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THE VALUE OF EXTRACURRICULAR PARTICIPATION AMONG ADOLESCENTS: BENEFITS TO
EDUCATIONAL PERFORMANCE IN HIGH SCHOOL AND BEYOND

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Abstract

High schools in the United States provide adolescents with myriad opportunities for growth and exploration in the classroom and beyond. Students can choose from a menu of classes, peer groups, and extracurricular activities based on their interests. Because approximately 70% of adolescents participate in extracurricular activities, it is important to understand what short and long term effects their activity choices (or choice to abstain) will have. This article explores the results of an empirical study conducted on adolescents as part of the National Longitudinal Study of Adolescent Health (Add Health). Results found that adolescents who participated in extracurricular activities reported higher GPAs and a greater inclination toward postsecondary education.

TABLE OF CONTENTS

ABSTRACT.....	i
TABLE OF CONTENTS	ii
ACKNOWLEDGEMENTS.....	iv
LITERATURE REVIEW.....	1
INTRODUCTION.....	1
PURPOSE FOR STUDY.....	2
BENEFITS OF EXTRACURRICULAR ACTIVITIES ON EDUCATION.....	3
BENEFITS OF POSTSECONDARY EDUCATION	5
BENEFITS OF EXTRACURRICULAR ACTIVITIES ON INTERPERSONAL COMPETENCE.....	5
INFLUENCE OF EXTRACURRICULAR ACTIVITIERS ON GOAL SETTING BEHAVIORS	6
OTHER BENEFITS OF EXTRACURRICULAR ACTIVITIES.....	7
BARRIERS TO EDUCATIONAL ACHIEVEMENT.....	8
PRESENT STUDY.....	9
OBJECTIVES AND HYPOTHESES.....	9
AIM 1.....	9
AIM 2.....	10
AIM 3.....	10
METHODS.....	11
DESCRIPTION OF ADD HEALTH DATA SET.....	11
DEMOGRAPHIC INFORMATION.....	11

MEASURES.....	12
EXTRACURRICULAR ACTIVITY SCALES.....	12
EDUCATIONAL ASPIRATION SCALE.....	13
GRADE POINT AVERAGE.....	13
RESULTS.....	14
ANALYTIC STRATEGY FOR AIMS 1-3.....	14
AIM 1.....	14
AIM 2.....	15
AIM 3.....	15
DISCUSSION.....	16
LIMITATIONS.....	17
FUTURE STUDIES.....	17
CONCLUSION.....	19
REFERENCES.....	20
APPENDIX.....	25

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Literature Review

Introduction

During high school adolescents are exposed to a variety of choices when deciding how to spend their time, including spending time with family members, working on school assignments, hanging out with friends, and participating in extracurricular activities.

Adolescents spend over half of their day participating in leisure activities, with much of this time specifically focused on extracurricular activities (Larson & Verma, 1999). Aside from the more obvious benefits these activities bring (such as stress relief, increased time with friends, and learning new skills), extracurricular activities have intrinsic benefits that may help adolescents in the long run. Both interpersonal competence and personal initiative improved among those who participated in extracurricular activities consistently during high school (Mahoney, Cairns, & Farmer, 2003). Both of these skills have been linked to achieving educational success after graduating high school (Mahoney, Cairns, & Farmer, 2003). Additionally, extracurricular activity participation has been linked to higher GPAs, lower absenteeism rates, and higher postsecondary goals (Eccles & Barber, 1999).

Overall, 70% of adolescents sampled in the National Longitudinal Study for Adolescent Health (Add Health) participated in at least one extracurricular activity during high school (Feldman & Matjasko, 2005). Adolescents are exposed to different values and norms depending on the type of group(s) they choose to belong to (Eckert, 1989). Similarly, extracurricular activities encourage formation of peer groups with similar goals for postsecondary achievement (Eccles & Barber, 1999). These factors may lay the groundwork for postsecondary success.

Because of this, adolescents of low socioeconomic status (SES) suffer if and when they cannot pay activity costs – a setback that that may have negative effects on college admissions.

Those who participate in extracurricular activities often report feeling more connected to the “educational process” in a way that is different yet supportive of classroom engagement – a result that may transfer to greater connection to the general educational process, including postsecondary education (Mahoney & Cairns, 1997; Marsh, 1992; Otto, 1975). Extracurricular activities allow adolescents to connect to their school in a challenging setting, allowing students the opportunity to develop skills and recognition not learned within the classroom (Finn, 1989). This “non-classroom” environment provides students another outlet in which to succeed – an opportunity that may be particularly meaningful to academically underachieving students (Brown, B. & Theobald, 1998). Consistent participation in extracurricular activities is important when examining the relationship between extracurricular activities and positive outcomes (Mahoney, Cairns, & Farmer, 2003).

Purpose for Study

This analysis will provide an in-depth look at the role extracurricular activities play in the lives of adolescents in high school and beyond by examining Wave I of the National Longitudinal Study of Adolescent Health. In 2002, The National Center for Education Statistics reported that 25% of all high school seniors participate in academic clubs, 43% participate in athletics, 27% are involved with school involvement clubs, and 28% participate in performing arts related clubs (Feldman & Matjasko, 2005). Because these activities are so common, research should be done on these activities to form a clear picture of adolescent development during the high school years. Changes that take place during adolescence can be considered monumental, so it

is important to take a look at activities that may have a positive or negative effect on this growth. There is a need for further research that utilizes nationally representative longitudinal data, as only a small number of previous studies have examined these relationships longitudinally. There is also a need for exploration of extracurricular participation by ethnicity.

Benefits of Extracurricular Activities on Education

Early literature suggested a positive relationship between participation in extracurricular activities and increased educational aspirations and attainment (Holland & Andre, 1987). A 1999 Eccles and Barber study found that participation in all types of extracurricular activities was positively linked to increased GPAs and a greater propensity toward full-time college enrollment (Eccles & Barber, 1999). It is important to note that research has found the networking opportunities afforded by participation in extracurricular activities (between students, peers, teachers, and school officials) may lead to better school performance (Broh, 2002). While this school performance/extracurricular activity relationship may be monitored by a variety of third variables (such as increased interaction with teachers or greater levels of school connectedness), many of these positive mediators may stem from participation in extracurriculars, and therefore many of these means should be considered as valuable as the end result (Broh, 2002).

Risks and benefits of participation in sporting teams are among the most widely researched extracurricular activities due to their high rates of participation. Despite this, little research has been done to examine the link between participation in sports and academic success or failure. A handful of studies show that sports participation raises test scores and grades among adolescents (Fejgin, 1994; Kraus, 1998). Among females, sports participation was

associated with higher math and science performance (Kraus, 1998). Although individuals who participate in sporting extracurricular activities generally fare well academically, they are not the only students who see educational gains as a result of their extracurricular participation.

The benefits of extracurricular activities may be universal – rooted in general participation, rather than facets of a particular activity. Based on the three previously listed qualities of a. structure, b. voluntary participation, and c. challenge, extracurricular activities may provide an opportunity to develop skills and promote competence regardless of type (Mahoney, Cairns, & Farmer, 2003). Building these interpersonal skills and constructing positive plans for the future were associated with higher educational status in young adulthood (Mahoney, Cairns, & Farmer, 2003)

Beyond high school, extracurricular participation has historically translated well into postsecondary outcomes via increased education and better career prospects. There is a positive correlation between adolescents who participate in any type of activity and increased number of years of education (Barber, Eccles, & Stone, 2001). Additionally, extracurricular participants report higher rates of college graduation, feelings of “having a job with a future”, experience more job autonomy, achieve better educational outcomes, and report a better occupational status (Eccles, Barber, Stone, & Hunt, 2003). Adolescent participation in sports has been linked to increased college enrollment, more months spent in college, and higher levels of postsecondary education even after controlling for other factors of educational outcomes (Marsh & Kleitman, 2003).

Benefits of Postsecondary Education

There are numerous benefits of postsecondary education that are experienced by the student and society as a whole. Primarily, it is common knowledge that obtaining a college education significantly increases your access to a higher paying job and better benefits, including health insurance while decreasing rates of unemployment and poverty (Baum & Ma, 2007). These benefits are beneficial to personal growth and achievement as well as societal improvement. This success generally translates into increased opportunities for future generations (Baum & Ma, 2007). Society also benefits from individuals who pursue higher education, as this education is correlated with increased rates of volunteer work, blood donation, voting, etc. (Baum & Ma, 2007).

Benefits of Extracurricular Activities on Interpersonal Competence

Interpersonal competence, defined as avoiding aggressive conflicts and maintaining good peer relationships, is one of the central influences in the process of educational attainment in adolescents (Mahoney, Cairns, & Farmer, 2003; Cairns & Cairns, 1994; Luthar & Burack, 2000). Adolescents with high interpersonal competence seem to have both the resources and aptitude required to excel at postsecondary goals (in both education and career paths) (Csikszentmihalyi & Schneider, 2000). High goal setting is influenced by interpersonal competence – when you succeed in education, you may also be more likely to seek a challenging career (Mahoney, Cairns, & Farmer, 2003). Additionally, living in a low socioeconomic status household may inhibit the development of interpersonal competence, which influences educational attainment indirectly (Mahoney, Cairns, & Farmer, 2003). The

relationship between interpersonal competence and goal setting among adolescents may be influenced by participation in extracurricular activities.

Extracurricular activities share myriad qualities that may lead to increased levels of interpersonal competence, including structure, voluntary participation, and challenge (Csikszentmihalyi & Schneider, 2000). Extracurricular activities provide structure by meeting in a more formal space (i.e. a classroom, theatre, sporting facility) that is usually located on school property (Csikszentmihalyi, 1990). Additionally, adults are often at the forefront of such activities, providing additional structure. Extracurricular activities are voluntary – suggesting those who self-select into such activities may receive positive reinforcement for their intrinsic motivation. Finally, extracurricular activities provide a challenge – those seeking out a challenge may be more likely to participate in these activities that may support future goal setting (Csikszentmihalyi, 1990).

Initiative development is another key component of interpersonal competence that is developed in adolescence. Initiative development can be defined as setting personal goals, evaluating what is needed to achieve those goals, actively acquiring the abilities and resources to fulfill said goals (Mahoney, Cairns, & Farmer, 2003). Initiative is developed in extracurricular activities because they are structured, voluntary, and challenging (Mahoney, Cairns, & Farmer, 2003). Closely related to initiative development is the acquisition of goal setting behaviors, which are also developed by participation in extracurricular activities.

Influence of Extracurricular Activities on Goal Setting Behaviors

Goal setting is arguably one of the most valuable skills developed through participation in extracurricular activities. Extracurricular activities require both individual and group goal

setting (Mahoney, Cairns, & Farmer, 2003). They require adolescents to develop and rehearse strategies to meet goals, and execute these strategies regularly – a process that may become more generalized over time (Mahoney, Cairns, & Farmer, 2003). Research has also found that extracurricular participation increases the likelihood of having goal-oriented peers – a benefit that translates well into postsecondary achievement (Marsh, 1992). This may lead to generalized goal setting outside of extracurricular activities which could relate to postsecondary educational and career goals. Adolescents who can set educational goals for the future possess an important component of the educational attainment process (Mahoney, Cairns, & Farmer, 2003). Those who set challenging goals and hold high aspirations for the future may be more likely to pursue further education and begin promising careers when compared to their non-goal setting peers (Clausen, 1993). Aside from goal setting behaviors and increased propensity for educational outcomes, extracurricular activities provide other benefits to adolescents who participate in them.

Other Benefits of Extracurricular Activities

Extracurricular activities have a wide variety of benefits ranging from lower dropout rates to increased positive peer influence. Participating in extracurricular activities affords adolescents the opportunity to develop mentoring relationships with adults, develop personal relationships with like-minded peers, and interact with the community (Dworkin, Larson, & Hansen, 2003; Gould, Feltz, & Weiss, 1985; Smith, 2003). Participation has also been linked to lower dropout rates among adolescents (Mahoney & Cairns, 1997). More recently, lower dropout rates have been reported among high risk males and females who participate in extracurricular activities (Mahoney, 2000). Participation in extracurricular activities has also

been linked to lower rates of substance use and abuse (Feldman & Matjasko, 2005).

Adolescents who spent 1 to 4 hours per week participating in extracurricular activities were significantly less likely to use drugs or smoke cigarettes.

It seems females receive the greatest benefit from participation in extracurricular activities, from decreased sexual activity to increased positive peer influence. Female athletes have reported delaying initial intercourse, greater propensity for contraceptive use, a lesser number of partners, fewer sexual experiences, and fewer pregnancies when compared with non-athletic females (Miller, Sabo, Farrell, Barnes, & Melnick, 1999). Additionally, females who participate in extracurricular athletic activities are seemingly more likely to be friends with high-achieving peers and socially active peers than their non-athletic counterparts (Crosnoe, 2001). Various studies have demonstrated the importance of positive peer influence, so participation in extracurricular activities allows adolescents to build a strong foundation of like-minded peers. This protective factor supports a decrease in risk behaviors and an increase in positive behaviors (Feldman & Matjasko, 2005).

Barriers to Educational Achievement

The benefits of participation in extracurricular activities may have the greatest impact on “high risk” and low-SES youth (Smith & Smoll, 1997). Low family socioeconomic status may lead to limits on opportunities, resources, supports which are necessary to reach higher educational goals and related careers (Csikszentmihalyi & Schneider, 2000). As such, adolescents in low-SES families are at risk of not developing ambitious educational goals if they lack role models (friends, family) who have high-status careers (Trice, 1991). A study conducted on the NELS 88 data found that participation in school activities resulted in higher achievement

among both African American and White adolescents (Gerber, 1996). Although there is a definitive lack of research on extracurricular participation by ethnicity, research does suggest that postsecondary education provides a significant benefit to at-risk and low-SES individuals.

Present Study

The present study aims to examine the value of extracurricular activities in American schools using a nationally representative sample of adolescents (The National Longitudinal Study of Adolescent Development). Outcomes of extracurricular activities including high school GPA, expectations of collegiate success, and postsecondary educational attainment will be measured and examined across gender and ethnicity.

Objectives and Hypotheses

The overall research question explored in this study was: Does participation in extracurricular activities have a positive effect on educational outcomes in high school and beyond? Using the Add Health Data, the following four aims were explored in an effort to answer this question in greater detail.

Aim 1

The first aim of this study was to determine the significance and degree of the relationship between participation in extracurricular activities and high school GPA.

Hypothesis 1a. There will be a positive relationship between participation in extracurricular activities and high school GPA.

Aim 2

The second aim of the current study was to determine the degree and significance of the relationship between participation in extracurricular activities during high school and educational aspirations.

Hypothesis 2a. Adolescents who participate in extracurricular activities in high school will be more likely to have high educational aspirations and this association will be stronger among females.

Aim 3

The third aim of this study was to determine if any moderation of the associations between participating in extracurricular activities and educational aspirations exists by gender.

Hypothesis 3a. Participating in high school sports will correlate positively with educational aspirations, particularly among females.

Hypothesis 3b. Participating in academic clubs and/or school involvement clubs will correlate positively with educational aspirations, and associations will be similar across genders.

Methods

Description of Add Health Data Set

The National Longitudinal Study of Adolescent Health (Add Health) is a longitudinal study of a nationally representative sample of adolescents in grades 7-12 in the United States during the 1994-1995 school year. The Add Health cohort has been followed into young adulthood with four in-home interviews, the most recent in 2008, when the sample was aged 24-32. Add Health combines longitudinal survey data on respondents' social, economic, psychological and physical well-being with contextual data on the family, neighborhood, community, school, friendships, peer groups, and romantic relationships, providing unique opportunities to study how social environments and behaviors in adolescence are linked to health and achievement outcomes in young adulthood. The fourth wave of interviews expanded the collection of biological data in Add Health to understand the social, behavioral, and biological linkages in health trajectories as the Add Health cohort ages through adulthood (Harris, et al., 2009).

Demographic Information

This study uses the public data from the National Longitudinal Study of Adolescent Health (Add Health). For the purposes of this study, the sample size is 6,497 and both the In Home and In School sections will be used. A total of 3,144 males and 3,353 females were included in this sample, with only participants in grades 9 through 12 (13-19 year olds) included. Respondents indicated a broad range of backgrounds, with the largest populations being: 59% White, 24.4% Black, 3.8% Asian, and 11.4% Hispanic. Specific oversamplings were

taken to ensure a nationally representative sample. Additional demographic data can be seen in Table 1.

Measures

Extracurricular activity scales. The extracurricular activity scale was constructed using Wave 1 Public Use Data from the In School portion of the Add Health Study. The item read “darken the oval next to any club that you are participating in this year, or that you plan to participate in later in the school year”, and listed a total of 44 choices. From these choices, four variables (Academic Clubs, Athletics, Performing Arts, and School Involvement) were created based on club groupings in previous studies (Broh, 2002). The responses “other club or org”, “does not belong to any clubs”, and “Future Farmers of America” were omitted from this study as they did not fit into any of the four scales created.

Academic clubs. The Academic Clubs variable was constructed using the following clubs: French, German, Latin, Spanish, Book, Computer, Debate, History, Math, Science, and Honors. Responses were individually dummy coded (0, 1) for participation, and then summed to create one variable (min = 0, max = 11) with a mean of .37(SD =.85).

Athletics. The Athletics variable was constructed using the following clubs: Baseball/Softball, Basketball, Field Hockey, Football, Ice Hockey, Soccer, Swimming, Tennis, Track, Volleyball, Wrestling, Other. This 12 item scale was created by individually dummy coding (0, 1) each club and then summing them into one variable (min = 0, max = 12) with a mean of 1.12 (SD=1.39).

Performing arts. The Performing Arts variable contained Drama, Band, Orchestra, and Choir clubs. Each of these four items was dummy coded (0,1), and then summed into one variable (min = 0, max = 4) with a mean of .34 (SD = .61).

School involvement. Newspaper, Student Council, Yearbook, and Cheerleading clubs were used to create the School Involvement Scale. Each item was dummy coded (0,1) then summed into one variable (min = 0, max = 4) with a mean of .32 (SD =.65).

Educational aspiration scale. The Educational Aspiration Scale was constructed from three items drawn from the In Home and In School portion of the Add Health data. Items varied in the response scale, some from 0-8, others from 1-5. To set items to the same scale, the 1-8 item was rescaled to range between 1 to 5. Items were then arranged to create one educational aspirations scale. The mean (and SD) of this scale was 4.33 (.92). The items read (“What do you think are the chances you will graduate from college?”, “How much do you want to go to college?”, and “How likely is it that you will attend college?”).

Grade point average. A traditional Grade Point Average (GPA) Scale was constructed by finding the cumulative mean of reported grades in Math, English, Science, and History on a 0.0-4.0 scale. With a mean of 2.84 and a SD of .75.

Results

Analytic Strategy for Aims 1-3

The descriptive statistics for each variable used in the analysis of Aims 1-3 can be found in Table 1 of the Appendix. The sample size of 9-12 graders in this study was 4252. Given the large sample size, findings of ($\alpha < .01$) were considered.

Aim 1

To investigate the relationship between participation in extracurricular activities and high school GPA, bivariate correlations were calculated. Results [Table 2] indicated that there were significant relationships between GPA, total extracurricular involvement, academic participation, athletic participation, performing arts, and school involvement ($\alpha < .01$). The largest relationship was demonstrated between total extracurricular activity participation and GPA ($r = .21$), with each individual variable correlating between .09 and .20.

hypothesis 1: The hypothesis that participating in extracurricular activities would be positively correlated with GPA was supported. Table 2 shows that a significant relationship ($r = .21$) existed between participation in extracurricular activities and GPA.

Aim 2

To complete Aim 2, exploring the relationship between participation in extracurricular activities during high school and educational aspirations, bivariate correlations were used.

Hypothesis 2: The hypothesis for this aim stated that adolescents who participate in extracurricular activities in high school will be more likely to have high educational aspirations for the future. As seen in Table 2, each extracurricular activity variable was positively correlated

with positive educational aspirations ($r=.14$ - $r=.15$). Again, the most significant correlation was seen between general participation in extracurricular activities and positive educational aspirations ($r=.22$).

Aim 3

The third aim of this study was completed by computing correlations to determine if associations between participating in extracurricular activities and educational aspirations differed across genders. More specifically, I expected the association to be greater among females than males.

Hypothesis 3a. The hypothesis that participating in high school sports be positively associated with educational aspirations most strongly among females was not supported. Table 3 shows that participation in athletics had the greatest association with educational aspirations among males ($r= .19$). Additionally, participation in athletics had the most varied effect on educational aspirations between males ($r= .19$) and females ($r= .14$), however these associations are largely similar to each other.

Hypothesis 3b. The results supported hypothesis 3b which stated participating in academic clubs and/or school involvement clubs will correlate positively with educational aspirations, regardless of gender. Tables 3,4 show a positive correlation between participation in academic clubs and educational aspirations among males ($r= .14$) and slightly more in females ($r= .15$). These tables also show a positive correlation between participation in athletics and educational aspirations, which is stronger among males ($r= .19$) than females ($r= .14$).

Discussion

This study examined the associations between participation in extracurricular activities and both high school and postsecondary outcomes, and whether these relationships varied by gender. The results demonstrate that extracurricular activity participation is related to educational aspirations among adolescents. Although each extracurricular variable (Academics, athletics, performing arts, and school involvement) was positively associated with both GPA ($r = .09 - r = .20$) and educational aspirations ($r = .14 - r = .15$), the most significant relationship was seen between overall participation in extracurricular activities and GPA ($r = .21$) and educational aspirations ($r = .22$). Additionally, GPA was positively associated with having educational aspirations as well ($r = .38$).

Consistent with previous research, these findings suggest that participation in extracurricular activities may be beneficial to educational outcomes in adolescents, particularly their high school GPAs and educational aspirations. Previous research stated that extracurricular participation encourages formation of similarly motivated peer groups which, in turn, may have a positive influence on academic achievements (Eccles & Barber, 1999). These findings also suggest that extracurricular activity participation may have a positive relationship with GPA and educational aspirations regardless of the type of activity.

Despite the finding being consistent with the positive effect of extracurricular activities, we cannot assume that participation in an extracurricular activity actually increases your GPA in high school and your desire to attend college. Adolescents who are more motivated or have are oriented toward school achievement may likely self-select into extracurricular activities. This caution aside, these findings may be particularly important in the current context of budget

cuts and a focus on testing. It seems that governmental officials should take a holistic approach toward education. There may be more components to educational success in high school and beyond than simple reading and writing.

Limitations

This study was limited due to being restricted to the publically available aspects of the Add Health data, and could be improved by obtaining the full Add Health data set. One key limitation in using the public use data was the inability to access the School Administrator data. This data could be used to break schools into categories based on community affluence, parental involvement, access to resources, and teacher quality. All of these factors have the potential to greatly influence the access and desire to participate in extracurricular activities. Additionally, as noted above this study failed to examine the intrinsic factors that might encourage adolescents to join extracurricular activities in the first place. Future research should look further into possible confounding variables including personality characteristics, family structure, neighborhood, and parental academic achievement.

Future Studies

Because ongoing budget cuts often hit extracurricular activities the hardest, future research should focus on the long-term benefits of extracurricular activities (Benjamin & Correa, 2010). This is particularly important for low SES students, as they may not have the resources needed to fund participation in extracurricular activities without the support of their school district. Additional research could also be used to examine the benefits of extracurricular activities as part of a well-rounded high school curriculum. Recent governmental programs such as No Child Left Behind and Race to the Top have arguably put too much emphasis on test

performance, leaving non-tested subjects to be neglected from the curriculum and the budget. As seen in this study, scholastic achievement is influenced by factors outside of the classroom, and academic success might be fostered and enhanced by increasing funding to schools who promote the development of the whole child.

Conclusion

Overall, this study has found that extracurricular activities are consistently linked to positive outcomes and attitudes in high school. Students who participate in extracurricular activities are more likely to have a higher GPA in high school and to have high educational aspirations for the future than their peers who abstain from extracurricular participation. When relating this to previous literature on the benefits of postsecondary education on the individual and society, these positive relationships become more relevant. If participation in extracurricular activities has a positive effect on a students' outlook on postsecondary education, school officials should consider implementing less dramatic budget cuts to these programs.

References

- Barber, B. L., Eccles, J. S., & Stone, M. R. (2001). Whatever happened to the “Jock”, the “Brain,” and the “Princess”?: Young adulthood pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research, 16*, 429-455.
- Baum, S., & Ma, J. (2007). Education Pays for Individuals and Society. *Higher Education, 82*(8 Suppl), 1-48.
- Benjamin, M., & Correa, T. (2010, April 10). *Usjf defends families paying for extracurricular activities*. Retrieved from <http://usjf.net/2010/04/usjf-defends-families-paying-for-extracurricular-activities/>
- Broh, B. A. (2002). Linking extracurricular programming to academic achievement: Who benefits and why? *Sociology of Education, 75*, 69-95.
- Brown, B. B. (1988). The vital agenda for research on extracurricular influences: A reply to Holland and Andre. *Review of Educational Research of Educational Research, 58*, 107-111.
- Cairns, R. B., & Cairns B. D. (1994). *Lifelines and Risks: Pathways of youth in our time*. New York: Cambridge University Press.

Clausen, J. A., (1993). *American lives: Looking back at the children of the Great Depression*.
Berkeley: University of California Press.

Crosnoe, R. (2001). The social world of male and female athletes in high school. *Sociological Studies of Children and Youth*, 8, 87-108.

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper and Row.

Csikszentmihalyi, M. & Schneider, B. (2000). *Becoming adult: how teenagers prepare for the world or work*. New York: Basic Books.

Dworkin, J. B., Larson, R., and Hansen, D. (2003). Adolescents' accounts of growth experiences in youth activities. *Journal of Youth and Adolescence*, 32, 17-26.

Eccles, J. S. & Barber, B. L. (1999). Student council, volunteering, basketball, or marching band: What kind of extracurricular involvement matters? *Journal of Adolescent Research*, 14, 10-42.

Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues*, 59, 855-889.

Eckert, P. (1989). *Jocks and burnouts: Social categories and identity in the high school*. New York: Teachers College Press.

Flinn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117-142.

Fejgin, N. (1994). Participation in high school competitive sports: A subversion of school mission or contribution to academic goals? *Sociology of Sport Journal*, 11, 211-230.

Feldman, A. F. & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, 75(2), 159-210.

Gerber, S. (1996). Extracurricular activities and academic achievement. *Journal of Research and Development in Education*, 30, 42-50.

Gould, D., Feltz, D., and Weiss, M. (1985). Motives for participating in competitive youth swimming. *International Journal of Sports Psychology*, 16, 126-140.

Harris, K.M., C.T. Halpern, E. Whitsel, J. Hussey, J. Tabor, P. Entzel, and J.R. Udry. 2009. The National Longitudinal Study of Adolescent Health: Research Design [WWW document]. URL: <http://www.cpc.unc.edu/projects/addhealth/design>.

Holland, A., & Andre, T. (1987). Participation in extracurricular activities in secondary school:

What is known, what needs to be known? *Review of Educational Research*, 57, 437-466.

Kraus, R. S., & Hanson, S. L. (1998). Women, Sports, and Science: Do Female Athletes Have an Advantage? *Sociology of Education*, 71, 93-110.

Larson, R. & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 125(6), 701-736.

Luthar, S., & Burack, J. A. (2000). Adolescent wellness: In the eye of the beholder? In D. Cicchetti, J. Rappaport, I. Sandler, & R. P. Weissberg (Eds.), *The promotion of wellness in children and adolescents* (pp 29-57). Washington, DC: Child Welfare League of America Press.

Mahoney, J. L. (2000). Participation in school extracurricular activities as a moderator in the development of antisocial patterns. *Child Development*, 71, 502-516.

Mahoney, J. L., & Cairns, R. B. (1997). Do extracurricular activities protect against early school dropout? *Developmental Psychology*, 32, 241-253.

Mahoney, J., Cairns, B., & Farmer, T. (2003). Promoting interpersonal competence and educational success through extracurricular activity participation. *Journal of Educational Psychology*, 95, 109-418.

Marsh, H. W. (1992). Extracurricular activities: Beneficial extension of the traditional curriculum or subversion of academic goals? *Journal of Educational Psychology, 84*, 553-562.

Marsh, H. W., & Kleitman, S. (2003). School athletic participation: Mostly gain with little pain. *Journal of Sport and Exercise Psychology, 25*, 205-229.

Miller, K. E., Sabo, D. F., Farrell, M. P., Barnes, G. M., and Melnick, M. J. (1999). Sports, sexual behavior, contraceptive use, and pregnancy among female and male high school students; Testing cultural resource theory. *Sociology of Sport Journal, 16*, 366-387.

Otto, L. B. (1975). Extracurricular activities in the educational attainment process. *Rural Sociology, 40*, 162-176.

Smith, A. L. (2003). Peer relationships in physical activity contexts: A road less travelled in youth sport and exercise psychology research. *Psychology of Sport and Exercise, 4*, 25-39.

Smith, R. E. & Smoll, F. L. (1997). Coaching the coaches. Youth sports as a scientific and applied behavioral setting. *Current Directions in Psychological Science, 6*, 16-21.

Trice, A. D. (1991). Stability of children's career aspirations. *Journal of Genetic Psychology, 152*, 137-139.

Appendix

Table 1: Demographic Information (N=4252)

Variable	N (%)	Mean	SD	Minimum	Maximum
	<i>Sex</i>	.52	.50	<i>(Age)</i>	
Males	2032 (47.8%)			13	19
Females	2220 (52.2%)			13	19
	<i>Ethnicity</i>				
White	2524 (59.4%)	.59	.49		
Black	1102 (25.9%)	.26	.44		
Asian	162 (3.8%)	.04	.19		
Hispanic	415 (9.8%)	.10	.29		
Other	49 (1.2%)	.01	.11		
	<i>Extracurricular Activity Groups</i>			<i>(# Activities)</i>	
Academics	1060 (24.9%)	.37	.85	0	11
Athletics	2386 (56%)	1.12	1.39	0	12
Performing Arts	1119 (26.3%)	.34	.61	0	4
School Involvement	1013 (23.8%)	.32	.65	0	4
Total	4252 (100%)				

Table 2: Correlation between GPA, Educational Aspirations and Participation in Extracurricular Activities
by Gender (N= 4741, 4644)

	Total		Males		Females	
	GPA	Educational Aspirations	GPA	Educational Aspirations	GPA	Educational Aspirations
Academic	.20*	.15*	.20*	.14*	.19*	.15*
	.00	.00	.00	.00	.00	.00
Athletic	.09*	.14*	.12*	.19*	.13*	.14*
	.00	.00	.00	.00	.00	.00
Performing Arts	.17*	.15*	.15*	.14*	.14*	.13*
	.00	.00	.00	.00	.00	.00
School Involvement	.13*	.14*	.13*	.11*	.07*	.07*
	.00	.00	.00	.00	.00	.00
Total Extracurricular	.21*	.22*	.20*	.21*	.21*	.21*
	.00	.00	.00	.00	.00	.00
GPA	.38*	1	.38*	1	.36*	1
	.00	-----	.00	-----	.00	-----
Educational Aspirations	1	.38*	1	.38*	1	.36*
	-----	.00	-----	.00	-----	.00

*Correlation is significant at the .01 level (2-tailed)



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EDUCATION

The Pennsylvania State University, Schreyer Honors College • University Park, PA
Bachelor of Science in Human Development and Family Studies
Minor: Health Policy and Administration

May 2011

Schreyer Honors College

Honors Thesis: Correlations of Adolescent Involvement in Performing Arts and Increased Educational Performance

WORK EXPERIENCE

Office of Residence Life

Resident Assistant, University Park, PA

Summer 2009 – Present

- Developed Health and Wellness living and learning community for first-year students
- Mentored 76 residents in both large group and one-on-one settings
- Created major-specific programming with the Assistant Dean of Health and Human Development
- Led Professional Development workshop on increasing technological saviness in the workplace to 50 colleagues
- Served on hiring committees for various positions in Residence Life

Penn State Pan-Hellenic Dance Marathon (THON)

HEAL THON Founder and Overall President

Fall 2007 - Present

- Created a new THON group, recruited 90+ members
- Designed multi-state fundraising efforts, raising over \$15,000 in the past year
- Mentored a leadership team, creating a stable organizational structure for future success

College of Health and Human Development

Teaching Assistant, Human Development & Family Studies

Fall 2008 – Present

- Created lesson plans for honors research methods class using statistical software (SPSS)
- Led First-Year students in a small, 25 student environment

Wynnwood House

Project Manager

Fall 2009

- Worked with long-term care facility owner to measure quality and satisfaction outcomes among employees
- Increased staff morale by implementing morale program for 20 direct care workers

Hamot Hospital

Emergency Department Hospitality Assistant

Summer 2009

- Supported emergency room personnel with administrative tasks (intake of 66,000 patients per year)
- Increased overall patient satisfaction by working with department leaders to create a new survey system

ACTIVITIES

Penn State Varsity Crew Team: Dedicated 12+ hours per week to practices • 2010 McGreavy Award Winner • Elected Team Captain
• Organized Senior Giving Campaign

Detroit Women's Rowing Association: 2010 Social Director • Organized 20 person Winter training trip

Other Associations: DiscipleMakers Christian Fellowship • Blue and White Society • LGBTTA Support Network

COMPUTER SKILLS

Statistical Package for the Social Sciences (SPSS) • Proficient with Microsoft Word, Powerpoint • Google Documents • Prezi

CERTIFICATIONS

Health Insurance Portability and Accountability Act (HIPAA) Certification

Spring 2009

Emergycare Emergency Medical Technician (EMT) Course

Summer 2008

- Obtained official EMT license • Attended 300+ hours of classroom and hands on instruction

Lake Erie College of Osteopathic Medicine (LECOM) Pharmacy Technician

Spring 2007

- Gained experience filling prescriptions, dispensing medication in pharmacies

LECOM Anatomy Academy

Summer 2006

- Worked with cadavers (under D.O. instruction) to learn about various medical conditions