

University of San Francisco
SCHOOL OF EDUCATION
INSTITUTIONAL REVIEW BOARD FOR THE PROTECTION OF HUMAN SUBJECTS
SHORT FORM APPLICATION

Applicant: Grace Grimaldo
USF Identification Number: 20154904
University Title: Masters Degree Candidate
School : University of San Francisco
Department or Group: School of Education Learning and Instruction
Home or Campus Address: 2463 Old Middlefield Way Mountain View Ca 94043
Home Phone: 408-406-1948
Work Phone: 650-849-7953
Electronic Mail Address(s): gjgrimaldo@usfca.edu
Name of Faculty Advisor: Lanna Andrews. Ed.D.
University Title: Associate Professor
Home or Campus Address: Learning and Instruction Department
School of Education
University of San Francisco
2130 Fulton Street, San Francisco Ca 94117
Home or Campus Phone: 415-422-5721
Electronic Mail Address(s): Andrews@usfca.edu
Thesis Title: The Relationship Between Sports Participation and
Students with Mild to Moderate Disabilities:
Are There Benefits to Participation?

1. Background and Rationale

The rational for this research study developed from the need to explore alternative means to help students with learning disabilities achieve in the classroom and improve their general mental and physical well-being. Research on school-aged children, adolescents, and adults have shown positive correlations between sports participation and positive outcomes related to academics, health, and self-esteem. Although the studies are mostly correlational in nature and thus do not provide explanations for the positive outcomes to sports participation, some researchers argue that students develop a greater sense of commitment to school and greater school identification. Others say that increased

participation in extracurricular activities built stronger bonds between students, teachers and administrators. **Little research exists about the possible outcomes of sports participation on students with learning disabilities. No studies were found that included and examined the outcomes of sports participation on students with learning disabilities. This study will address the gap in the research.**

2. Description of Sample

Participants include special education high school students in grades 9-12 enrolled in a suburban school. Participants are culturally and ethnically diverse, approximately 43% of the participants were White, 14% African-American, 28% Hispanic, 11% Asian, and 3.5% other minority. Approximately 43% of the students were males and 57% were female, ranging from ages 14 to 18. All of the participants had a mild to moderate disability. The researcher obtained this information from the students' most recent Individualized Education Plans (IEP). All participants are students in special education classes at the researcher's site.

3. Recruitment Procedure

Participants will be asked to participate in the study because of their participation in a class taught at the researcher's site. All study data collection will be performed in the researcher's classroom during normal school hours. All students in the researcher's classes may be included in the research. The decision to participate or not to participate in the study will not affect the students' grades in the class.

4. Subject Consent Process

A signed parental consent form will be required for all minor participants. The researcher will send home, via mail or email, the consent form to all parents of students

under the age of 18. The form will include information about the nature of the study and the potential risks and benefits of participation.

5. Procedures

Data collection will include participants' responses on a set of questionnaires. During class time participants will be presented with three questionnaires to fill out. The questionnaires will measure health and risk taking behaviors, sports participation, and self-esteem. The researcher will be the teacher in these classes. The researcher's regular classroom assistant will also be present in these classes and may assist in data collection. In addition the researcher will collect academic information for each of the students through the grade reporting system. Data will be aggregated and analyzed for trends correlations between sports participation and the various outcomes. Results will contain data that may be used to determine if a positive correlation exists between sports participation and any of the measured outcomes.

6. Potential Risks to

Subjects

Participants will spend approximately 10-15 minutes filling out the questionnaires. They may suffer some discomfort at having to express their health related behaviors or in responding to the self-esteem questionnaire. They can decide to exit the study at any time.

Student responses will not be subject to evaluation by anyone other than the researcher. There will be no risk of contingencies to their grades. No one, other than the researcher, who may have authority over them, will view their responses.

7. Minimization of Potential

Risk

The researcher will code the questionnaires with code numbers known only to the researcher so that no student's name or other identifying information will be included on them. Participants will receive all forms directly from the researcher during class. Participants will return the forms directly to the researcher at the end of each data collection session. All responses will be kept in a locked file. At no time will participants' names, addresses, phone numbers, or other personal or identifying information be used in the study. The researcher will inform the students that all responses will be confidential and will not be used to determine their grades.

8. Potential Benefits to

Subjects

The results of the study will be shared with all participants. Regardless of the outcome of the study, participants will have more information about the effects of sports participation.

9. Costs to Subjects

There will be no cost to participants other than the time required to complete the questionnaires.

10. Reimbursements/Compensation to

Subjects _____

Participants will not be compensated in any way for participating in this study.

11. Confidentiality of

Records _____

All participant records will be kept in personal confidence by the researcher. Participants will not be allowed to view the contents of data collected from other participants. Data will be kept in a locked file, which will be stored away from physical access by anyone involved with this study or the participants.

Signature of Applicant Date

Signature of Faculty Advisor* Date

*Your signature indicates that you accept responsibility for the research described, including work by students under your supervision. It further attests that you are fully aware of all procedures to be followed, will monitor the research, and will notify the IRPBHS of any significant problems or changes.

CONSENT COVER LETTER

10/15/09

Mr. John Doe
123 Sunny Circle
Anywhere, CA 90000

Dear Parents:

My name is Grace Grimaldo and I am a graduate student in the School of Education at the University of San Francisco. I am doing a study on the effects of sports participation on students with mild to moderate disabilities. I am interested in learning if a correlation exists between participation in organized sports and health, academic, and self-esteem outcomes. The administration at Gunn High School has given approval to me to conduct this research.

Your child is being asked to participate in this research study because he/she has a mild to moderate disability and is a student in one of my classes or a student on my caseload. If you agree that your child participate in this study, he/she will complete 3 surveys that ask questions related to sports participation, health behaviors, and self-esteem.

It is possible that some of the questions on the survey may make your child feel uncomfortable, but they will be free to decline to answer any questions they do not wish to answer, or to stop participation at any time. Study records will be kept as confidential as is possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in locked files at all times. Only study personnel will have access to the files.

While there will be no direct benefit to you and your child from participating in this study, the anticipated benefit of this study is a better understanding of the effects of participation in organized sports on students with mild to moderate disabilities.

There will be no costs to you as a result of your student taking part in this study, nor will you be reimbursed for his/her participation in this study.

If you have questions about the research, you may contact me at 408-406-1948. If you have further questions about the study, you may contact the IRBPHS at the University of San Francisco, which is concerned with protection of volunteers in research projects. You may reach the IRBPHS office by calling (415) 422-6091 and leaving a voicemail message, by e-mailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline your child's participation in this study, or to have him/her withdrawn from it at any point. The administration at Gunn High School is aware of this study but does not require that you participate in this research and your decision as to whether or not to participate will have no influence on your child's present or future status as a student at Gunn High School.

Thank you for your attention. If you agree that your child can participate, please sign the attached letter of parental consent.

Sincerely,

Grace Grimaldo
Graduate Student
University of San Francisco

PARENTAL CONSENT FOR RESEARCH PARTICIPATION

Purpose and Background

Ms. Grace Grimaldo a graduate student of the School of Education at the University of San Francisco is doing a study on the effects of sports participation on students with mild to moderate disabilities. Because students with mild to moderate disabilities at higher risks for a number of negative outcomes, the researcher is interested in learning whether these students may benefit from participation in organized sports. My child is being asked to participate because he/she has a mild to moderate disability and is currently receives Special Education services at Gunn High School.

Procedures

If I agree to allow my child to be in this study, the following will happen:

1. My child will fill out three questionnaires that will take approximately 10-15 minutes to complete.
2. The researcher will obtain and review my child's first semester grades.

Risks and/or Discomforts

1. Participants will spend approximately 10-15 minutes filling out the questionnaires. They may suffer some discomfort at having to express their health related behaviors or in responding to the self-esteem questionnaire.
2. Student responses will not be subject to evaluation by anyone other than the researcher. There will be no risk of contingencies to students' grades. Study records will be kept as confidential as is possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be coded and kept in locked files at all times.

Benefits

There will be no direct benefit to me or to my child from participating in this study. The anticipated benefit of this study is a better understanding of the effects of sports participation on students with mild to moderate disabilities.

Costs/Financial Considerations

There will be no costs to me or to my child as a result of taking part in this study.

Payment/Reimbursement

Neither my child nor I will be reimbursed for participation in this study.

Questions

I have talked to Ms. Grimaldo about this study and have had my questions answered. If I have further questions about the study, I may call her at (408) 406-1948 or email her at ggrimaldo@pausd.org

If I have any questions or comments about participation in this study, I should first talk with the researcher. If for some reason I do not wish to do this, I may contact the IRBPHS, which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling (415) 422-6091 and leaving a voicemail message, fy FAX at (415) 422-5528, by e-mailing IRBPHS@usfca.edu, or by writing to the:

IRBPHS, Department of Counseling Psychology
Education Building, University of San
Francisco, 2130 Fulton
Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the “Research Subject’s Bill of Rights,” and I have been given a copy of this consent form to keep. PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to have my child be in this study, or to withdraw my child from it at any point. My decision as to whether or not to have my child participate in this study will have no influence on my child’s present or future status as student at Gunn High School.

My signature below indicates that I agree to allow my child to participate in this study.

Signature of Subject’s Parent/Guardian

Date of Signature

Signature of Person Obtaining Consent

Date of Signature

PERMISSION LETTER FROM SCHOOL SITE

15 October 2009

Institutional Review Board for the Protection of Human Subjects
University of San Francisco
2130 Fulton Street
San Francisco, CA 94117

Dear Members of the Committee:

On behalf of Henry M. Gunn High School, I am writing to formally indicate our awareness of the research proposed by Ms. Grace Grimaldo, a student at USF. We are aware that Ms. Grimaldo intends to conduct her research by administering written questionnaires to our students.

I am responsible for employee relations on campus. I give Ms. Grimaldo permission to conduct her research in our school.

If you have any questions or concerns, please feel free to contact my office at (650) 354-8203.

Sincerely,

Noreen Likins
Principal Henry M. Gunn High School

** letter should be printed on proper institutional letterhead*

**The Relationship Between Sports Participation and Students with Mild to
Moderate Disabilities:
Are There Benefits to Participation?**

A Thesis Presented to the Faculty of the School of Education

University of San Francisco

In Partial Fulfillment of the Requirement of the Degree of

MASTER OF ARTS

in

Learning and Instruction

By

Grace Grimaldo

May 23, 2010

**The Relationship Between Sports Participation and Students with Mild to
Moderate Disabilities:
Are There Benefits to Participation?**

Chapter One

Introduction

In periods of economic stress, States examine their budgets for places to cut spending. During this past year alone, the State of California faced massive budget cuts due to the State's 42 billion dollar deficit. The budgets for numerous sectors were cut, including k-12 education (Governors Budget 2009-2010). Local school districts sought ways to cut down on educational spending and still maintain a fair level of education. With cuts to education, many negative situations can arise, including larger class sizes, less money for materials, and fewer programs being offered. Unfortunately, the first programs to see these cuts are usually art, music, after school extracurricular programs, and sports programs.

Because of the instability of these programs in hard economic times, it is important to study the effect that the lack of services has on students' education and well-being. Students with learning disabilities in particular face many difficulties in schools. Among these problems are lower achievement rates in statewide assessments, higher rates of substance abuse, and higher drop-out rates (U.S. Department of Education National Center for Education Statistics, 2007).

According to the research, students with disabilities are at a greater risk for a range of negative outcomes (Beitchman, Wilson, Douglas, Young, & Adlaf, 2001; McNamara, Verbaeke, & Willoughby, 2008; Blackorby & Wagner 1996). There is also a large body of literature indicating that participating in organized extracurricular activities, such as clubs and athletics, benefits students in several ways (Blomfield & Barber, 2009; Bohnert & Garber, 2007; Dodge & Lambert, 2009). The reported benefits include higher academic performance, improved self-worth, and positive health effects. Some research has focused on the impact of extracurricular

activities on minority students (Melnick et al., 1992), students at higher risk for psychiatric disorders (Bohnert & Garber, 2007), and adolescent girls (deBruin et al., 2009).

Research has also indicated that adolescents who participate in sports find a number of benefits from participation (Pate, Trost, Levin, & Dowda, 2000; Marsh & Kleitman, 2007, 2008; de Bruin, Woertman, Bakker & Oudejans, 2009; Melnick, Sabo & Vanfossen, 1992). Studies on the effects of sports participation on adolescents has been conducted since the 1960s (Rehberg & Schafer, 1968). This research focused primarily on white male students, whereas research during the 1980s and later focused on minority students (Melnick et al., 1992; Snyder & Spreitzer, 1990). As a result of the Title IX education amendment of 1972, the number of girls participating in sports increased significantly (Pate et al., 2000). Later research in the 1990s and 2000s focused on the impact of sports participation on girls (Videon, 2002; Woertman, Bakker, & Oudejans, 2009).

Current research conducted about people with disabilities has focused on women and men with physical disabilities (Blinde & McCallister 1999; Mactavish, & Iwasaki, 2005). Blinde and McCallister, explored the reasons and perceptions about why women with physical disabilities participated in physical activities or sports. The results of this study showed that there were two main reasons women with disabilities participated in physical activities: to maintain their bodies and to gain the positive psychological benefits of exercise. Therefore, exercise may have positive effects on the psychological well-being of participants.

Research that included people with physical disabilities has been crucial to the larger body of knowledge about sports participation. A gap exists in the literature, however, regarding the effects of sports participation on students with learning disabilities in particular. Because studies have shown an overrepresentation of minority students classified as having a disability

(Skiba, Poloni, Gallini, Simmons, & Feggins, 2006), research that included male and female Hispanic and African American students is a good starting point in the exploration of the relationship between sports participation and students with mild to moderate disabilities (Melnick et al., 1992).

Special education teachers may also have difficulty educating students with mild to moderate disabilities who have a number of negative experiences as compared to their peers without disabilities. Statistics demonstrate that students with disabilities may experience lower self-esteem (Peleg, 2009), higher school drop out rates (U.S. Department of Education National Center for Education Statistics, 2007), lower academic performance, increased use of alcohol and drugs (Beitchman et al., 2001; McNamara, et al., 2008), and lower post-school outcomes (Blackorby & Wagner, 1996). Since sports participation has been shown to increase academic achievement, self-esteem, and lower use of alcohol, tobacco, and other drugs (Pate et al., 2000; Marsh & Kleitman, 2003; Fredricks & Eccles, 2008), this is an important area of study for the population of students with disabilities. If students with disabilities also receive the benefits from sports participation, the gap between students with disabilities and students without disabilities may be reduced. Teachers of students with disabilities, their parents, the coordinators of sports programs, and the policy makers in charge of providing funding for programs may benefit the most from findings of research on the effects of sports participation on students with disabilities. If the results of research demonstrates that students with disabilities may benefit from sports participation, then teachers and parents would have a reason to motivate their students to participate in school sports. Sports programs coordinators and policy makers could use this information as an impetus to advertise programs to students with disabilities and to change their policies and recruitment to include more students with learning disabilities. It is therefore

important to include the population of students with disabilities in the research that studies the effects of sports participation. This current study was intended to contribute to the research on the benefits of student sports participation by examining whether a positive correlation exists between sports participation and beneficial outcomes in a sample of adolescents with mild to moderate disabilities.

Statement of the Problem

Students with specific learning disabilities are at higher risk of not completing high school than students who do not have learning disabilities or other mild disabilities (Dunn, Chambers, & Rabren, 2004; Kaufman, Alt, & Chapman, 2004; Wagner, Newman, Cameto, Garza, & Levine, 2005). They may also have lower self-esteem than students who do not have mild to moderate disabilities (Gans, Kenny, & Ghany, 2003; Peleg, 2009) and participate in more high-risk behaviors (McNamara, Vervaeke, & Willowghby, 2008). These problem areas are in some ways linked. Lower academic achievement, which may result from students' learning disabilities, may lead to lower self-esteem. Lower self-esteem then may make them more vulnerable to high-risk behaviors that may negatively impact their health. Students who are not happy with their lives are more likely than students satisfied with their lives to use drugs and alcohol to chemically induce feelings of pleasure or self-medicate (Beitchman, et al., 2001; Karacostas & Fisher, 1993). There are three areas in which students with learning disabilities often demonstrate these problems: academic achievement, self-esteem, and health.

Academic Achievement. Students with learning disabilities usually do not perform as well as their non-disabled peers in academics. Of students with disabilities that took the California STAR test in grades 9-11, only between 4-7% scored proficient in English-Language Arts, and only 2-4% proficient in Algebra 1 in grades 9-11. Students that reported no disabilities

had scores in the range of 21-27% proficient in the English-Language Arts test in grades 9-11 and 6-20% proficient scores in the Algebra 1 test (California Dept of Education, 2007). Reports show that students with learning disabilities have school drop out rates of around 29%, while estimates place the overall dropout rate for students without disabilities at 11% (U.S. Department of Education, 2000).

Research regarding the impact of sports on academic achievement has indicated that general education students who participate in sports have better academic achievement when compared to peers who do not participate in sports (Marsh & Kleitman, 2002; Videon, 2002). Therefore, it may be possible to assume that students with learning disabilities could experience academic benefits from sports participation.

Self-esteem. Students with learning disabilities may be at higher risk for low self-esteem (Peleg, 2009). In a study that compared middle school students with learning disabilities to their counterparts without learning disabilities, Gans, Kenny, and Ghany, (2003) found that students with learning disabilities had lower scores on the Intellectual, School Status, and Behavior subscales on the *Piers-Harris Children's Self-Concept Scale*.

Positive peer and adult relationships may be an important benefit of participation in extracurricular activities. Melnick, Sabo and Vanfossen (1992) found that Black and Hispanic athletes reported higher popularity scores than non-athletes during their senior year of high school. Researchers have also studied the effects of sports participation on self-esteem. Students who participated in sports reported more positive self-worth than students who did not engage in athletics (Blomfield & Barber, 2009; Fredricks & Eccles, 2006). The students reported positive reasons for participation, which may have lead to positive feelings about themselves and more

positive self-esteem. Therefore this is may be a critical area of possible benefit for students with mild to moderate learning disabilities.

Health. Lastly, students with mild to moderate disabilities may be at higher risk of engaging in unhealthy behaviors like using alcohol, tobacco and other drugs (Karacostas & Fisher, 1993). Beitchman, et al. (2001) found that students with learning disabilities were three times more likely than students without learning disabilities to have substance abuse disorders. These studies suggest that students with mild to moderate disabilities are more likely to engage in risky behaviors. Research on sports participation has shown positive effects on health in young adulthood (Dodge & Lambert, 2009) and lowered externalizing psychopathology in at risk adolescents (Bohnert & Garber, 2007). Bohnert and Garber defined externalizing pathology as symptoms of aggression and delinquency. The study found no effect for internalizing pathology defined as symptoms of depression, anxiety, withdrawals and somatic complaints.

Therefore, research should focus on strategies to deter students with learning disabilities from the use of unhealthy substances such as tobacco, alcohol and marijuana. Research on the advantages of sports participation has shown that this is a possible area of benefit from participation (Pate, Trost, Levin, & Dowda, 2000).

Even though these three areas are all areas of concern for students with learning disabilities, the research on the benefits of sports participation has not addressed this particular population of students. When compared to their peers without disabilities, students with learning disabilities appear to be at a higher risk for a number of negative outcomes. The research examined (need citations) indicated that sports participation may improve many of these outcomes including self-esteem, academic achievement, and health for non-disabled students. This present study investigated whether there are positive correlations between sports

participation and academic, health, and self-esteem outcomes for students with learning disabilities.

Background and Need

The range of benefits derived from sports participation has prompted researchers to explore these effects on a number of groups including adolescent men and women (de Bruin, et al., 2008), minorities (Melnick, et al., 1992; Snyder & Spreitzer, 1990), and people with physical disabilities (Blinde & McAllister, 1999). This research, however, did not include the population of students with learning disabilities, even though this group of students faces challenges in many areas and may benefit as much or even more than the other groups from participation in sports.

Academic Achievement. Marsh and Kleitman (2002) found that higher levels of participation in school-based extracurricular activities were associated with higher levels of time spent on homework, number of university applications, and educational aspirations. The research found similar effects two years after completion of high school in a nationally representative sample of non-disabled students. Higher levels of participation in these activities had a positive correlation with higher levels of university enrollment, months in university, higher educational aspirations, higher levels of education achieved and higher occupational aspirations. This study, and previous research by Marsh (1992) investigated one of the most influential theories in extracurricular school activity research, Coleman's zero-sum model. The zero-sum model states that the amount of time devoted to social, athletic, or academic activities are in competition with each other (Coleman, 1961). Therefore, according to this theory, sports participation detracts from academic pursuits. Marsh and Kleitman's study found that both time spent on activities and number of extracurricular activities had significant positive effects on most outcomes. These

results provide evidence against the zero-sum model. In this study Marsh and Kleitman also proposed an alternative model, the social inequality gap reduction model. The model predicted, and their research found supporting evidence, that students from lower socio-economic backgrounds would benefit more than all other student groups from participation in extra-curricular school activities. The researchers argued that the most economically disadvantaged students would be more likely to see the positive benefits of participation in school clubs and sports. Because these students may develop a greater sense of commitment and school identification, they may have more positive outcomes related to (a) school grades, (b) coursework selection, (c) homework, (d) educational and occupational aspirations, (e) self-esteem, (f) freedom from substance abuse, (g) number of university applications, (h) subsequent college enrollment, and (i) highest educational level. Marsh (1992) also yielded similar conclusions. Some reports have found that disproportionate numbers of students with learning disabilities were of lower socio-economic backgrounds, when compared to peers without disabilities (McDonnell & McLaughlin, 1997). Students with disabilities are at a sort of “double jeopardy” for negative outcomes, because their disability coupled with a lower socio-economic background, may put them at greater risk for academic failure. This may indicate that students with disabilities could potentially receive larger benefits from extracurricular participation. Subsequent research by Marsh and Kleitman (2003) that focused particularly on the impact of sports participation on post-secondary outcomes found that students who participated in sports were more likely to have positive academic and non-academic outcomes when compared to peers who did not participate in sports. Marsh and Kleitman’s research found a positive correlation between sports participation and grades, post-school aspirations, college enrollment and educational attainment.

Reeves (2008) mentioned that Woodstock High School in Illinois improved the academic achievement and behavior of all of its students by increasing the opportunities to participate in extracurricular activities by 400% over five years. The school's, Principal Corey Tafoya, stated that the increased participation in extracurricular activities built stronger bonds between students, teachers and administrators. Experiences, such as the one at Woodstock, and similar models may help all students achieve success.

Blackorby and Wagner (1996) found that students with learning disabilities were less likely to attend postsecondary school when compared to their peers without disabilities. Only 27% of youths with disabilities studied had ever attended postsecondary school, compared with 68% of youths without disabilities. A study involving Arab Israeli students with learning disabilities found that these students reported higher levels of test anxiety and lower levels of self-esteem than their peers without learning disabilities. The researchers concluded that these students' intense distress had a negative effect on their academic performance (Peleg, 2009). Therefore, since the research on the academic benefits of sports participation suggests that students across different subgroups achieve academic benefits from sports participation it is important to include this particular population of students in research. Sports participation may potentially narrow the academic achievement gap between students with and without mild to moderate disabilities.

Health. Research conducted in the area of health and sports participation has focused on long-term health effects (Dodge & Lambert, 2009), substance abuse including marijuana and alcohol use (Fredricks & Eccles, 2006; Marsh & Kleitman, 2002), and internalizing and externalizing behaviors (Fredricks & Eccles, 2006). One report suggested that adolescents who were physically active were "less likely to engage in risky behaviors and more likely to report

high self-esteem than those who were sedentary and watched a lot of television” (*Active Teens Better Behaved*, 2007) need to put page number if you include a quotation. Another study found that adolescents who attended schools with a higher number of sports programs had lower juvenile arrests rates and lower teen birth rates (Cohen, Taylor, Zonta, Vestal, & Schuster, 2007). A qualitative study that included male and female adults with disabilities found that participants reported using exercise as a form of stress relief and to enhance their sense of wellbeing (Mactavish & Iwasaki, 2005). Fredricks and Eccles (2006) found that adolescents who participated in sports reported lower alcohol use when compared to students who did not participate in sports. In addition, boys who participate in sports also reported lower marijuana use in 11th grade when compared to adolescent boys who did not participate in sports.

Beitchman, Wilson, Douglas, Yound, and Adlaf (2001) found that students with learning disabilities had three-fold increased risks for substance abuse disorders and other psychiatric disorders when compared to peers without LD. Therefore, because of the large number of students with learning disabilities that also have a substance abuse disorder, this is an area of great concern in this population of students. Research on the effects of sports participation on alcohol and substance abuse indicates that this may be an area of benefit from sports participation (Pate, Trost, Levin, & Dowda, 2000). Pate, Trost, Levin and Dowda found that male sports participants were three times less likely to report smoking cigarettes, using cocaine, or using other illegal drugs when compared to nonparticipants. This same study found that white male sports participants were less likely to report smoking marijuana than non-participants. Therefore it is important to see if these benefits from participation can be found in a group of students with mild to moderate disabilities.

Self-Esteem. Current research on the relationship between sports participation and self-esteem indicates that there may be positive self-esteem outcomes associated with sports participation. Dodge and Lambert (2009), found that students who participated in sports reported more positive self-beliefs than their non-athlete counterparts. Melnick, Sabo, and Vanfossen (1992) found that adolescents who participated in sports self-reported higher scores of popularity their senior year than non-participants. These results may indicate higher levels of self-esteem. Other research has found that participating in prosocial activities predicted higher levels of self-esteem and participation in sports predicted lower levels of social isolation (Barber, Eccles, & Stone, 2001). In a study that included 1,489 adolescents, Blomfield and Barber (2009) found that adolescents who participated in sports had higher social self-concepts than adolescents who had not participated in extracurricular activities. In addition, Blomfield and Barber found that adolescents who participated in sports had significantly higher general self-worth when compared to adolescents who did not participate in extracurricular activities. Marsh and Kleitman (2002) found that adolescent extracurricular participation was associated with higher levels of self-esteem. In a longitudinal study that followed African American and European American adolescents from eighth grade to eleventh grade, Fredricks and Eccles (2006), found that adolescents who participated in sports during 8th grade had higher levels of self-esteem in 11th grade when compared to adolescents who had not participated in sports in 8th grade. These studies suggest that sports participation may have lasting positive effects on self-esteem in adolescents.

Research has found that students with learning disabilities have poorer social skills and have poorer acceptance by peers when compared to students with no disabilities (Gresham & McMillan, 1997). Students with learning disabilities also may have fewer positive peer

interactions, which may result in lower self-esteem (Gresham & McMillan, 1997). Wadman, Durkin and Ramsden (2008) found that adolescent students ages 16-17 with specific language impairments had significantly lower self-esteem scores when compared to students with typical language abilities. This research suggests that students with mild to moderate disabilities are at higher risk for lower self-esteem. The research on sports participation and self-esteem indicates that sports participation may improve the self-esteem of children with different disabilities. One report investigated the reasons students with exceptionalities (eg. developmentally handicapped, learning disabled, hearing handicapped, visually handicapped, orthopedically handicapped or multi-handicapped) gave for participating in a number of extracurricular activities. The two most frequent responses were for personal enjoyment or fun, 72%, and for personal achievement, 48% (Willia, 1994). This research suggests that, in addition to potential benefits in self-esteem, sports participation may also offer a fun activity for youths.

Purpose

Children with mild to moderate disabilities may be at higher risks for negative outcomes in the areas of academic achievement, health, and self-esteem. Research on the relationship between sports participation and adolescent outcomes indicates that sports participation may have beneficial effects on all of these areas. But this research has not included the population of students with disabilities. The purpose of this study is to examine the effects of sports participation on a number of aspects of the lives of students with mild to moderate disabilities. This study will investigate the following areas: (a) the impact of sports participation on the self-esteem of students with mild to moderate disabilities (b) the impact of sports participation on the health of students with mild to moderate disabilities and (c) the effects of sports participation on the academic achievement of students classified as having a mild to moderate disabilities.

One goal of this study is to determine whether sports participation benefits students with learning disabilities. As a result of the knowledge obtained in this study students, teachers, parents, and may better understand whether sports participation would have beneficial outcomes for students with learning disabilities.

Research Questions

(a) What is the relationship between participation in organized sports and the health of adolescents with mild to moderate disabilities? (b) What is the relationship between participation in organized sports and academic achievement of adolescents with mild to moderate disabilities? (c) What is the relationship between participation in organized sports and the self-esteem of adolescents with mild to moderate disabilities?

Chapter Two

Literature Review

There is a large body of research indicating that participating in organized sports benefits students in several ways (Blomfield & Barber, 2009; Bohnert & Garber, 2007; Videon 2002). The reported benefits include both positive academic and non-academic outcomes. These positive outcomes are seen during the students' K-12 education, and several studies have also found that they extend to the post-secondary period (Fredricks & Eccles, 2006; Marsh & Kleitman, 2003). Although research in this area has been extensive, the effects of sports participation on the population of students with mild to moderate disabilities had not been studied. Because of the very specific characteristics of students with mild to moderate disabilities it is important to study the effects of sports participation on this particular population of students.

This literature review will examine three areas of positive outcomes related to student participation in extracurricular activities such as athletics. This literature review will investigate the following areas: (a) research studies about the impact of sports participation on the self-esteem of students will be addressed, (b) current literature about the impact of sports participation on the health of students, (c) research studies about the effects of sports participation on the academic achievement of students.

Self-Esteem

This section will review the impact of participation in a variety of extracurricular activities on the self-esteem of high school students. The first study investigated the effects of sports participation on a number of measures including academic self-concept, social self-concept, and general self-worth.

Australian adolescent extracurricular participation. This study explores the relationship between adolescent's participation in school activities and their self-worth. (Blomfield & Barber, 2009). The researchers investigated the relationship between participation in extracurricular activities and different aspects of self-concept.

Participants included 1,489 students ranging in age from 12 to 16 years. Of these students 919 were in 8th grade, 570 in 10th grade. These students were selected from 26 high schools in Australia, of the participants 51.5% attended non-government schools and 48.5% of the participants attended government schools.

Participants were asked to check activities that they participated in during the school year from a provided list of 30 sports and 24 non-sport activities, at the end of each list there was a place to write-in activities. The data from these student questionnaires was then grouped into four categories: (a) 9.3% of the students did not participate in any activity and were classified as

“no participation”, (b) 8.3% of the students participated in non-sport activities and were classified as “activities-only”, (c) 38.4% of the students participated in just sports activities and were classified as “sports-only”; finally (d) 44% of the students participated in at least one sport and one other activity were classified as “mixed participation”. Academic, social and general self-worth were assessed on a six point Likert scale with items taken and adapted from existing measures. Participants completed the questionnaire with laptop computers connected to the internet or in a paper and pencil format. Self-worth was measured using three items about social self-concept, three items about academic self-concept and four items about general self-worth.

The data was analyzed using a 2 (gender) by 4 (activity participation) ANOVA. The results indicate that students classified in the categories “mixed participation” and “activities only” had significantly higher academic self-concept, than students with “sports-only” and “no participation” classifications. Although in general, a main effect of portfolio was found for academic self-concept, $F(3,1448)=16.75$, $p<.001$. No effect for gender was found. Regarding social self-concept students in the “mixed participation” and “sports-only” categories had significantly higher self-concepts than students in the “no participation” category. In general, the activity portfolio main effect was also significant for social self-concept, $F(3,1448)=9.90$, $p<.001$. The main effect of gender was also significant, females were more likely to have a higher self-concept than males. Finally, an activity portfolio main effect was found for general self-worth $F(3,1452)=19.79$, $p<.001$. Participants in all activity categories had significantly higher general self-worth than participants in the “no participation” category. No effect for gender was found.

The authors discuss the possible reasons for the more positive outcomes of students in the mixed participation category than the students in the other participation categories. They suggest

that extracurricular activities provide a good place for adolescents to develop positive experiences and that these experiences vary depending on the type of activity. Therefore students in the mixed participation category are exposed to more developmental experiences, which then lead to more positive self-concepts. The authors argue that due to the importance of social and academic competence during adolescence it is crucial to identify contexts in which these competences flourish and that more research be conducted in the area.

One of the limitations of this study as expressed by the authors is that students choosing to participate in extracurricular activities might already enjoy the benefits of having a more positive self-concept. Therefore it could be the case that it is not extracurricular activities that are influencing self-concept, but the other way around.

The results of this first study suggest that sports participation has positive influences on a number of aspects of self-worth, including academic self-worth, social self-worth, and global self-worth. The following study in this review investigated the relationship between sports participation and the self-concept of adolescents in New Zealand.

Adolescents emotional well-being. This study was designed to explore the relationship between self-concept and sports participation (Donaldson, & Ronan, 2006). This study also examined the relationship between self-competence and sports participation. Finally, this study examined whether competence or perceived competence is more influential on gaining the psychological benefits of sports participation.

The participants in this study included 203 adolescents from New Zealand, of which 93 participants were male, and 109 participants were female. The average age of these adolescents was 12 years old. Of the participants 152 self-identified as Caucasian, 17 identified themselves as Maaori, 6 participants reported being part Maaori part Caucasian, 7 participants identified

themselves as Pacific Islander, 1 participant identified as Asian, and 10 participants identified themselves as “other”. Most of the participants were identified as either middle or upper middle class.

The participants filled out self-report batteries. The battery was comprised of three questionnaires. The Youth Self-Report comprised of 120 items was used to assess socio-emotional development. The Youth Self-Report (YSR) is divided into two sections, for this study only the section that assesses behavioral problems was used. The Self-Perception Profile for Children was used to measure the adolescents’ perceived competence, self-worth, and self-esteem. This survey is divided into several domains: (a) scholastic competence, (b) social acceptance, (c) athletic competence, (d) physical appearance, (e) behavioral conduct, and (f) global self-worth. Finally, the Sports Participation and Attitude Questionnaire for Children and Adolescents was developed by the authors for this study. This questionnaire asked about the type of sport adolescents played, frequency of participation and the reason for their participation. Frequency of participation in each of 24 sports listed was rated using a three point scale (0=little or no participation, 1= some participation, 2=regular participation). Using this information two groups were formed: (a) students whose score was in the upper third percentile were classified as High Total Participators (HTPs), and (b) students whose score was in the lower third percentile were classified as Low Total Participators (LTPs). Type of formal sports participation was measured next. Using the same list of 24 sports of the first question, students were asked to report which sport(s) they played. Based on their responses students were divided into two groups: (a) students whose score was in the higher third percentile were classified as High Formal Participators (HFPPs), and (b) students whose score was in the lower third percentile were classified as Low Formal Participators (LFPPs). One question asked about the total number of

years playing the sport(s). Finally, the students' physical education teachers completed the Teacher Global Rating Scale to assess overall sports ability on a 5-point Likert scale.

The analyses between sport participation and problem behaviors found moderate to significant negative correlations between number of formal sports played and some Youth Self-Report subscales. This analysis yielded Pearson Product Coefficients for externalizing problems ($r=-.24$; $p<.01$), social problems ($r=-.24$; $p<.01$), and aggression problems ($r=-.20$; $p<.01$). A separate analyses between number of years played in each formal sport and Youth Self-Report subscales found moderate to significant correlations for externalizing problems ($r=-.24$; $p<.01$), social problems ($r=-.20$; $p<.01$), aggression problems ($r=-.19$; $p<.01$), and delinquency problems ($r=-.25$; $p<.01$). Further analyses found that those adolescents classified as High Total Participators reported less somatic complaints than adolescents classified as Low Total Participators. Analyses conducted between High Formal Participators and Low Formal Participators and the Youth Self-Report Scale found that students classified as HFP had significantly lower means for the externalizing scale, anxious/depressed problems, social problems, aggression problems, and delinquency problems when compared to adolescents classified as LFP. With regards to the relationship between sports participation and self-concept, the analyses between Low and High Total Participators and the self-concept subscales found that HTPs has significantly higher means on athletic competence, social competence, and global self-worth when compared to LTPs. Further analyses between High and Low Formal Participators and the self-concept subscales found that HFPs had significantly higher means for athletic competence, and behavior competence when compared to LFPs. Finally, analyses were run between Athletic Competence and the Youth Self-Report Scale and between independent rater scores of competence and the Youth Self-Report Scale. Results show moderately significant

correlations between perceived Athletic Competence and total problems ($r=-.32$; $p<.01$), internalizing problems ($r=-.42$; $p<.001$), withdrawn ($r=-.39$; $p<.001$), somatic complaints ($r=-.28$; $p<.001$), anxious/depressed ($r=-.46$; $p<.001$), social problems ($r=-.39$; $p<.001$), and attention problems ($r=-.30$; $p<.001$). The only significant correlation between independent rater scores and the Youth Self-Report Scale was for attention problems ($r=-.22$; $p<.01$). The results of this study suggest that participation in sports has positive psychological and behavioral outcomes for adolescents.

There are several limitations to this study as expressed by the authors. First, no causal relationships can be concluded from the correlations. Another limitation of this study is the use of the sports questionnaire, which was devised by the researchers and is not an empirically tested instrument. Finally, the teacher rating of students' sports competence was a global measure of ability rather than one focusing on particular sports.

The results of the second study suggest that frequent participation in sports can have positive benefits on several aspects of self-concept including athletic competence, social competence, behavioral competence, and global self-worth. The third study in this section examined the relationship between women with physical disabilities and participation in physical activities.

Women, disability, and sport. In this study Blinde and McCallister (1999) explored the reasons and perceptions for physical/sport activity of women with physical disabilities. The study sought to examine the experiences of women with physical disabilities in the domain of sports and physical activities. This study focused particularly on type and nature, reasons and outcomes of participation.

The participants were recruited from a pool of participants of a grant project that provided recreational activities for persons with physical disabilities. The participants included 16 women (fifteen Caucasian, one African American) ages 19-54. All 16 women had some form of physical disability, including cerebral palsy, paraplegia, hemiplegia, partial paralysis and muscular dystrophy, spinal muscular atrophy and osteogenesis imperfecta.

Female doctoral students conducted the research interviews on a university campus. Grant personnel developed the interview used, the questions focused on the areas of life history of the disability, past participation experiences in sport and physical fitness activities, reasons for participation, importance and enjoyment of participation, encouragement and discouragement received for participation, self-perceptions of the body and one's physical capabilities and type of positive and negative outcomes of participation. The women were interviewed before beginning the recreational activities provide by the grant project. The interviews were tape recorded and later transcribed. The responses were then analyzed using qualitative analysis. The responses were analyzed twice, first by each researcher individually and later both researchers analyzed their notes together to find patterns in the responses. The researchers then combined their information.

The results of the study suggest that the majority of activities that the participants engaged in were fitness related rather than sports related. In 2/3 of the cases the reason behind participation was to maintain their body's ability to function. Other reasons mentioned for participation include social factors like meeting people and psychological factors like releasing stress and to "feel good about myself". One of the participants reported: "It's like a drug; it's addictive, I think. I'm, instead of an alcoholic, I'm a sport-aholic...I love it, it's quite a mental high." A majority of the women also responded that they had some sort of enhanced view of

capabilities, both physically and in general life situations such as social life, work place and student roles. Finally most women reported an increased sense of control in their lives. Among all responses the most frequent theme was the intrinsic gains of participation in physical activities.

This study served to examine the experiences of women with physical disabilities and indicates the importance of providing positive environments for these women to engage in physical activities. The researchers suggest that future research should explore more in depth the intersections of gender, disability and physical activity in this population.

A limitation of the study lies in the very limited scope of their participants. The participants in this study were mostly Caucasian women this makes it hard to generalize the findings to women from other races. In addition this study is not generalizable because it is a qualitative study with a small sample size.

The results of this study suggest that women with physical disabilities find a number of benefits from participation in physical activity. One of the most notable reported benefits was an increased view of self-competence or self-esteem.

The research literature indicates that sports participation can have a number of positive benefits. The three research articles that were evaluated in this section provide support to the theory that sports participation yields a number of positive benefits in the area of self-esteem. The adolescents and women who participated in sports in this study benefited from their participation as evidenced by their statements and self-reports. However, the populations of participants used in these studies were women with physical disabilities and adolescents, this limits their generalizability to other populations, such as students with mild to moderate disabilities. Therefore it is unclear whether the students with mild to moderate disabilities would

receive the same self-esteem benefits from sports participation. The following three research articles will address the relationship between sports participation and another area of possible benefit, academic achievement.

Academic Achievement

This section will review research studies on the effects of sports participation on academic achievement. In these studies academic achievement was assessed through a number of measures including GPA, and educational expectations. Two of these studies collected data on post high school academic outcomes as well as collecting data during high school. The first study in this section explores the relationship between participation in sports and academic performance among a number of other outcomes.

Extracurricular participation and beneficial outcomes. This study was designed to examine the relationship between participation in a variety of extracurricular activities and certain developmental outcomes in adolescents (Fredricks & Eccles, 2006). This study explored whether participating in a range of different extracurricular activities, divided into three categories: (a) school clubs, (b) organized sports, and (c) prosocial behavior, would lead to different outcomes for adolescents. In addition, this study wanted to investigate the question of whether the positive effects of extracurricular activities found in previous studies are overestimates.

The study used information from the Maryland Development in Context Study to select the targeted group of participants. The study used information from the Maryland Adolescent Development in Context Study (MADICS) and included information from 1500 randomly selected families. The sample taken for the study consisted of 51% female participants and 49% male participants; 67% of the participants were African American, and 33% of the participants

were European American adolescents from a wide range of socioeconomic backgrounds. The authors did not indicate if any English Language Learners or special education students were involved in the study.

This study was a longitudinal study that collected information from the participants over the period of years between 1991 and 1999. Surveys were used to collect data for type of extracurricular activity, academics, psychological adjustment, alcohol and drug use and civic engagement. The surveys include the Children's Depressive Inventory, the Harter's Global Self-Worth Scale, and the Child Behavior Checklist. Data was collected in 5 interval or cycles. The first set of data was collected when the participants were in 7th grade. The second set of data was collected following the participants 8th grade school year. The fourth set of data was collected during the participants 11th grade; the surveys in this fourth set asked the participants to report, using yes or no answers, their involvement in three types of extracurricular activities: school clubs, organized sport, and prosocial behavior. Finally, the fifth set of data was collected one year after the participants completed high school. In 8th and 11th grades, the participants were asked to report on their academic achievement by indicating number of As, Bs, Cs, Ds, and Fs received on their report cards. The researchers calculated GPA from this information. Participants were also asked to record how far they thought they would go in their education using a scale from graduate from high school or less to professional degree. Psychological adjustment was measured at 8th and 11th grades and 1 year after graduating from high school. At three points during the study, participants were asked about certain behaviors such as drinking and smoking marijuana. The last measure, civic engagement, was measured 1 year after the participants had graduated from high school and asked about the participants civic engagement in the past 2 years.

The study concluded that participation in a variety of extracurricular activities during high school does predict several areas of academic, psychological and behavior adjustment. The relationships found in this study are not as significant as some found in previous studies. The researchers analyzed the data using analysis of covariance (ANCOVA). Gender, race, parents' educational attainment, parents' perceptions of their children's achievement related motivation, and socioeconomic status were used as predictive factors. The sample was divided into four categories: (a) 14.6% of the participants were not involved in any of the three types of extracurricular activities, school clubs, organized sports, or prosocial behavior; (b) 27.7% of the participants were involved in one of the three types of extracurricular activities; (c) 32.9% of the participants were involved in two types of extracurricular activities; and (d) 24.8% of the participants were involved in all three types of extracurricular activities. The study showed that high school clubs participation in 8th grade predicted academics in 11th grade, these participants had both higher GPAs, [F(8, 674)=12.75; p<.001] with an effect size .019 and higher educational expectations, [F(8, 704)=12.72; p<.001] with an effect size of .018. High school sports participation in 8th grade also predicted academics in 11th grade, these students had higher 11th grade GPAs, [F(8, 663)=5.46; p<.05] with an effect size of .008 and higher educational expectations, [F(8, 703); p<.001] with an effect size of .022. Sports participation also predicted psychological adjustment in 11th grade. Students who participated in sports reported lower levels of depression, [F(8, 773)=10.03; p<.01] with an effect size of .013, and lower levels of internalizing behavior, [F(8, 644)=12.97; p<.001] with an effect size of .020. These students also had higher levels of self-esteem, [F(8,762)=8.41; p<.01] with an effect size of .011 when compared to students who did not participate in athletics. Adolescents who participated in sports reported lower alcohol use when compared to students who did not participate in sports

[F(8,622)=4.45; $p < .05$] effect size of .007. Boys who participate in sports also reported lower marijuana use in 11th grade when compared to adolescent boys who did not participate in sports. The results of the one year after graduation survey show that educational status or number of years of schooling was affected by participation in high school clubs [F(8,488)=7.22; $p < .01$] effect size .015, and sports [F(8,485)=12.76; $p < .001$] with effect size of .026. The results for students who participated in prosocial activities were less significant. The only significant interaction was in higher educational expectations. Participants of prosocial activities reported higher educational expectation than non participants, [F(8, 484)=4.05; $p < .05$] with an effect size of .008.

The authors suggest that due to the gains that students received from extracurricular activities educators and politicians should evaluate the importance of these extracurricular activities for youth development before cutting services during times of fiscal instability. Instead we should move towards increasing opportunities for adolescents to engage in a wide variety of extracurricular activities.

One of the limitations of this study is that attrition rates were higher for African Americans and high-risk youths. Another limitation as stated by the authors is that the study did not include information about the amount of time students spent on the respective extracurricular activities.

The results of this study indicate that participation in extracurricular activities such as athletics predicts a number of positive outcomes for adolescents. This study found that students who participate in sports reported higher self-esteem, lower levels of depression, lower levels of internalizing behavior, higher educational expectations, and higher GPAs when compared to

students who did not participate in extracurricular activities. The following study investigated the impact of sports participation on academic outcomes for boys and for girls.

Who plays and who benefits. In this study Videon (2004) investigates the likelihood of individuals with various characteristics participating in sports (eg. are boys more likely to participate in athletics than girls?) and the impact participation has on their academic achievement. The researchers predict that the association between sports participation and academic outcomes will be true for both boys and girls, but greater for boys than for girls.

Participants and data for this study were obtained from the National Longitudinal Study of Adolescent Health (Add Health). A total of 13,869 participants were included in the study. The sample was heterogeneous and nationally representative. Data was collected from students, parents, and school administrators.

Data on participation in sports was obtained from a self-administered questionnaire. Adolescents were classified as sports participants if they played or planned to play any sport. Subsequent in-home interviews were used to obtain socioeconomic and academic information. Students were also asked to report through questionnaires on the number of times they skipped class without an excuse, the number of core courses taken, grades, and academic expectations, parental encouragement for college attendance. The Peabody Pictures Vocabulary Test was administered to find academic aptitude. Students were also asked to identify their racial/ethnic group out of five possible groups: Hispanic, Black, Asian American, Native American, and White. Parental encouragement for college attendance, parental level of education and family structure were also measured with a survey. Finally, school administrators provided information about the context of the school (eg. whether the school was located in the West, Midwest, South or Northeast, private or public, size of school and if it was in an urban, suburban or rural area).

Survey Design Analysis Software (SUDAAN) was used to minimize Type I and Type II errors. The first set of analysis examined the effects of a number of characteristics on sports participation. The results of the analysis suggest that girls are only about $\frac{1}{2}$ as likely to participate in sports as boys (OR=.55). Hispanic (OR=.74) and Asian (OR=.66) adolescents are less likely to participate in sports when compared to white adolescents. Youths in intact homes are 24 % more likely to participate in sports, than if the youth came from another home setting. Students that have parents with a higher educational attainment are also more likely to participate in sports (OR=1.12). Students in the lower grades were more likely to participate in sports than students in higher grades. Attrition rates increase with each increasing grade (OR=0.92). Students in smaller schools are also more likely to participate in sports (OR=1.36). Race was found to be an influence on participation rates, with black male students having larger participation rates than white students, but black female students having lower participation rates than their white counterparts. On educational outcomes girls had much better educational outcomes than boys. Girls had fewer unexcused absences, take more core courses, have higher GPAs, and higher expectations to go to college. On the other hand, once other factors were controlled for, the beneficial effects of sports participation on unexcused absences and academic achievement was greater for boys than for girls.

The researchers suggest that some of the positive effects of participation in sports are found to come from the tendency for better students to participate on athletics rather than improved academic outcomes solely being the consequence of participation. The direction of causality is not clear between better academic outcomes and sports participation, but when controlling for various factors there still exists an improvement in academic outcomes of students. The researchers also address the fact that thirty years after the Title IX legislation

provided girls equal access to athletics, there still exists a wide gap in girls participation in sports when compared to boys. Future research should focus on the factors that increase girls participation in sports in order to create more opportunities for girls to participate in sports.

Some of the limitations of this study include possible errors in data collection. The measures of participation asked students about athletics they were participating in and also athletics they planned to participate in later in the year. Therefore, some students might have thought they were going to participate, but in fact were not able to participate.

The results of this study indicate that certain demographic populations are more likely to participate in athletics. However, all sports participants, boys and girls, had more positive academic outcomes when compared to non-participants. The third study in this section investigated the relationship between in school and out of school extracurricular activities and a number of outcomes including academic achievement and self-esteem.

Extracurricular school activities. In this study the effects of participation in extracurricular activities were examined (Marsh & Kleitman, 2002). This study was designed to investigate grade 12 and post-secondary outcomes of students who participated in a variety of extracurricular activities. The study focused on three models: the threshold model (diminishing returns for high levels of participation), identification/commitment model (school based activities more beneficial than out-of-school activities), and finally the social inequality gap reduction model (most economically disadvantaged students would see greater benefits of participation).

The data for this study was drawn from NELS:88, a longitudinal study done for the U.S. Department of Education. Participants were chosen using a complex stratified sampling procedure, the sample of participants was nationally representative. Of the 1,000 randomly

selected schools, approximately 25 students were randomly selected from each school. The resulting number of participants was 12,084, but only 4,250 had valid complete data. In order to bring the sample size back to 12,084 participants missing information were imputed using the Expectation Maximization procedure.

In the original NELS:88 study, data was collected on four different occasions. The first set of data was collected in 1988, the second in 1990 when the participants were in grade 10, the third in 1992 when the participants were in 12 grade, and finally in 1994 in the postsecondary stage. For this study extracurricular participation was divided into five measures: number of extracurricular activities sponsored by and undertaken in the school; time spent on extracurricular activities sponsored by the school; total school-based extracurricular activities (composite of the previous 2 measures); participation in structured activities not sponsored by and occurring out of school; and frequency of participation in leisure activities done out of school. Multiple regression analyses were implemented to investigate the effects of extracurricular activities on 12th grade and post-secondary outcomes. Preexisting grade 8 and grade 10 outcomes were controlled in all analyses.

The results of this study indicate that adolescent girls participate in a larger number of extracurricular activities, but adolescent males spend more time on activities. Students from families of higher socioeconomic status were also more likely to engage in extracurricular activities and for longer periods of time when compared to students from lower socioeconomic status. A number of other findings in this study suggest that initial differences among students do affect their participation in extracurricular activities. The results of analyses also indicated that in-school extracurricular activities and out-of-school structured activities had beneficial associations with grades, general self-esteem, higher educational aspirations, less time watching

TV, and more time on homework. Overall in-school activities had higher favorable outcomes than out-of-school activities. Higher levels of total participation in school based extracurricular activities were associated with higher grade-twelve outcomes such as time spent on homework, number of university applications, educational aspirations, self-esteem, high school grades, freedom from substance abuse, and other positive outcomes. Two years after completion of high school, higher levels of participation in school based extracurricular activities were associated with more positive outcomes such as higher levels of university enrollment, higher levels of education achieved, higher occupational aspirations, and other positive outcomes. Out-of-school structured activities were found to have a higher number of favorable outcomes than out-of-school leisure activities. Out-of-school leisure activities were found to be associated with lower achievement scores, higher general self-esteem, more internal locus of control and having trouble in school. Further analyses were conducted to test the threshold model. The results indicate that the relation was an inverted U-shaped function in which positive outcomes were found for low and moderate levels of extracurricular activities and then became negative for really extremely high levels of extracurricular activities. Effect sizes of total school based extracurricular participation show that 16 of the 21 outcomes are significantly positive: grades (0.38; $p < .01$), Carnegie units (.051; $p < .01$), homework (.112; $p < .01$), TV watching (.034; $p < .05$), locus of control (.032; $p < .05$), general self-esteem (.053; $p < .01$), parental expectations (.057; $p < .01$), educational aspirations (.087; $p < .01$), occupational aspirations (.036; $p < .01$), no substance abuse (.043; $p < .01$), university applications (.110; $p < .01$), university enrollment (.084; $p < .01$), months in university (.094; $p < .01$), highest educational level (.065; $p < .01$), postsecondary educational aspirations (.078; $p < .01$), postsecondary occupational aspirations (.041; $p < .01$) and five are not significant or negative: attendance (.006), standardized test scores (-0.19; $p < .01$), staying out of

trouble (-.030; $p < .05$), ready (-.010) and months employed (-.018). The researchers then analyzed the consistency of effects across different subgroups. The results indicate that the benefits of extracurricular activities were more positive for students of lower socioeconomic backgrounds. Finally, analyses were conducted to establish the consistency of effects across different types of school based extracurricular activities. Extracurricular activities were grouped into 8 categories: athletics, arts, government, newspaper, cheerleading, hobbies, academic, and vocational. The results suggest that different activities had very different effects on outcomes. Cheerleading and hobbies had almost no effects. Academic clubs and newspaper were associated exclusively with positive effects and higher outcomes. Sports, performing arts, and student governments were predominantly associated with positive effects and higher outcomes. Vocational clubs were associated with mostly negative effects and lower outcomes. Academic club participation was associated with the largest number of positive effects for grade twelve outcomes. Sports participation had the largest positive effects for postsecondary outcomes. None of the extracurricular activities were associated with higher standardized test scores. Of the 8 categories, 3 were identified with positive self-esteem: academic clubs, sports, and student government.

The authors suggest that the positive effects of extracurricular activities are strong enough to justify their promotion and continuation. The results also suggest that the detrimental effects are small and the evidence in this area is not conclusive. Some of the positive outcomes of extracurricular in-school activities are hypothesized to come from a stronger identification with the school and commitment to academic achievement (identification/commitment model). Based on the results of the research, the authors recommend that policy makers broaden the

number and options of extracurricular activities available to students. Particularly because these activities are likely to benefit all students, including the most disadvantaged.

The greatest limitation of this study, as expressed by the authors, is that participation in extracurricular activities is a self-selected intervention. Therefore, this limitation makes the results harder to generalize.

The research literature indicates that sports participation has significant positive effects on a number of measures of academic competence. Among these measures are GPA and academic expectations. These positive effects were found during high school, and two years after high school. Of particular interest is the finding by Marsh and Kleitman, 2002 that the most disadvantaged students were the group to benefit most from participating in extracurricular activities. The three research articles that were evaluated in this section provide support for the theory that sports participation has beneficial high school and post high school academic outcomes. The next section will review research on the effects of sports participation on adolescent health.

Health

This section will review the literature on sports participation and adolescents' health outcomes. A number of health outcomes have been studied in relation to sports participation, these three studies will address the literature on the relationship of sports participation and psychopathology, subjective health, and drug use. The first study will address the effects of participation in high school organized activities on adolescent psychopathology.

Organized activity and psychopathology. Bohnert & Garber (2007), examined the relationship between psychopathology and organized activity involvement in high school students. This research was designed to explore the question of whether greater levels of

participation in activities during high school predict lower levels of psychopathology, both symptom and diagnostic. The researchers also explored whether existing psychopathology predicted participation in organized activities. Finally the study explored the relationship between different types of activities and lower levels of symptoms and disorders.

Participants included 198 families (mothers and students), who were chosen based on the mother's depression history. Of these mothers 146 were considered high-risk because of a history of a mood disorder, 52 were considered low-risk due to no reports of a history of psychiatric disorders. The sample consisted of 85 males and 113 female students; 82% the participants were Caucasian, 15% of the participants were African American and 3% of the participants were Hispanic.

This study was a longitudinal study that collected information from participants over the period of time from grade 6 through grade 12. Researcher assistants administered questionnaires to the adolescents starting at grade 6 and every year following until grade 12. The Structured Clinical Interview for DSM diagnoses was used to interview the mothers and assess current or/and previous episodes of psychopathology. The Four Factor Index of Social Status was used to determine the household economic status, SES. The Adolescent Activity Involvement Inventory was used to assess adolescent participation in activities in school or in the community. The survey asked information about participation in seven major categories: prosocial activities, academic clubs, sports, performance/fine arts, school involvement, peer, and leadership. This survey was administered to both the mother and student at the end of 12th grade. The Child Behavior Checklist was administered in 8th grade and again in 12th grade and was used to determine externalizing or internalizing symptoms, this survey was completed by the mothers. The Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and

Lifetime Version was administered first in 6th grade. This survey was used to gather information regarding tobacco use and psychiatric disorders. Subsequent data collection in this area was done using the Longitudinal Interval Follow-up Evaluation (LIFE). Information from these surveys was grouped into the following categories: mood disorders, behavior disorders, substance abuse and dependence, anxiety disorders, and tobacco use.

Descriptive statistics were run using four of the seven categories of extracurricular involvement: (a) sport, (b) performance arts, (c) prosocial activities, and (d) academic clubs. The results of the study suggested level of activity involvement predicted 12th grade externalizing symptoms ($\beta=-.16$; $p<.05$), but not internalizing symptoms ($\beta=-.13$) after controlling for 8th grade symptoms. The researchers also tested the over-scheduling hypothesis and found no negative effects on symptoms at high levels of participation. Further analysis of the data found that specific activity categories did not predict 12th grade internalizing or externalizing symptom levels. The study also concluded that lower overall activity involvement predicted increased chances of having a behavior disorder, a substance use disorder and increased tobacco use. When the specific categories were added only lower involvement in academic activities predicted 12th grade substance abuse disorders. Activity involvement, however, did not buffer the relation between risk as measured by the mother's depression history and subsequent psychopathology in the participants. Finally, the study found that eighth grade internalizing and externalizing symptoms predicted less participation in academic clubs, but did not have any effects on overall activity involvement, involvement on sports, involvement on prosocial activities or involvement on performing arts during high school.

The authors stress the importance of extracurricular activities for the development of youth. They suggest that the reasons for these positive outcomes in youth comes from the

development of life skills, the opportunity to form friendships with nondeviant peers and the reinforcement of personal identities including a sense of pride, respect, leadership and self-regulation.

The researchers present several limitations to the study. One of the limitations is that the participants were mostly high-risk adolescents, the results found with this population would not necessarily generalize to the larger population. Another limitation is that depressed mothers may be more negative when reporting their children's symptoms. Finally the measure of activity involvement was calculated only in 12th grade; therefore, it is possible that recall of involvement in all four years of high school was affected.

The results of this study indicate that high levels of organized activity involvement during high school predicted lower levels of externalizing symptoms, fewer behavior disorder, and lower tobacco and drug use. The second study in this review investigates the effects of sports participation on another measure of health, subjective health.

Sports participation and health. This study explored the relationship between sport participation during adolescence and health later in life (Dodge & Lambert, 2009). This study was designed to investigate two questions. The first question examined whether there is any difference between participation in organized sport versus participation in general physical activity during adolescence on levels of physical activities during young adulthood. The second goal of this study was to examine if participation in sports during adolescence has a relationship with subjective health in later young adulthood. A final goal of this study was to examine the possible causes for the relationship between sports participation in adolescence and later physical activity in adulthood. The researchers hypothesize that this positive relationship may be due to improvements in adolescent's self-beliefs that come from their participation in sports.

Data from the National Longitudinal Study of Adolescent Health was used. The participants included students from a stratified random sample of 80 high schools and the feeder schools (middle schools that sent graduates to the high school) for those high schools. The sample consisted of a total of 8,152 students in grades 7-12. The participants were 50.8% male and 49.2% female. Of this sample 73% of the participants were Caucasian, 16% non-Hispanic Black, 8.8% Hispanic and 1.9% non-Hispanic Asian, and less than 1% of the participants were American Indian.

During the first wave of data collection students in grades 7-12 completed a self-administered questionnaire. At this time parents also self-reported household income and highest level of education. In-home interviews with the adolescents and their caregivers (usually the mother) followed. These interviews included questions about participation in sports and physical fitness. The second wave of data was collected 1 year later and assessed positive self-beliefs. The third wave of data was collected 6 years later and assessed the behavioral outcomes of physical activity and subjective health. The Add health questionnaire was used during the second and third data collection waves.

The study hypotheses were assessed using Mplus 5.1, the program SUDAAN was used to calculate descriptive statistics, and correlations were calculated using SPSS. The results of the study suggest that participation in any type of physical activity such as exercise ($b=0.54$, $p<.01$), biking/skating ($b=.039$, $p<.01$) and sports participation ($b=.099$, $p<.01$) increases levels of moderate to vigorous physical activity in young adulthood. In addition participation in sports in adolescence was found to be a predictor of subjective health in young adulthood ($b=0.17$, $p<.01$). No significant relationships were found between other types of exercise and subjective health. In addition, this study found that adolescents who participation in sports and those who participate

in other forms of exercise in adolescence have more positive self-beliefs when compared to peers who do not participate in sports or other exercise ($b=0.13$, $p<.01$). These positive self-beliefs also predicted moderate to vigorous physical activity and subjective health in young adulthood.

The authors suggest that the activities that adolescents engage in, such as sports, can have positive health effects later in their lives. They argue that future research investigating this relationship should explore the aspects of sports participation that lead to psychological health. The researchers suggest that since the present study found positive health related benefits to sports participation it would be worthwhile to extend the research to see if there are additional health related benefits including protective factors against drug and alcohol use. One of the practical applications of this research is that there is more evidence about the positive mental and physical outcomes of sports participation, therefore, the researchers argue that schools should provide additional opportunities for students to engage in organized sports.

One of the limitations of this study as mentioned by the authors is that the study used self-report measures, therefore it is possible that the responses were biased or not accurate. Another limitation is that this study did not explore the relationships of sports participation and health and how they would interact with specific ages, racial groups and communities.

The results of the second study indicate that participation in sports during adolescence can have positive effects on subjective health and moderate physical activity in young adulthood. The third study investigates the relationship between sports participation and a range of measures including drug use, sexual behavior, and dietary habits.

Sports participation and health behaviors. This study was designed to examine the effects of sports participation on health-related behaviors of high school students (Pate, Trost, Levin, & Dowda, 2000). In particular this study sought to determine if there is a relationship,

positive or negative, between adolescent sports participation and behaviors such as dietary habits, substance abuse (alcohol, tobacco, marijuana, cocaine, and others), sexual activity, and weight loss practices.

The participants in this study included 14,221 high school students in grades 9-12. These students attended private or public schools in the United States. The participants were taken from the 1997 Youth Risk Behavior Survey conducted by the Center for Disease Control and Prevention. A cluster sampling procedure was used to obtain a nationally representative sample. Approximately 39% of the participants were white, 31% of the participants were African American, and 30% of the participants were Hispanic.

This study used the information from 27 of the 88 items in the Youth Risk Behavior Survey. The items measuring dietary behavior were divided into three separate measures: fruit consumption, vegetable consumption, and previous day fat intake. The items measuring sexual activity were divided into three separate measures: having sexual intercourse during one's lifetime, having sexual intercourse in the past three months, and having sexual intercourse with more than one partner in the past three months. Substance abuse was divided into a number of measures: alcohol consumption, binge drinking, tobacco consumption, marijuana consumption, cocaine use, other illegal drugs use, glue sniffing, and steroid use. Finally weight loss practices were separated into three measures: trying to lose weight, using diet pills to lose weight, and vomiting or using laxatives to lose weight.

The program SUDAAN was used to analyze the data. The relationships were analyzed separately for males and females in order to investigate possible gender differences. Analyses of the data show that 62.4% of the study participants reported playing in one or more sports teams. These analyses also show that males (69.9%) are more likely to participate than female (53.4%)

students, younger students are more likely to participate than older students and white students were more likely to participate in sports teams than both Hispanic and African American students. Both male and female sports participants were more likely to report participating in vigorous physical activity, (defined as at least three times per week for 20 minutes or more per session) than nonparticipants (OR=4.78 and OR= 4.5 respectively $p<.05$). The analyses of health related outcomes of sports participation show that female students who participated in sports were less likely to report not eating fruits (OR=.46; $p<.05$) and vegetables (OR=.49; $p<.05$) than female nonparticipants. In almost every other health related measure female sports participants were less likely to report negative outcomes when compared to nonparticipants. Female sports participants were less likely to report cigarette smoking (OR= .73; $p<.05$), cocaine use (OR=.37; $p<.05$), marijuana use (OR=.67; $p<.05$), contemplating or attempting suicide (OR=.73 and OR=.70 respectively; $p<.05$), and sexual behaviors in all measures: having ever had sexual intercourse(OR=.57; $p<.05$), , and having sexual intercourse in the past three months. According to the authors the only negative behavior found to be associated with female sports participation was the use of chewing tobacco (OR=1.84; $p<.05$), but the percentage of students that reported use was minimal, 1.5%. Most of these associations, however, were specifically linked to white female participants. With regards to males the results of the analyses show that male sports participants were less likely to report not eating fruits (OR=.48; $p<.05$) and vegetables (OR=.67; $P<.05$) than nonparticipants. On the health related outcomes similar results to the female students were found for male sports participants when compared to nonparticipants. Male sports participants were significantly less likely to report smoking marijuana (OR=.71; $p<.05$) and tobacco (OR=.66; $p<.05$), using cocaine (OR=.56; $p<.05$) or other illegal drugs (OR=.64; $p<.05$), sniffing glue (OR=.63; $p<.05$), contemplating suicide (OR=.59; $p<.05$), carrying a weapon

(OR=.78; $p<.05$)and trying to lose weight (OR=.67; $p<.05$). Again, more of these positive health outcomes were found for white students than for African American or Hispanic students.

The authors suggest that based on the finding of this study sports participation seems to have important health consequences for youth. The authors argue that the less positive outcomes found for minority youths may be due to less favorable socio-economic factors that offset the positive effects of sports participation. The authors suggest that future studies address the role of socio-economic factors on the relationship between sports participation and health outcomes. One of the implications of this study as reported by the authors is that physicians and other health providers should actively encourage youths to participate in sports. Also, since some negative health effects were found, coaches, parents, and physicians should routinely screen for health-risk behaviors and provide health information and counseling.

One of the limitations of this study as expressed by the authors is that a causal relationship cannot be established due to the design of the study. Another limitation of this study is that the measures well self-reports and students may have underreported participation in negative behaviors. Finally, this study did not assess whether the relationship between sports participation and health outcomes varies for specific sports.

The three studies presented in this section indicate that there is support for the theory that sports participation during adolescence can have positive health effects. The health effects found in these studies are varied, ranging from psychological health effects, to better subjective health, and finally decreased drug use.

Summary

The research studies reviewed in this chapter indicate that participation in extracurricular activities, including sports participation, has a number of positive outcomes associated with

participation. The first section of this review studied the effects of sports participation on self-esteem. These studies found that students who participate in sports have better self-concepts, more positive self-competence, and better general self-worth. The second section of this review evaluated the research on the relationship between sports participation and academic achievement. The results of these studies indicate that sports participation and participation in other extracurricular activities has significant positive academic outcomes. All three studies found that students who participated in extracurricular activities had higher grades, and higher educational expectations. Although the results of one study found that this relationship is in part due to a tendency for better students to participate in extracurricular activities. Two studies in this section also found positive effects on self-esteem providing more support to the literature on the effects of sports participation on self-esteem. Finally, the research presented in the third section indicated that sports participation can also have beneficial effects on a number of aspects of adolescent health. In particular the research on the area of health has focused on the effects of extracurricular participation on substance abuse, subjective health, and psychopathology. All nine studies showed beneficial effects on the participating students. These studies also included large sample sizes, a large range of student ages (ranging from early adolescence to young adulthood), and a diverse sample of students. However, the research did not include students with mild to moderate disabilities in their sample groups. More research that includes this population of students is needed in order to establish whether these effects are the same across different student populations. This study will contribute to the existing research literature by measuring the effects of sports participation on the academic achievement, self-esteem, and health of students with mild to moderate disabilities.

Chapter Three

Methods

Sports participation may prove to have a number of positive outcomes for adolescents with mild to moderate disabilities. In order to test the research questions, the researcher took several factors into consideration to assure that the methods were appropriate for the study. The following research questions were addressed in this study: (a) What is the relationship between participation in organized sports and the health of adolescents with mild to moderate disabilities? (b) What is the relationship between participation in organized sports and academic achievement of adolescents with mild to moderate disabilities? (c) What is the relationship between participation in organized sports and the self-esteem of adolescents with mild to moderate disabilities?

Design Overview

This study followed a quasi-experimental, correlational design. Students were given a set of questionnaires to assess their sports participation, health, and self-esteem. In addition, the researcher obtained academic achievement measures through school reports. Data was then analyzed using Pearson Correlation Coefficients.

Research Setting

This study took place in a suburban high school located in Northern California with approximately 1,900 students. Fifty percent of students were Caucasian, 29.6 % Asian, 4.9 % Asian Indian, 6.8 % Hispanic, 2.5 % African American, and 2.4 % Pacific Islander. Roughly 4% of the total school population was made up of students with limited English proficiency.

The data for this study was collected in a group setting. The questionnaires were completed in a resource room in the participating high school.

Participants

The sampling procedure used by the researcher was convenience sampling. The participants were restricted to students identified as having mild to moderate disabilities at the researcher's school site.

The participants in the study were from diverse ethnic backgrounds. Participants included 30 high school students in grades 9-12; 17 of the students were males, and 13 were female, ranging from ages 14 to 18. All of the students had a mild to moderate disability: 19 students had a specific learning disability, 7 students had a health impairment, and 4 students had an emotional disability. The researcher obtained this information from the students' most recent Individualized Education Plan (IEP).

Intervention

In this study the independent variable was participation or non-participation in a sports program. The dependent variable measured by this study consisted of student's health, academic achievement, and self-esteem.

Measurement Instruments

Organized sports participation was measured on the Sports Participation Survey using a list of athletic teams found in the participating high school. Adolescents were asked to indicate any sports team(s) they were participating in or planned to participate in later in the school year. Participants were asked to report both, sports team(s) they played through the school, and sports team(s) they played through an out of school club. Next, the sport participants were asked to write in the number of years they had been on each team. Participants were then classified as sports participants if they indicated they played or planned to play any sport. Only organized sport participation was used for this study. The researcher created the Sports Participation Survey

to meet the purposes of this study.

The Rosenberg Self-Esteem scale was used to assess students' self-esteem. The Rosenberg Self-Esteem scale is a 10 question scale that measures global self-esteem. It is a Guttman type scale in which a statement is made and the participants are asked to respond with strongly agree, agree, disagree, or strongly disagree. The questionnaires were scored as follows: For items 1,2,4,6, and 7- a response of strongly agree=3, agree=2, disagree=1 and strongly disagree=0; For items 3,5,8,9, and 10- a response of strongly agree=0, agree=1, disagree=2, and strongly disagree=3. The final total scores ranged from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. The Rosenberg Self-Esteem scale has been found to be a valid and reliability measure of global self-esteem when used with high school and college students (Silbert & Tippett 1965; Crandal 1973; McCarthy & Hoge 1982).

Health was measured as alcohol consumption, tobacco use, marijuana use, and other drug use. Questions from the 2009-2010 California Healthy Kids Survey were used for this purpose. The questions were taken from the high school versions of Modules C (tobacco), and D (alcohol, and other drug use).

Finally, academic achievement was measured through grade point average (GPA). GPA was obtained from students' transcripts.

Data Collection/Procedures

The data were collected through questionnaires and school records. All questionnaires were administered in a group setting. Students were asked to complete the sports participation

survey, California Healthy Kids Survey, and Rosenberg's Self-Esteem scale. The completion of the surveys took approximately 30 minutes. At the completion of the administration surveys were collected and scored by the researcher.

Data Analysis

The researcher computed descriptive statistics to assess the relationship between sports participation and the dependent variables. The mean was used as the measure of central tendency. The standard deviation was used as the measure of variability, and the Pearson Correlation Coefficient were used to analyze the correlation among the variables. Participants were divided into two groups for analysis. Group 1 included sports participants and Group 2 included non participants. Statistical analysis using Statistical Package for the Social Sciences (SPSS) software was conducted for each group on each of the dependent variables, to identify means and standard deviations. Pearson Correlation Coefficients were then calculated to determine the relationship between sports participation, health, academic achievement, and self-esteem of the participants. The researcher then compared the correlation coefficients of sports participants versus those of nonparticipants to determine if there was a significant difference in any of the dependent measures.

Ethical Considerations/IRBPHS Procedure

The researcher submitted and obtained approval from the Institutional Review board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco. All participants were given the choice to participate and no coercion or monetary incentives were used to recruit participants. Students that agreed to participate in the study were given a copy of their

safeguards. Permission to conduct the experiment at the school was obtained through the school principal. In addition Parental Consent Forms describing the study were sent home and only students whose parents returned the forms signed were able to participate in the study. The researcher took all preventative measures necessary to ensure the physical safety, and emotional well-being of the participants. Participants' names were not mentioned in the study and all documents were kept confidential. Potential risks of the study include emotional discomfort or frustration during survey administration. The participants may stop participation at any time.

Student Code: _____

BELOW IS A LIST OF STATEMENTS DEALING WITH YOUR GENERAL FEELINGS ABOUT YOURSELF. IF YOU **STRONGLY AGREE**, CIRCLE **SA**. IF YOU **AGREE** WITH THE STATEMENT, CIRCLE **A**. IF YOU **DISAGREE**, CIRCLE **D**. IF YOU **STRONGLY DISAGREE**, CIRCLE **SD**.

		1. STRONGLY A GREE	2 AGREE	3. DISAGREE	4. STRONGLY DI SAGREE
1.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
2.	I feel that I have a number of good qualities.	SA	A	D	SD

3.	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.	SA	A	D	SD
6.	I take a positive	SA	A	D	SD

	attitude toward myself.				
7.	On the whole, I am satisfied with myself.	SA	A	D	SD
8.	I wish I could have more respect for myself.	SA	A	D	SD
9.	I certainly feel useless at times.	SA	A	D	SD

10.	At times I think I am no good at all.	SA	A	D	SD
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Student Code _____

Circle the correct response

Do you currently play an organized team sport? Yes No

What sport(s) do you play and where:

circle S=school team, OS=outside of school team or B= both if you play for a team outside of school and for the school team.

Sport	School Team	Outside organization team	Both school team and outside organization team
Football	S	OS	B
Cross-Country	S	OS	B
Badminton	S	OS	B
Tennis	S	OS	B
Wrestling	S	OS	B
Baseball	S	OS	B
Soccer	S	OS	B
Basketball	S	OS	B
Gymnastics	S	OS	B
Volleyball	S	OS	B
Track and Field	S	OS	B
Softball	S	OS	B
Water Polo	S	OS	B
Swimming	S	OS	B

Lacrosse	S	OS	B
Other: _____	S	OS	B

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