

TEEN SPORT IN AMERICA: WHY PARTICIPATION MATTERS

Executive Summary

January 2018

A Women's Sports Foundation Report



Women's Sports Foundation Acknowledgments

This research builds on previous research and policy that view teen sports as an educational tool and public health asset. However, little to no research has scrutinized whether adolescent health and educational achievement vary from sport to sport. First, the Women's Sports Foundation is indebted to the study authors, Nicole Zarrett, Ph.D., Philip Veliz, Ph.D., and Don Sabo, Ph.D. We're proud to be associated with such creative and excellent researchers and writers. We are grateful to Bruce Y. Lee, M.D., M.B.A., the primary author of the policy recommendations, for his thoughtful and thorough development of recommendations that can lead to improvements in how teens experience sport.

We are deeply indebted to Deborah Slaner Larkin, who originally championed the idea that each sport might make unique contributions to the health and well-being of American youth and that understanding these benefits would ultimately lead to more opportunities for youth to play sports. She was a powerful advocate and supporter for this line of research when she served as the Executive Director of the USTA Serves (now Foundation) and oversaw the development and conduct of the research that resulted in *More Than A Sport: Tennis, Education, and Health*, a first-of-its-kind nationwide study that compared the educational and health profiles of adolescent tennis participants with participants in other non-contact sports and contact sports, as well as high school students who did not participate in sports. Later, as WSF CEO, she made this line of research an organizational priority, helped conceptualize the project, and made many important contributions to the final report.

The panel of scholars, health policy experts, and youth sport leaders who reviewed the findings and the policy recommendations provided invaluable feedback that improved the final report immensely.

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About The Women's Sports Foundation

The Women's Sports Foundation — the leading authority on the participation of women and girls in sports — is dedicated to creating leaders by ensuring girls access to sports. Founded by Billie Jean King in 1974, our work shapes public attitude about women's sports and athletes, builds capacities for organizations that get girls active, ensures equal opportunities for girls and women, and supports physically and emotionally healthy lifestyles. The Women's Sports Foundation has relationships with more than 1,000 of the world's elite female athletes and is recognized globally for its leadership, vision, expertise and influence. For more information, visit www.WomensSportsFoundation.org.

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LETTER FROM THE CEO

Founded more than 40 years ago by Billie Jean King, the Women's Sports Foundation is a powerful voice and catalyst for ensuring all girls have equal access to sports and physical activity and the benefits they provide. Sports teach us to be strong and to work together toward a common goal. Sports teach us perseverance in the face of loss and obstacles and they teach us to win gracefully. We know that courageous leaders are made on the playing field and the court, and in the rink, arena or gymnasium.

Research is the centerpiece of the work we do at the Women's Sports Foundation, and is essential to demonstrating that sports lead to healthier, happier, more productive lives.

Since our inception, we have been conducting evidence-based research to measure the impact of physical activity and sport on girls, gaps in access, gender inequality, and need for role models. We recognize that data drives public education, debate, action and policy, which can lead to greater access, opportunity, leadership and gender equity for women's sports.

We are also driven by the knowledge that teen sports are both an educational tool and a public health asset. We embarked on this report, *Teen Sport in America: Why Participation Matters*—which is the first to offer in-depth analysis into how the type of sport and number of sports that teens play impacts their health and well-being—in order to identify opportunities to improve access to high quality sports programming for teen girls.

With this study, we reaffirm that teens who play sports not only do better in school, but also are more likely to have high self-esteem, stronger relationships and improved physical health. The data reveals this is especially true for teen girls who participate in two or more sports. The data shows that, while all sports have benefits, some sports generate more positive impacts than others. The report findings identify the unique benefits and opportunities for improvement that exist within each sport to maximize the health benefits for teens.





Unfortunately, too many teens, primarily teen girls of color, still don't have equal access to sports. And with an increase in teens between eighth and 12th grades dropping out of sports, this means that teen girls—a group that is already 15 percent less likely to participate in sports than their male counterparts—are disproportionately missing out on experiencing the full academic, educational and health benefits of sports.

We encourage policymakers, administrators and coaches to read the report and the detailed policy recommendations, which we believe will strengthen the positive impact of sports, and will ensure more teen girls—particularly girls of color—have access to high quality sports programming, and its benefits.

We also look forward to reaching a wide community of teen-serving organizations, thought leaders and parents so they can understand how sports can unlock the future for teen girls. This report empowers us all to be stronger advocates for the teen girls in our lives—whether they're our daughters, sisters, neighbors or friends.

The Women's Sports Foundation will continue to lead the way for girls and young women with its unique focus on ALL girls and ALL sports. This investment in girls creates a more just and equitable society and pays dividends in the form of personal and public health, self-determination, achievement, leadership and prosperity.

Dr. Deborah Antoine

CEO, Women's Sports Foundation

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EXECUTIVE SUMMARY

The Women's Sports Foundation commissioned the *Teen Sport in America: Why Participation Matters* report to better understand the impact of sports participation on teen health, well-being and academic achievement. We sought to understand how each sport impacts teen well-being, and whether the number of sports in which a teen participates influences their health. We also sought to better understand whether sports opportunities overall, as well as individual sports, are accessible to all teens across genders, race and ethnicities, levels of family income and regions. Finally, we wanted to identify the unique benefits and opportunities for improvement that exist within each sport to maximize the health benefits for teens.

This report builds on previous research and policy showing that athletic participation has a favorable influence on academic achievement, ¹⁻⁵ psychological well-being, ^{6,7} and physical health. ^{8,9} And it digs deeper by looking at the little-studied question of whether adolescent health and educational success vary from sport to sport. ¹⁰ This report goes beyond most previous research by looking at a larger number of positive health outcomes; previous research

considered only a small number of well-being outcomes, which can limit discovery and understanding of how sports contribute to positive youth development.⁵

The research is based on an analysis of the Monitoring the Future (MTF)* nationwide surveys, a federally funded longitudinal study of American secondary students. 11 We evaluated 20 sports most commonly accessible to American teen girls and boys to identify which sports are doing well in promoting health and preventing risk, and which have room for improvement. This included the 13 most popular sports in the U.S. (baseball/softball, basketball, cheerleading**, cross-country, football, golf, lacrosse, soccer, swimming/ diving, tennis, track and field, volleyball, and wrestling) and seven emerging youth sports (crew, equestrian, field hockey, gymnastics, ice hockey, water polo, and weight lifting). All data analyses controlled for key sociodemographic variables like sex, race, and socioeconomic status. In this way, our report answers questions about how each specific sport is related to healthy development for all participating teens, regardless of their sex, race, or socioeconomic background.

^{*} See the Measures index on page 43 for more detailed information on the study design, sample and data analysis. More details on the MTF can be found at http://www.monitoringthefuture.org/.

^{**} Monitoring the Future asks respondents if they "competed in competitive cheerleading." Many sideline cheer squads do have a culminating competitive cheer opportunity, which may have prompted respondents to respond favorably. However, it should be noted that a squad whose main focus is sideline cheer with limited competitive cheer opportunities would be unlikely to qualify as a 'sport' for Title IX purposes as defined by the Office of Civil Rights.



We found that each sport has its own subculture¹² and provides a unique experience that likely influences youth behaviors and development in different ways. Young people's experiences can also differ depending on how many sports they play.

We also identified opportunities to strengthen the impact of sports participation and make it even more beneficial to teens. For example, some studies suggest potential risks of sports participation, including higher rates of substance use, ^{13,2} consumption of fast food and sweetened beverages, ^{14,15} lack of sleep, ¹⁶ and self-criticism. ^{17,18} By better understanding the potential risks, we can make policy recommendations to improve or strengthen the impact sports have on youth.

With this study, we hope to provide useful insights for use by Women's Sports Foundation and Laureus Sport for Good Foundation USA leadership and beyond. The findings can be used as a catalyst for evidence-based policy development, provide new and reliable information for sport governing bodies and support the development of sport programming. They also will help educators, coaches, athletic directors, and parents understand and assess the role that different sports can play in youth development.

Key Findings

Sports are transformative in the lives of teens.

Research has shown that sports participation and physical activity support long-term health, ¹⁹ achievement, ²⁰ and well-being. ²¹

Physical health

Findings linked sports participation to positive physical health. Teens who played sports were more likely to have a healthy diet — eating breakfast, and fruits and vegetables, daily — get ample daily physical activity, and sleep at least seven hours per night. All of these have been identified as important factors in preventing obesity and related diseases.

Academic achievement

Sports participation was directly related to teens having a more positive attitude toward schoolwork, improved academic performance and higher grades, and higher aspirations for earning a college degree and post-college education specialization.

Previous research has shown that these academic factors are important predictors of future educational attainment and occupational success. ¹⁻⁶



Psychological well-being

In addition, our study showed that teens who played sports fared better than non-athletes on multiple markers of psychological health, including high self-esteem and stronger social connections, such as higher levels of social support and fewer feelings of loneliness.

The number of sports teens participate in matters.

In almost all the outcomes considered in this report, teens who participated in two or more sports benefitted the most from their involvement. They performed better academically and also reported better psychological and physical health than teens who played just one sport. This may be because the positive development fostered by playing sports has a cumulative effect, with the benefits of one sport reinforcing the other. In addition, playing multiple sports may expose youth to a broader range of growth-related opportunities and skills, such as teamwork, task commitment, or the ability to balance multiple scheduling demands. These opportunities give teens more chances to contribute, build supportive relationships with a variety of adults and peers, and have a buffer against possible negative experiences in one of the sports or in other areas of their lives. 5 Since teens benefitted the most from playing two or more sports, it's particularly alarming that only 37% of teens play more than one sport, and many teens, 39% of girls and 25% of boys, don't even play one sport. Attrition rates also varied by sport. Among the 20 sports, 16 sports lost participants between eighth and 12th grades.

Each sport provides a unique impact on health.

Findings showed several sports to be particularly effective in promoting healthy development across all key areas of well-being. The most supportive sports include track and field, cross-country, tennis, and soccer. Another set of sports provided unique support in some, but not all, areas of well-being. For example, the research linked basketball with average levels of physical health and academic achievement, but the sport also showed the highest ratings for supporting psychological health. Similarly, lacrosse athletes engaged in several healthy behaviors, including healthy eating, and possessed a fairly strong profile of psychological health, but the research showed them to be at high risk for substance use and poor academic achievement. Weightlifting had very positive profiles across all areas of well-being except for substance use, because it was linked with one of the highest risks for alcohol binge drinking.

A few sports showed particularly low total ratings and can benefit from improvements across almost all areas of well-being. For example, the data linked wrestling to poor health because of an increased risk of substance use, lower academic achievement because of poor grades and higher rates of skipping class, and a high risk of poor psychological health due to lower self-esteem and lack of social support. Along with wrestling, crew and ice hockey showed the lowest total ratings across well-being outcomes among all 20 sports studied for this report. The low total rating score was largely driven by the significantly higher risk of poor



psychological health and substance use.¹³ High-contact sports, like wrestling, may facilitate a context that places a premium on risky behaviors like fighting or engaging in minor forms of delinquency like substance use.

Room for improvement exists in some areas, especially in certain sports.

Although sports yield mostly positive benefits, research linked participation in sports with a higher risk for binge drinking. Teens who participated in two or more sports faced the greatest risk. Although sports participation can protect against the use of some substances, such as cigarettes, youth participation in multiple sports had no impact on other unhealthy behaviors, such as marijuana use or caffeine intake, and could be a risk factor for alcohol binge drinking. Differences in the culture of particular sports may be partially responsible for sports not consistently preventing risky behaviors. For example, the amount of physical contact in a sport seems to be a factor. Sports that involve continual aggressive contact, such as football, may influence risky behavior off the playing field by promoting the notion that the body is a means to an end. On the other hand, sports that involve minimal to no contact, such as tennis, may promote the idea that the body is an end in itself, motivating youth to sustain long-term health, which minimizes the risk for substance use and other risky behaviors.13

Diversity and disparities in sport depend on geographic region and type of sport.

Equitable access and opportunities in sport also remain a challenge. In particular, girls and teens from low-income families are still participating at significantly lower rates than boys and teens from more affluent backgrounds, with certain sports having greater gender and economic divides than others. Although findings suggested that sports are racially and ethnically diverse (with similar participation rates found for white, black, and Hispanic youth), clear differences in the racial and ethnic composition of each type of sport suggests the need to improve equity and diversity within certain sports.

The time for sport-by-sport evaluation has come.

The findings clearly demonstrated the importance of looking at sports individually as well as collectively. Increased access to "big data" and a growing number of databases has made it possible to do program evaluation of specific sports at varying levels of analysis, such as by county, state, region, or nationally. Armed with better information, athletic directors and coaches who work within specific sports settings can assess the strengths and weaknesses of their efforts, just as school administrators and teachers do.



EVIDENCE-BASED POLICY RECOMMENDATIONS

The goal of this study was to produce useful insights into the diversity, health, and education, of the 20 major teen sports in the United States. The findings and interpretations can be used as a catalyst for evidence-based policy development within the sports assessed here, as well as other school and community sports. The findings and assessments provide new and reliable information for sport governing bodies.

The findings and interpretations of this study provide new and reliable information for sport governing bodies, coaches, schools, and parents, among others. They can also be a catalyst for evidence-based policy development, including these recommendations.

Increase Youth Participation in Sports

Rationale: Sports remain the primary way youth can get the recommended physical activity of 60 minutes per day and has other potential benefits. But the data from this study showed that almost one-third of teens do not participate in sports at all.

Recommendation 1: Prioritize increasing youth participation in sports and physical activity, with significant

input from youth about developing and implementing solutions. Ways to do this include:

- Establish national, state, and local government efforts to monitor and promote sports participation.
- Fund, support, and implement research to identify the barriers to sports participation and physical activity across different communities and populations and how to overcome them.
- Once barriers and solutions are identified, establish
 programs to execute strategic solutions. This should
 include research that looks at multiple factors
 impacting sports participation and uses advanced
 research methods and data to better understand the
 systems involved.

Improve Girls' Participation in Sports

Rationale: Girls are less likely than boys to participate in sports. According to the data, 38.6% percent of girls do not participate in sports, compared to 25.1% of boys.

Recommendation 2: Involve girls as a priority population in all aspects of Recommendation 1, including having girls



participate in the research and decision-making process. It will be important to determine which barriers are specific to girls and which ones are more common in particular socioeconomic groups or exist across all youth in order to create strategies needed to overcome them.

Recommendation 3: Ensure gender equity in opportunities to participate in sports. This may be done in a number of ways.

- Offer the same sports, programs, and facilities to both genders.
- Create a comparable culture for sports participation for girls, which includes changing social norms so it's more accepted and encouraged for girls to play sports.
- Provide mentorship, peer support, and awareness programs; establish female coaches and role models; educate parents and school officials; and increase the presence and images of women playing sports in various types of media.
- Identify ways to adjust the culture, composition, and
 operations of sports to make them more accepting
 of girls. Examples include making the leadership and
 coaching of different sports more diverse; removing
 rituals and behaviors that consciously or unconsciously
 exclude girls, such as hazing; adjusting schedules,
 equipment, uniforms, and rules that may be barriers;
 and editing promotional and instructional materials to
 reflect diversity.

Encourage Participation in Multiple Sports

Rationale: Participating in more than one sport increases protective health benefits, but only 37.4% of teens participate in more than one sport. Involvement in multiple, diverse sports can help broaden skill sets and, as a result, improve achievement in sports and other areas of life.

Recommendation 4: Educate youth, parents, schools, and coaches on the benefits of playing multiple sports as well as the hazards of focusing on one sport too early, which includes higher risk of injury. There are a number of ways to do this:

- Fund, support, and implement research to determine
 the barriers to multi-sport participation in different
 communities, school types and sizes, and populations,
 and design and develop strategies to overcome
 these barriers.
- Increase availability of equipment, facilities, and coaches for a wider variety of sports.
- Place limits on the lengths of seasons and practice times for a given sport. Longer and overlapping seasons and practice sessions make it more difficult for youth to participate in multiple sports.
- Limit early scouting and programs that track youth into a single sport at an early age.



Decrease Attrition from Sports

Rationale: The study found an attrition rate of 15.8% in sports participation from eighth grade to 12th grade.

Recommendation 5: Fund, support, and implement research to determine the causes of athletic attrition in different communities and populations. This should include evaluating multiple contributing factors, such as cost of sports involvement, injuries, lack of family or social support, lack of mentorship or opportunities, and sports becoming less fun or enjoyable as they become more competitive. Special attention should be paid to injury prevention.

Recommendation 6: Make it easier for youth to play sports and stick with it. Strategies for doing this include:

- Increase the number and size of varsity teams.
- Enhance opportunities for youth to play sports at the non-varsity level, such as junior varsity, club, and recreational sports.
- Improve the quality of physical education (PE) classes so they not only serve as feeders to competitive sports teams but provide opportunities, training, and education for those who remain recreational athletes.
- Require schools to provide PE classes, ensure that schools adhere to mandated PE requirements, and advocate for mandating more hours of PE.

- Conduct more multi-faceted research to further establish the link between PE, academic performance, and other current and future success.
- Coordinate sports schedules with other competing demands so teens don't have to choose between playing sports and other activities such as academics, music, drama, or work, and don't experience burnout. Also establish recommendations or regulations for practice and training time for sports.
- Make fields, courts, and other locations available to recreational sports, in addition to formal team activities.
- Expand the number of available sports to include those not traditionally offered, including emerging sports and non-competitive activities such as yoga and hiking. This will give teens more options to engage in physical activity.

Prevent Unhealthy Behaviors Associated with Certain Sports

Rationale: While sports participation is associated with a number of healthy behaviors, certain unhealthy behaviors, such as alcohol use and binge drinking, are also linked to sports participation, especially with certain sports.

Recommendation 7: Fund, support, and implement research to determine the causes of links between participation in different types of sports and unhealthy behaviors, academic performance issues, and psychological



issues, and develop potential sport-specific strategies to reduce those risks. The research should address not only sports, but also other issues that may contribute to unhealthy behaviors, such as surrounding community structure and influence, economic hardship, bullying, stress, and discrimination. Related steps include:

- Establish education, surveillance, and early intervention programs to identify and help youth who may be at risk for these unhealthy behaviors.
- Make fundamental changes in the structure and culture of particular sports to reduce the risk of unhealthy behaviors. For example, a critical point of intervention would target youth in high-contact sports — such as football, wrestling, ice hockey, and lacrosse — given their higher likelihood of engaging in substance use, along with some of the other academic and psychological challenges associated with participation.

Develop More Tailored Approaches to Increasing Sports Participation

Rationale: The study found significant variation in results for different sports and various populations. Although the study looked at different demographic groups, it did not closely examine groups such as Asian Americans and Native Americans.

Recommendation 8: Consider all of the recommendations in this report on a sport-by-sport basis. Some general principles may apply across all sports, but different sports have their unique strengths and challenges, so treating all sports as a single entity may overlook these variations.

Recommendation 9: For all of the above recommendations, explore, evaluate, and address populations and demographics that have been overlooked, including races and ethnicities that have not been well-studied and other emerging demographics. Fund, support, and implement research to do this work.



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