A growing body of research literature finds that in addition to improved physical health, sport plays a primarily positive role in youth development, including improved academic achievement, higher self-esteem, fewer behavioral problems, and better psychosocial. Many studies focus on the effects of sport on the five “C’s”—competence, confidence, connections, character, and caring—which are considered critical components of positive youth development. It has long been thought that the many facets of playing sport—the discipline of training, learning teamwork, following the leadership of coaches and captains, learning to lose—provide lifelong skills for athletes.

Sports do not build character. They reveal it. John Wooden, Legendary UCLA Basketball Coach

The literature on youth sport stresses the positive effects of participation in learning the important life skills of goal setting and time management combined with enjoyment; the development of a strong sense of morality; and the development of an appreciation of diversity. Longitudinal studies have shown that children and youth participating in sport, when compared to peers who do not play sport, exhibit:

• higher grades, expectations, and attainment;
• greater personal confidence and self-esteem;
• greater personal confidence and self-esteem;
• greater connections with school—that is, greater attachment and support from adults;
• stronger peer relationships;
• more academically oriented friends;
• greater family attachment and more frequent interactions with parents;
• more restraint in avoiding risky behavior; and
• greater involvement in volunteer work (see Linver et al. for a summary).

These outcomes are thought to be related to the contribution of sport to learning values and skills associated with initiative, social cohesion, self-control, persistence, and responsibility. Theories of positive youth development stress the importance of sport in acquiring skills that are beneficial in other domains (e.g., school, family, work) that lead to better adaptive skills.

People who work together will win, whether it be against complex football defenses, or the problems of modern society.  
Vince Lombardi, American Football Coach

Sport provides opportunities for children and youth to engage in valuable and positive relationships with adults, which is especially important when such benefits are not available at home. Thus, it is a missed opportunity for children who are "gated"—or not included in sport—during early stages of childhood because they are less well behaved than other children. These children are being prevented from participating in the very thing that could help them learn to control and regulate their behavior. Sport provides an opportunity for children to safely navigate and negotiate between right and wrong as they learn to interact with peers and adults. Research by Taliaferro et al. suggests that playing sport can even protect against suicide risk in youth. Compared to nonathletes, male athletes exhibit lower levels of hopelessness and suicidal ideation. Young males involved in multiple sports seem to garner even more protection in this regard. Similar results were found for girls. Research on the role of exercise in adults confirms that it improves mood and alleviates many forms of depression. Bartko and Eccles found that youth who are highly involved in sport are more "psychologically resilient," that is, better able to recover from problems. Eccles et al. found that sport participation protects young athletes against alcohol problems.
Taliaferro et al. propose that youth who play sport have higher levels of social support, which provides higher levels of resilience. Becoming a member of a community that includes teammates, coaches, family, and the greater community provides “fertile ground for adolescent self-esteem development because teams provide opportunities for youth to engage with adults and peers to achieve collective goals” (p. 545). In addition, physical activity enhances one’s self-perceptions of body, competence, and self-worth. The assumed association between playing sport and improved psychological and behavioral outcomes (or character) is at times challenged, despite the overwhelming directionality of the positive associations. Skeptics also say that many studies have failed to examine whether athletes had specific character traits before playing sport. Moreover, many studies do not account for variations in sport participation by level of competition, type of sport played, and other contextual factors. Linver et al. caution that participating in other types of nonsport activities also can produce many of these benefits— for example, the performing arts, school clubs, and other prosocial activities. However, sport participation stands out over other activities as a confidence builder, showing a consistent advantage in building self-esteem and improved psychological functioning. This is particularly true during the later adolescent years (around 11th grade). Hansen et al. found that youth who play sport reported higher rates of self-knowledge, managing emotions, and physical skills compared to peers in academic and leadership activities.

Playing Sport Leads to Improved Academic Performance

I figure practice puts your brains in your muscles. Sam Snead, Professional Golfer

Numerous studies have demonstrated the positive effects of playing sport on academic achievement, in large part because of the positive influence of identity formation and emotional development. So, to flip Sam Snead’s perspective, practice figuratively puts muscles in your brain.

Data show that high school students who play sport are less likely to drop out. Participation in sport also has been associated with completing more years of education and consistently higher grades in school.
CDC synthesized and analyzed the scientific literature on the association between school-based physical activity and academic performance and found that the majority of the studies found positive associations. CDC’s report notes, “There is a growing body of research focused on the association between school-based physical activity, including physical education, and academic performance among school-aged youth” suggesting that such activity “may have an impact on academic performance through a variety of direct and indirect physiological, cognitive, emotional, and learning mechanisms” (p. 5). Similarly, research aimed at discovering whether sport participation can detract from academic performance found that participation in interscholastic sport and other team or individual sport, as well as other after-school physical activity programs, does not have a detrimental impact on students’ academic performance.

Research has shown that physical movement can affect the brain’s physiology by increasing cerebral capillary growth, blood flow, oxygenation, production of neurotrophins, growth of nerve cells in the hippocampus, neurotransmitter levels, development of nerve connections, density of neural network, and brain tissue volume. These changes may be associated with improved attention; improved information processing, storage, and retrieval; enhanced coping; enhanced positive affect; and reduced sensations of cravings and pain. Linder’s research suggests that increased energy levels and time outside of the classroom—both byproducts of playing sport—may give relief from boredom, resulting in higher attention levels during classroom time. Research by the Canadian Fitness and Lifestyle Research Institute has shown that physical exercise causes short-term relaxation, accompanied by improved concentration, enhanced creativity and memory, improved mood, and enhanced problem-solving abilities.

Believe me, the reward is not so great without the struggle.
*Wilma Rudolph, Track and Field Olympic Gold Medalist*

Physical and Psychological Benefits of Sport for Girls

As described above, sport participation conveys myriad psychological, physiological, and sociological benefits. In recent years, research has begun to explore the particular benefits of sport for girls and young women, who are increasingly playing more sport at all levels. Studies are beginning
to tease apart the issues that contribute to girls electing to play, factors that keep them playing, and reasons for their dropping out.

A 2007 study found that women who played sport in high school were 73 percent more likely to earn a college degree within six years of graduating high school than those who did not play sport. This advantage held up even for students facing socioeconomic challenges to graduating college.

Playing sport also conveys other beneficial outcomes: Girls and young women engaged in sport are less likely to be overweight or obese, depressed, smoke, use illicit drugs, or have unwanted teen pregnancies. This may possibly be related to the goal of maximizing athletic performance or the goal of protecting sport eligibility or scholarships. Suicide and sexual victimization also is lower in girls and young women engaged in sport.

Sports psychology research has shown that girls gain confidence and self-esteem through participation in sport and physical activity. A positive team sport experience may mediate the risks of low social acceptance and dissatisfaction with one’s body. Determining the relationship between selfconcept and sport participation is complicated by the measurement models used across studies, but greater participation in sport has been found to be relational to greater emotional and behavioral wellbeing. Donaldson and Ronan’s findings suggest that for girls the psychological benefits of participation are not related to the level of competence but rather to the act of participating.

Sport participation also may meet the developmental needs of adolescent girls, including having a sense of belonging, a sense of mastery over one’s body, the experience of generosity, and the sensation of mattering. Life skills such as persistence, teamwork, goal setting, leadership, and character development may transfer from sport to academics, family life, and the work setting. Sport involvement, in addition to making college attendance more likely, correlates with greater levels of overall extracurricular and community involvement. This is true for both boys and girls.

Peer and parental support also influence girls’ enjoyment and learning of sport. Girls develop important social relationships through the physical activity of sport, both with their teammates and with their adult physical activity leaders, but girls may suffer negative psychological consequences if their developmental needs for feedback and encouragement are not considered by instructors or coaches.

Sport as an Agent for Social Change

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Some research has shown that sport contributes to the development of social capital.

Longitudinal studies, such as the National Longitudinal Survey of Youth, have found that men at age 32 who played high school sport were paid 31 percent higher wages than men who had not played sport. The National Longitudinal Study of the High School Class of 1972 found that men at age 31 who played high school sport were paid 12 percent higher wages than those who did not. Of course, there could be other explanations for these findings. Barron et al. suggest that higher-ability individuals or individuals with lower preferences for leisure are more likely to play sport. These same people are then also more likely to seek higher achievement in the workforce. Athletic competition might serve as an excellent training activity for individuals who are already highly motivated to succeed.

Research has shown that the longer youth play sport, the greater attachment they have to their community, according to a series of measures. Studies using data from the University of Maryland’s National Youth Survey of Civil Engagement show that sport participants, compared to those who do not participate in sport, are more likely to register to vote (66 percent versus 44 percent) and to follow the news (41 percent versus 27 percent).

Studies by Eccles and Barber show that youth sport participation is positively related to adult involvement in community activities that can last a lifetime. Youth who participate in sport are more likely to make friends, including those of different races. Young athletes are better able to acquire emotional control, learn the value of teamwork, and exhibit initiative, all social skills that can contribute to a better community. However, with many of these findings, the associations could be correlative rather than causal, because youth who choose to be highly engaged in sport also may choose to be highly engaged in other community activities.

There is no question that providing opportunities for youth to play sport provides community benefit—if for no other reason than idle time can be filled with activities that are healthy and positive. For example, when Phoenix, Arizona, basketball courts and other recreational facilities were kept open until 2 a.m. during summer hours, juvenile crime dropped 55 percent. Similarly, crime rates dropped by 24 percent after late night recreation programs were started in Cincinnati, Ohio.

Finally, Jamieson and Ross suggest that sport can even serve as a useful intervention in international peace-building activities. Organized sport efforts in the Middle East have provided youth with positive and constructive activities.
In the Middle East have provided youth with positive and constructive experiences, creating peaceful and productive relations with neighbors. “Youth and youth sport leaders play vital roles in transforming dangerous and violent conflict situations associated with terrorism across the world” (p. 28).

Sport Alone Does Not Build Character—Context and Environment Matter

The benefits of sport do not necessarily always accrue. Positive outcomes are more likely to occur when a sport program emphasizes mastery, includes positive adult behaviors and supervision, and focuses on personal skills.

In fact, some studies have found that young athletes in some sports are more likely to be involved in risky behaviors—such as alcohol use—than those who do not participate in sport. Research also has found that in addition to physical injury, sport can create stress and anxiety and even promote heightened aggressiveness. These outcomes can be shaped by the nature of the athlete’s experience—for example, the attitudes and behaviors of coaches, teammates, and parents. Research by Zarrett et al. highlights the importance of not only the quantity of participation, but also the quality of the experience.

Several researchers have found that some male youth who are highly engaged in sport actually engage in more delinquent behaviors, such as lying and substance use, compared to youth who are more involved in school-based clubs and school work and youth who are involved in multiple, diverse activities. For example, well-known studies by Barber et al., Eccles et al., and others have found that student athletes reported drinking more frequently than nonathletes.

Rutten et al. tried to understand the possible reasons for and consequences of these findings. They investigated the contribution of organized youth sport to antisocial and prosocial behavior in adolescent athletes and found that “coaches who maintain good relationships with their athletes reduce antisocial behavior, and that exposure to relatively high levels of sociomoral reasoning within the immediate context of sporting activities promotes prosocial behavior” (p. 263). Thus, high-quality coach-athlete relationships can protect against antisocial behavior.

Gardner et al. also tried to understand the complexities of context and the relationship between an apparent association between sport participation and juvenile delinquency. They found that previous studies had compared behavior of athletes against behavior of students who participate in other non-sport activities (e.g., school clubs, theater). In these comparisons,
nonsport activities (e.g., school clubs, theater). In those comparisons, athletes are more likely to exhibit delinquency than students in nonsport activities, but still less so than youth not involved in any activities.

Gardner’s review of the literature found that several factors mediate the apparent delinquent behavior of athletes, including peer pressure, urban setting, opportunities for unstructured socializing, and prior problems—particularly during childhood. Thus, as in all aspects of adolescent and teen development, the complexity and diversity of context plays an important role. Gardner concluded that participation in organized sport neither protects against delinquency nor increases its risks. However, the social stature gained by participation in certain sports can result in more social opportunities that can lead to problem behaviors (e.g., drinking).

There is also research suggesting that certain sports can influence a tendency toward delinquency (e.g., contact, team) and that the nature of the sport in which a high school athlete participates may have more influence on violent and delinquent behaviors outside of sport than any other variable. For example, students who play in the more highly publicized and physically aggressive sports are more likely to be involved in antisocial acts off the field or court than athletes in other sports.68

Thus, playing sport does not automatically build character. Hodge argues that character must be “taught” not “caught.” When fair play and sportsmanship are part of the game, character can be enhanced. And when sport is played in a caring environment, social, emotional, and psychological benefits for youth are enhanced. Many factors influence a young person’s experience in sport, such as the training of the coach; the support that the young person receives from that coach, family members, and peers to participate in that sport; and perhaps even the type and competitive level of sport being played. Researchers also suggest that the competitive nature of youth sport is a key factor that drives both the positive and negative effects of participation.

Optimizing the Potential Benefits of True Sport

The Sport in America research found that, overall, sport is delivering on what most parents expect their child will learn, particularly the values deemed most important by the majority of parents—having fun and doing your best. Indeed, nearly all parents who hoped that sport would teach their children to have fun also say this expectation has been exceeded or met (Figure 1).

However, the Sport in America data indicate that, despite their children’s relatively strong engagement in sport, adults perceive sport generally as
having limited positive influence on youth today (Figure 2). Those adults who are personally engaged in sport-related activities or who work directly with children perceive sport as having relatively greater positive influence. Respondents were asked to rank the actual and potential influence of eight factors, including sport, on today’s youth. Although this survey ranks sport ahead of only music and social networking sites in terms of its potential positive influence, general population adults perceive sport as having less actual positive influence on youth than all elements listed, including parents/family, friends/peers, and school.

Despite the perception that sport has a relatively soft influence on youth, adults recognize many positive benefits of sport to society. Four out of five adults agree that sport provides a source of fun and enjoyment and can reduce youth crime and delinquency—and that losing in sport can teach valuable life lessons. However, almost two-thirds of adults also agree that sport overemphasizes the importance of winning, a belief most strongly felt by older adults (ages 45 to 64) who are significantly more likely than adults overall to agree that sport overemphasizes winning.

Content excerpt from the TrueSport Report. [Download the full TrueSport Report (PDF)]

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