

Sport Participation Rates among Underserved American Youth

Prepared by the
University of Florida
Sport Policy & Research
Collaborative

Michael Sagas and
George B. Cunningham

The purpose of this research brief is to review and describe the most relevant and recent data on the topic of sport participation rates among American youth by various historically underserved populations. Specifically, data is aggregated and summarized by social class, race, gender, and disability status. While the available data and research related to sport participation and physical activity rates among youth is often scant and even non-existent in some cases, what research that is available demonstrates several significant participation and activity gaps between wealthy and poor, Whites and racial minorities, boys and girls, and able-bodied and disabled youth.

More specifically, the available data suggests that now more than ever, it takes significant resources such as time, access, and money to develop as an athlete and be fully engaged in organized sport activities. This reality eliminates or limits access to quality sports opportunities for millions of American kids in low income families. Boys continue to have much greater access to sport opportunities than girls across all grade levels. Boys are also much more likely to achieve recommended physical activity levels than their girl counterparts. Hispanic children are much less likely to be physically active than White children, and sport participation rates for White kids exceed that of African-Americans, Hispanics, and Asian kids. Furthermore, data on other historically marginalized groups such as Native-American children are not even reported in governmentally funded studies that track physical activity in youth.

Disabled youth have achieved a great deal of access and opportunity for sport at several levels, especially physical education at school. However, opportunities to play sports for youth athletes with disabilities are exceptionally scarce at almost all of America's publicly funded schools.

Social Class and Socioeconomic Status Differences

The evolving and complex youth sport system in the U.S. necessitates significant resources, such as time, access, and money, to develop as an athlete and play competitive sports. Indeed, economic means play an important role in the sport participation opportunities people enjoy.¹ Some of the most recent available data, which are aggregated in this brief, clearly show that youth who have access to financial resources are much more likely to participate in and gain from organized youth sport in American society. The actual financial costs involved in facilitating a youth sport career at the elite levels range from an average of a few thousand dollars per year, to more than \$20,000 per year in some sports.² Thus, it is not surprising to see that, just from the perspective of family income, participation in organized sports is not feasible for a majority of kids growing up in lower income families.

As can be gleaned from the data in Table 1, only 20% of U.S. households in 2009 reported an annual income of over \$100,000 per year, but 33% of households participating in sports enjoy that income level. For some sports, the gaps between the average U.S. household and the average U.S. sport participant household is much greater. For example, in the sport of soccer, 54% of participant households reported an income of over \$75,000 compared to just 32% of American households at that same level.

Further evidence in the participation gap by family income levels can be gleaned from the 2008 Women's Sports Foundation *Go Out and Play* study, which surveyed over 2,000 kids in grades 3 through 12. As demonstrated by the data depicted in Table 2, the percentage of children not engaged in any sports was highest among those households reporting an annual family income of \$35,000 or less. The households reporting annual family income of over \$75,000 per year reported the highest percentage of highly involved youth ath-

letes.

The inequalities to young people may be most problematic to kids forced to gain their access to sport through publicly funded sources. Indeed, athletic opportunities for children are also shaped by the economic conditions of their schools and local communities.³ As school districts continue to suffer from state and local

government cuts, funding to sport programs are often eliminated. For example, during the most recent economic recession in the U.S., news reports from around the country suggested that some schools in California were forced to cut entire middle school programs. Some districts in Florida were forced to cut as much as 40% of

their scheduled games.⁴

Findings from a recent Robert Wood Johnson Foundation Report⁵ suggest there is a positive relationship between the SES profile of a secondary school in the US and student participation in formal sports at that school. For example, participation rates among students at high SES schools was 36.1% for 8th graders, compared to just 24.6% among their peers in low SES schools. The gap had narrowed by the time students reached the 12th grade, but differences still remained: 32.7% participation rate for students at high SES schools and 26.3% participation among students in low SES schools. The Robert Wood Johnson Foundation report also demonstrated that participation rates among secondary students was highly associated with the number of func-

Table 1. Households Participating in Team Sports by Income Level and Selected Sports

Household Income	Total US Households	All Sport Participant Households	Soccer Participant Households	Baseball Participant Households	Football Participant Households	Basketball Participant Households
Under \$25,000	25%	15%	11%	12%	15%	15%
\$25,000 to \$50,000	25%	19%	18%	21%	20%	21%
\$50,000 to \$75,000	18%	19%	17%	19%	24%	22%
\$75,000 to \$99,000	12%	14%	17%	18%	15%	16%
\$100,000 and over	20%	33%	37%	31%	26%	27%

Notes. Data adapted from SGMA US Trends in Team Sports (2012). Figures include all participants (including adults and children) and only core participants for soccer, baseball, football, and basketball households.

Table 2. Family Household Income

Athletic Status	\$35,000 or Less	\$35,000 to \$75,000	\$75,000 or Greater
Non-Athlete	38%	35%	27%
Moderately Involved Athlete	48%	49%	49%
Highly Involved Athlete	14%	16%	24%

Notes. Data adapted from the Women's Sports Foundation (2008). Moderately involved athletes play 1-2 sports per year. Highly involved athletes play 3 or more sport per year.

tional sport facilities present at the school.

The available data show many factors contributing to different participation rates based on social class, including availability of facilities, resource gaps to pay coaches and officials, and little available equipment. In addition, the “pay-to-play” model that has evolved recently in public schools is also likely keeping children out of school sports. A 2012 C.S. Mott National Poll on Children’s Health demonstrates these effects. Data were collected from 814 randomly selected parents of children age 12-17. Results show that over 60% of children who play school sports have had to pay an athletic fee to play for their school. Further, only 6% of the surveyed parents indicated that they have ever received a waiver of this fee. In lower income households in this study, 19% of the respondents indicated a decrease in school sport participation due to the expense involved in playing. The average overall costs reported by parents in this survey for school sports participation was \$381 per year, and the average “pay-to-play” fee was over \$90 per student. For low-income families with little in the way of power or discretionary income, these fees necessarily become prohibitive and limit participation rates.

Gender Differences

Participation rate gaps between boys and girls in sports and physical activity are still significant, though gender differences have steadily declined over the past three decades. Boys still have significantly greater access to community sports, sports in middle and high schools, and even among the wealthiest of university level athletic programs. Much of the participation gap today is likely a remnant of the myths that sport activities were not suited for girls and women. These included the notion that females were naturally frail, they lacked interest in sports, and physical activity could actually harm the female body.⁶ Since the early 1970’s, and especially in the past few decades, more enlightened thinking has allowed girls and women to gain considerable access to sport and physical activity. In fact, girls’ sports participation since the enactment of Title IX in 1972 has increased 10 fold at the high school level alone. Yet, as can be gleaned from the data presented in this report, some 40 years after Title IX, significant gaps in participation and physical activity achievement still exists for a majority of American girls.

Table 3. Reported Physical Activity for at Least 60 Minutes/Day During the Past Week, by Gender

	Very Active Students							
	0 Days	1 Day	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days
Girls	7%	8%	12%	15%	15%	15%	8%	18%
Boys	6%	8%	7%	11%	15%	17%	9%	30%

Notes. Data adapted from the Women’s Sports Foundation (2008).

Physical Activity Levels for Boys and Girls

According to reports aggregated and reported on the Healthypeople.gov web portal, only 18.4% of students in the 9th through 12th grades currently meet the daily guidelines for aerobic physical activity of at least 60 minutes per day. A significant gender difference was noted for this variable as 24.8% of boys in grades 9-12 do meet the daily guideline, compared to just 11.4% of girls. These gaps among adolescent girls and boys are mirrored in adult women and men. As of 2011, women are less likely to engage in moderate physical activity than men (45.4% to 52.4%). Women are also much less likely to meet the guidelines for daily physical activity than men (17.1% to 24.6%). Similarly, the 2008 study from the Women’s Sports Foundation illustrated that boys were much more likely to be physically active than girls, as only 41% of the girls in this national study were physically active at least 5 days in the prior week compared to 56% of the boys in the sample. These data are depicted in Table 3.

The same report also noted significant participation gaps among boys and girls in organized and team sports. These differences existed across all age levels. As can be seen in Table 4 that is based on a 2007 survey of students, boys were much more likely to say they were involved in some form or another in “organized or team sports” than are girls, although the size of the participation gap did vary based on the age of the child.

Table 4. Self-Reported Participation Rates by Grade and Gender

	Grade 3-5	Grades 6-8	Grades 9-10	Grades 11-12
Girls	70%	72%	68%	64%
Boys	79%	77%	70%	69%

Notes. Data adapted from Women’s Sports Foundation (2008).

However, as noted in this study, sport opportunities for girls varied greatly based on a child's geographic location, family structure, and even race. A summary describing these differences from the report suggested the following (Women's Sport Foundation, 2008, p. 34):

Our findings suggest that if children are female, live in an urban area and are growing up in a lower-income single-parent family, they are less likely to be involved with sports during childhood and adolescence. Children's life chances in sport, or the probabilities that they will ever play and benefit from sports, flow from the intersections between personal preferences and social opportunities. Suburban girls have more sport options than their urban and rural counterparts. The chances that a poor girl will never play a sport are greater than an upper-middle-class girl. Fewer urban girls participate in sports than their male counterparts.

According to the National Federation of State High School Associations (NFHS), in 2012-13, there were 4,490,854 boys and 3,222,723 girls participating in high school sports. Over the past 20 years, girls' participation has increased 63%, compared to 31% for boys (NFHS, 2013). Further, in 1971 only 1 out of every 27 high school girls played a sport. In 2008, 1 in 2.4 girls played a high school sport compared to 1 out of every 1.7 boys in American high schools.⁷ Participation in National Collegiate Athletic Association (NCAA) sports also demonstrate significant gaps in the sports opportunities offered to women as compared to men. In 2011-2012, the average NCAA institution had 238 men and 181 women participating. That year, there were 198,103 women participating on 9,999 teams, while there were 261,150 men participating on 8,784 teams.

Racial Differences

Significant events and practices in American history, such as segregation and racial exclusion, have severely limited racial minorities' participation in sports. Indeed, African-Americans, in particular, were systematically excluded from White-controlled sports events, programs, and organizations for decades.⁸ Even today African-Americans continue to be excluded from participa-

tion in numerous sport types and from being members of private sports organizations. Beyond these forms of discriminatory and exclusionary practices, variations in discretionary income and cultural norms also contribute to racial differences in both access to and participation in sports.⁹ Relative to Whites, racial minorities are more likely to live in poverty and have restricted resources available to pay for sport participation. Cultural norms and expectations also influence who takes part in what sports, as they set expectations and signals of what is appropriate or popular to young athletes.

Table 5. Percent of American Adults Who Do Not Participate in Leisure-Time Physical Activity, By Race and Year

	2008	2009	2010	2011
American Indian	49.2%	35.2%	40.2%	35.2%
Black Only	47.3%	40.7%	42.8%	40.8%
White Only	34.6%	30.8%	30.8%	30.1%
Asian Only	33.6%	36.2%	32.9%	32.6%
Native Hawaiian or PI	---	46.2%	---	55.5%
Hispanic or Latino	47.4%	43.9%	44.6%	42.2%

Notes. Data adapted from www.healthypeople.gov.

Physical Activity Levels by Race

The focus of this research brief is to outline participation rates of American youth sports and physical activity. However, data showing differential participation rates in adults can also be quite informative, especially when adult data reflect activities among youth. For example, data from the Healthypeople.gov data portal suggests that the proportion of adults who do not participate in any form of leisure-time physical activity continues to be high and varies by race. White American adults indicated the lowest (best) levels of inactivity, while Hispanic and Latino adults indicated some the highest inactivity levels. These data are depicted in Table 5.

Iannotti and Wang, who collected data over an 8-year timespan from over 30,000 U.S. adolescents between the ages of 11 and 16, observed a similar pattern in youth.¹⁰ The authors in this study defined physical activity as "any activity that usually increases your heart rate and makes you get out of breath some of the time" and assessed the volume of activity achieved on a days per week basis. They found significant gender differences across all three timespans analyzed, further supporting

the activity gaps discussed in the gender section. The authors also noted significant race effects, as Hispanic adolescents were less physically active on a daily basis than were Whites. Unfortunately, the data for the racial difference analyses were not provided in the manuscript and only this one racial difference was noted as significantly different in their population, which included a comparison of Whites, African-Americans, Hispanics, and category they termed ‘Other’ races.

The Department of Health and Human Services’ Healthy People 2010 Final Report¹¹ also provides considerable data related to the physical activity levels for both adults and high school aged children. For the data related to high school youth, White students in the 9th to 12th grades were reported to be more likely to engage in both moderate daily physical activity and vigorous physical activity than were either Black students or Hispanic or Latino students. Unfortunately, data are not available for activity level comparisons among Asians, American Indians, persons with mixed races, or Native Hawaiian/Pacific Islander students.

Sport Participation by Race

Data depicted in Table 6 show how race and gender interact to influence athletic involvement.¹² Asian girls were most likely to be a non-athlete and least likely to be a highly involved athlete. Among boys, Hispanic reported the highest percentage of non-athletes in the sample at 28%, and just 25% of Hispanics in the study were identified as being highly involved athletes. This

figure is substantially lower than the corresponding values among White boys (30%) and African-American boys (31%).

Physical and Intellectual Disabilities

According to the U.S. Census Bureau, approximately 56.7 million people in the U.S. had a disability in the 2010. This figure represents about 18% of the population, meaning that 1 in 5 Americans have a disability. Data related to children and adolescents with a disability suggests that 8.4% of children in the U.S. under the age of 15 have a disability, and 4.2% of this population has what is considered a severe disability.

Children and adolescents with disabilities often experience very limited opportunities for athletic participation in their communities and schools,¹³ and thus these children are at a disproportionate risk of being physically inactive. These dynamics can also increase complications from secondary conditions often associated with disabilities.¹⁴ Physical inactivity as youth likely also contributes to the fact that adults with disabilities are much more likely to obese and be physically inactive than are adults without disabilities.¹⁵

Access to sports for athletes with a disability is almost non-existent at the college level¹⁶, but several high schools across the country have made progress in providing opportunities for athletes with disabilities on their campuses. A recent report, in the National Federation of High Schools publication *High School Today*¹⁷, outlines how schools in a dozen states are offering athletics programming adapted for students with disabilities. The NFHS have also been very proactive in disseminating information and interpretations of the U.S. Department of Education’s Office of Civil Rights “Dear Colleague” letter, which outlined the legal obligations of schools to provide students with disabilities equal opportunities to participate in athletics. Further, according to the 2012-2013 NFHS High School Athletics Participation Survey, 8,747 high school student-athletes par-

Table 6. Athletic Involvement by Gender and Race

	White	African American	Hispanic	Asian
Female Non-Athlete	24%	36%	36%	47%
Female Moderately Involved Athlete	54%	47%	50%	44%
Female Highly Involved Athlete	22%	17%	14%	9%
Male Non-Athlete	26%	21%	28%	22%
Male Moderately Involved Athlete	43%	49%	47%	43%
Male Highly Involved Athlete	31%	30%	25%	35%

Notes. Data adapted from Women’s Sport’s Foundation (2008). Moderately involved athletes play 1-2 sports per year. Highly involved athletes play 3 or more sports per year.

ticipated in adapted sports in the U.S., which represented an impressive increase from the 3,958 participants that participated in the 2011-2012 reporting year.

The Individuals with Disabilities Education Act (IDEA) defines a child with a disability as a child having one of the disabilities specified in section 602(3) of the law, who by reason of the disability needs special education and related services. The following categories of disability are included in section 602(3) of the IDEA: developmental delay (only for children under the age of 9); intellectual disability (formerly known as mental retardation); hearing impairments including deafness; speech or language impairments; visual impairments including blindness; emotional disturbance; orthopedic impairments; autism; traumatic brain injury; or other health impairments; and specific learning disabilities.

Source. US Department of Education (2011, p. 3)¹⁸

However, in a majority of school districts in the U.S., athletes with disabilities lack any opportunities to participate, and the schools are unwilling to allow athletes with disabilities to participate with their able-bodied counterparts.¹⁹ According to DePauw and Gavron, persons with disabilities face several key issues when pursuing sports participation.²⁰ Attitudes toward athletes with disabilities are poor, as they are seen as second class athletes. As a result, athletes with disabilities face barriers to inclusion, including a lack of sport programs, access to trained staff, access to accessible facilities, and financial resources for specialized equipment.

The available data comparing activity and sport participation for individuals with disabilities demonstrates just how severe of a gap exists between those with and without disabilities. According to the Healthypeople.gov web portal, 47% of adults with an activity limitation do not engage in any physical activity. This is substantially higher than the corresponding proportion (27%) of persons without that kind of disability. Further, 31.8% of people with an activity limitation engage in at least 150 minutes per week of moderate physical activity, compared to 52.7% of their peers without the limitation.

Data demonstrating physical activity levels for children and adolescents with disabilities show a similar pattern, and one estimate suggests that physical activity levels for children with disabilities can be as

much as 4.5 times lower than those without disabilities.¹⁸

A 2010 study by the U.S. Government Accounting Office (GAO) aggregated and reported data from several large governmental sponsored studies to offer estimates of physical education class participation as well as engage in sport and physical activity outside of school.²¹ Data in this report suggest that students with disabilities attend a physical education class at their schools at a similar rate as their able-bodied peers (44% and 49%, respectively). Furthermore, no differences were noted in the amount of time able-bodied and disabled students actually engaged in physical activity during their physical education courses.

The GAO report also suggests that students with disabilities do participate in extracurricular activities at fairly decent levels, although comparisons of participation rates to students without disabilities are not offered in the report. As depicted in Table 7, data suggests that 41% of students with disabilities aged 6 to 12 years old, and 33% of students aged 13 to 16 years old, reported participating in at least one school or community-based sport. Sports participation was significantly higher among boys with disabilities than for girls across both age groups.

As noted, comparisons to students without disabilities were not included in the report. However, when comparing these participation rates to the data available in other report, it can be concluded that able-bodied students participate at a much higher level than disabled athletes.

Table 7. Population Estimates for Sport Participation among Students with Disabilities

	Overall		Girls		Boys	
	Ages 6 to 12	Ages 13 to 16	Ages 6 to 12	Ages 13 to 16	Ages 6 to 12	Ages 13 to 16
Non-Athlete	59%	67%	69%	77%	55%	63%
Athlete	41%	33%	31%	23%	45%	37%

Notes. Data based on GAO report (2010). Athlete = participated on at least one sports team.

Notes

- Cunningham, G. B. (2011). *Diversity in sport organizations* (2nd ed.) Scottsdale, AZ: Holcomb-Hathaway.
- ESPN Parent Survey (2013) Available: http://espn.go.com/espn/story/_/id/9421568/parent-surveys-show-youth-sports-improve-family-dynamics-academics-espn-magazine
- Farrey, T. (2008). *Game On: The All-American Race to Make Champions Out of our Children*. New York: ESPN Books.
- Women's Sports Foundation Go Out and Play (2008). Available: <http://www.womenssportsfoundation.org/home/research/articles-and-reports/mental-and-physical-health/go-out-and-play>
- Cunningham (2011)
- Robert Wood Johnson Foundation (2012) Bridging the Gap Report on Sports Participation in Secondary Schools. Available: <http://www.rwjf.org/en/research-publications/find-rwjf-research/2012/10/sports-participation-in-secondary-schools.html>
- C.S. Mott National Poll on Children's Health (2012). Pay-to-play sports keeping lower-income kids out of the game. Available: <http://www.mottnpch.org/sites/default/files/documents/051412paytoplayreport.pdf>
- Woods, R. (2011). *Social Issues in Sport*. Champaign, IL: Human Kinetics.
- Coakley, J. (2009). *Sports in Society: Issues and Controversies*. New York: McGraw Hill.
- Cunningham (2011)
- Hibbler, D.K., & Shinew, K.J. (2002). Interracial couples' experience of leisure: A social network approach. *Journal of Leisure Research*, 34, 135-156.
- Ianotta, R. J., & Wang, J. (2013). Trends in physical activity, sedentary behavior, diet, and BMI among US Adolescents, 2001-2009. *Pediatrics*, 132, 606-614.
- Heathly People 2010 Final Review. Available: www.cdc.gov/nchs/data/hpdata2010/hp2010_final_review.pdf
- Women's Sports Foundation (2008)
- Rimmer, J. (2008). Promoting inclusive physical activity communities for people with disabilities. *President's Council on Physical Fitness and Sports Research Digest*, 9(2), 1-8.
- Rimmer, J., & Rowland, J. L. (2007). Physical activity for youth with disabilities: A critical need in an underserved population. *Developmental Rehabilitation*, 11(2), 141-148.
- Centers for Disease Control and Prevention Promoting the Health of People with Disabilities. Available: www.cdc.gov/ncbddd/disabilityandhealth/pdf/PromotingHealth508.pdf
- Hendrickson, Brian. "Boundless Determination." *NCAA Champion Magazine* (Winter 2013): 46- 53.
- NFHS High School Today (2014). Developing school sports program for students with disabilities. Available: <https://www.nfhs.org/hstoday>
- US Department of Education (2011) Creating Equal Opportunities for Children and Youth with Disabilities to Participate in Physical Education and Extracurricular Activities. Available: www2.ed.gov/policy/speced/guid/idea/equal-pe.pdf
- Mullins, A. (2008). Advocates back athletes with disabilities. Available: <http://www.womenssportsfoundation.org/en/home/research/articles-and-reports/athletes-with-disabilities/advocates-back-athletes-with-disabilities>
- DePauw, K.P., & Gavron, S.J. (2005). *Disability Sport*. Champaign, IL: Human Kinetics.
- U.S. Government Accountability Office (2010). Students with disabilities: More Information and Guidance Could Improve Opportunities in Physical Education and Athletics. Available: www.gao.gov/products/GAO-10-519

**About the Authors and SPARC**

Michael Sagas is currently a Professor of Sport Management and serves as Chair of the Department of Tourism, Recreation and Sport Management at the University of Florida. George B. Cunningham is a Professor and Associate Dean for Academic Affairs in the College of Education and Human Development at Texas A&M University. Cunningham publishes widely in the area of diversity in sport and physical activity and has authored an award-winning book, *Diversity in Sport Organizations*. He is the director of the Laboratory for Diversity in Sport (<http://www.diversityinsport.com>).

The SPARC is an interdisciplinary research collaborative within the Sport Management Program in the Department of Tourism, Recreation and Sport Management at the University of Florida. SPARC is comprised of Sport Management faculty within the UF Sport Management Program, as well as research and policy experts serving the University of Florida. SPARC serves to bring together talented faculty and cohesion to individual research efforts. Dr. J.O. Spengler serves as the Director of SPARC. The purpose of SPARC is to produce relevant and timely research that addresses sport as a facilitator of the physical, social, and emotional health of individuals, and the economic health of communities. SPARC is the official research partner of the Aspen Institute's Project Play.



The Aspen Institute's Project Play is a thought leadership exercise that will lay the foundation for the nation to get and keep more children involved in sports, with a focus on addressing the epidemic of physical inactivity. The Sports & Society Program convenes sport, policy and other leaders in a series of roundtable and other events, and in late 2014 will publish a framework for action that can help stakeholders create "Sport for All, Play for Life" communities. Project partners/sponsors include the Robert Wood Johnson Foundation, David & Lucile Packard Foundation, ESPN, the Clinton Health Matters Initiative, Nike, and the University of Florida's Sport Policy & Research Collaborative. More: www.AspenProjectPlay.org