasian, 2009, p.558). The answer to the aforementioned question is yes, there is not only a correlation between the two, but there is a positive correlation.

## CHAPTER 5:

### Summary, Conclusions, and Recommendations

#### Summary

There has been less pressure from state governments on athletic participation and more on academic performance (Cutler, 2009). Less students are participating in school sanctioned team sports because it is considered less of a priority in a student's life (Fujita, 2005). The federal government mandates the state government and school districts, which mandates the principals and teachers, which pressure the students and their parents to achieve academically, thus separating the idea that academics and school-sanctioned team sports are a partnership in the ongoing goal of higher academic achievement (U.S. Department of Education, 2013). Previous research has indicated that the participation in team sports has a positive effect on higher academic achievement (Eccles & Fredericks, 2008). This study was intended to suggest the positive impact of school-sanctioned team sports to the lives of students on the road to higher academic achievement.

The researcher collected data that indicated the academic achievement of students who participated in school-sanctioned team sports and students who didn't participate over three sport seasons. The study was conducted in a small middle school in rural southeastern Washington.

The data collected included weekly grades of four core classes: science, math, language arts, and social studies, for each study participant over three seasons consisting of nine weeks each. The data also included their participation, or non-participation, on team sports sanctioned by the middle school.

The researcher used quantitative analysis to compare the grades of team sport participants and non-participants of team sports. The Pearson  $r$  test was used to test for significance of correlation between team sport participants and their grades. In all cases, the variances were to be accepted due to chance up to 5%. The variances were at least double the acceptable threshold due to chance. The likelihood of a correlation of grades and participation due to chance was low, thus leading the researcher to reject the null hypothesis.

## Conclusion

The research was conducted to determine if a positive correlation between participation in school-sanctioned team sports and good grades existed at the middle school. The research, albeit a small sample and challenge to control a variety of other variables that may be present, suggests that there may be a positive relationship from participating in team sports, and how they can play an important role in the lives of middle school students.

The researcher discovered several ideas in regards to student achievement and participating in team sports. Students have several internal and external factors that can affect their grades; team sports can positively impact their grades because team sports can help a student build pro-social acceptance and connectedness on a team, create individual and school identity, build positive relationships with peers and non-familial adults, and ultimately increase the drive for positive academic outcomes and future aspirations.

## Recommendations

The conclusion of this research project does not suggest, or support, generalizations to all students. Some students performed academically well without participating in sports. These students may have a different support system than other kids, thus leading to the idea that there may have been more external variables that impacted the research. Student support systems could be defined as the help and guidance they get from home. This could be a crucial piece of data that would help to truly understand the factors that influence students' academic achievement.

Another recommendation would be that instead of using weekly grades as an indicator, a researcher could use common assessments given by multiple teachers in the same subject area. This would help the study take a more consistent form if done in larger schools.

Understanding a student's list of priorities that includes grades, sports, family, and hobbies, may help create a better foundation for the research. This could be done using a survey,



which is a more qualitative approach, but nonetheless important to understanding the quantitative data.

Another valid study would be to use the participation data no matter how many sports a student plays. If they play in only one season, include them in only the participant data. In other words, a team sports participant may play in one, two, or three seasons. This would be more beneficial to see data by athlete versus non-athlete.

The researcher wonders if students can gain valuable experience just by being a member of a sport team. This experience may translate into social acceptance, positive peer connectedness and relationships, and identity of self, in and out of school. This experience perhaps, could ultimately lead to confidence in self, which may transfer to the classroom.

This project suggests that students that participate in school-sanctioned team sports do achieve higher grades; however, it does not suggest that participation in team sports is a solution to poor grades. Perhaps, the more students that can be influence by the positive experience of being involved with team sports, the better the school environment will become,

which will lead to more positive academic outcomes and future aspirations for most students.

## REFERENCES

- Cutler, A. (2009). A sporting chance. *Journal of College Science Teaching*, May/June, 6-7.
- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59(4), 865-889.
- Fredericks, J. A., & Eccles, J. S. (2008). Participation in extracurricular activities in the middle school years: Are there developmental benefits for african american and european american youth?. *Journal of Youth and Adolescence*, (37), 1029-1043.
- Fujita, K. (2005). The effects of extracurricular activities on the academic performance of junior high students. *Undergraduate Research Journal for the Human Sciences*, Retrieved from mhtml:file:///H:\Master's Degree School Work\ED Research\ECA on Academics.mht
- Gay, L.R., Mills, G.E., and Airasian, P. (2009) Educational Research Competencies for Analysis and Applications. 9<sup>th</sup> Edition. New Jersey: Pearson.

- Harrison, P. A., & Narayan, G. (2003). Differences in behavior, psychological factors, and environmental factors associated with participation in school sports and other activities in adolescence. *Journal of School Health, 73*(3), 113-120.
- Howie, L. D., Lukacs, S. L., Pastor, P. N., Reuben, C. A., & Mendola, P. (2010). Participation in activities outside of school hours in relation to problem behavior and social skills in middle childhood. *Journal of School Health, 80*(3), 119-125.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the national longitudinal study of adolescent health. *Journal of School Health, 72*(4), 138-146.
- Miller, K. E., Melnick, M. J., Barnes, G. M., Sabo, D., & Farrell, M. P. (2006). Athletic involvement and adolescent delinquency. *Journal of Youth and Adolescence, (36)*, 711-723.
- Office of Superintendent of Public Instruction. (2013). *Washington State Report Card*. Retrieved April 4, 2013, from <http://www.k12.wa.us/>.

- Rosewater, A. (2009). Learning to play and playing to learn: Organized sports and educational outcomes. *The Education Digest, September*, 50-56.
- U.S. Department of Education. (2013). *No Child Left Behind, Statement of Purpose*. Retrieved July 19, 2013, from <http://www2.ed.gov/nclb>
- Valentine, J. C., Cooper, H., Bettencourt, B. A., & Dubois, D. L. (2002). Out-of-school activities and academic achievement: The mediating role of self-beliefs. *Educational Psychologist, 37*(4), 245-256.

Table 3. Cumulative Season/Participant Data

Season 1		Season 2		Season 3	
DNP	AVG	DNP	AVG	DNP	AVG
82	2.4	102	2.5	104	2.4
Engaged	AVG	Engaged	AVG	Engaged	AVG
55	3.0	40	3.1	38	3.2
Disengaged	AVG	Disengaged	AVG	Disengaged	AVG
9	2.6	4	1.9	4	2.4
Participants	AVG	Participants	AVG	Participants	AVG
64	3.0	44	3.0	42	2.9
Participants = Engaged + Disengaged Participants					