

The Impact of Organized Sports in Underserved Youths on Development, Health, and Lifelong Trajectories

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Abstract: Participation in organized childhood sports offers various benefits by enhancing mental, physical, and academic well-being. As the positive impacts of sports participation can be amplified for underserved youth, the need for equity-focused interventions is emphasized to address the social inequalities. This systematic review analyzes the current research findings to confirm the multifaceted impacts of organized youth sport participation and to underscore the urgent need for strategies to foster greater equity in organized youth sports. In addition, this review highlights the underlying causes of the remaining disparities in organized youth sport participation opportunities for underserved groups.

Author keywords: Youth sport; Underrepresented; Systemic review

Introduction

Participation in organized childhood sports offers a wealth of developmental benefits by enhancing mental, physical, and academic well-being. Research findings have suggested that structured athletic activities can reduce anxiety and depression and enhance cognitive function and self-esteem. Physically, sports contribute to improved fitness and better weight management, thereby reducing the risk of chronic diseases. Academically, participants in organized youth sports often exhibit superior performance, higher graduation rates, and the development of crucial life skills such as teamwork and perseverance. However, these significant benefits of sports participation do not reach all young people equally. The youth population face major institutional challenges that prevent children from low-income families and diverse cultural backgrounds from joining and staying in organized sports programs. The barriers to sports participation include high costs, insufficient facilities, and sports programs that fail to understand different cultures or lack representatives who reflect community diversity.

Importantly, the positive impacts of sports participation are suggested to be amplified for underserved youth when the barriers are overcome. Previous studies have suggested that these youths may experience even greater mental health improvements than the general youth population. In addition, the underserved youths are more likely to find sports as a valuable protective factor against their challenging environments. Moreover, long-term benefits are expected for participants in organized youth sports, such as better adult health and educational attainment. These findings have

suggested that the limited efforts on equity-focused interventions in the increasingly commercialized youth sports can worsen social inequalities. Although there have been systematic reviews on the multiple benefits of youth sport participation, they did not consider the impact of socioeconomic status (SES) on data analysis and interpretation. Thus, this review aimed a) to determine evidence-supported consensus on the multifaceted impacts of organized youth sport participation associated with SES, b) to identify limitations in the existing literature, data, and their interpretation, and c) to affirm the urgent need for strategies to foster greater equity in organized youth sports.

Search Methods and Outcomes

To capture all relevant studies on organized youth sport participation, health-related outcomes and socioeconomic barriers, we performed electronic searches of full-text and peer-reviewed articles from 2000 to 2025 in PubMed, PsycINFO, PubMed, and Scopus. The initial search terms were designed to capture impacts of youth sport participation: (sport*) AND (youth* OR adolescence* OR teen*) AND (longitudinal OR prospective OR simulation) AND (consequence OR value* or benefit* OR effect* or outcome*) AND (psychology OR physiology OR “biomechanical function” OR depress* OR stress* OR anxiety* OR happiness OR emotion* OR “quality of life” OR “social health” OR “social resources*” OR well* OR “social connect*” OR “social function*” OR “life satisfaction” OR “mental health” OR “physiological health” OR sociology OR social* OR “prosocial behavior” OR “antisocial behavior” OR lifestyle OR “health behavior*” OR “long-term”). Within the searched literature, we included the search term (disparity OR socioeconomic minority). We included only original articles published in peer-reviewed journals that

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addressed physical, psychological, social, or academic consequences of organized youth sport participation and that specified the age range of the study subjects. The exclusion criteria included lack of investigation of sport participation, focus on elite sports, and absence of comparison groups. Not only quantitative studies but also qualitative and simulation studies were included.

Our initial search identified 749 articles, and screening for organized sports yielded 79 articles. After screening with the exclusion criteria, 44 articles remained; of these, 14 addressed socioeconomic factors and disparities in youth sport participation.

Reported Benefits of Organized Childhood Sports

Organized sports for children create multiple benefits that support their holistic development.¹ The advantages of organized youth sports include positive effects on psychological and physical health as well as educational development, which produce immediate benefits and future achievements (Fig. 1). The research findings suggest that progress in one developmental area can positively influence others, consequently leading to a positive cycle of development.

Enhancing Mental Well-being and Cognitive Function

Participation in organized sports can significantly improve youth mental health. Previous studies have indicated that

children and adolescents involved in sports tend to experience lower rates of anxiety, depression, and stress.¹ The social aspects of physical activity in the organized sports contribute to improved mood by providing a constructive outlet for emotional expression.² This is particularly crucial during adolescence, when emotional volatility is often heightened.³ In fact, individuals who have experienced adverse childhood effects, such as physical or sexual abuse, emotional neglect, parental alcohol misuse, parental incarceration, or living with a single parent, are less likely to experience depression and other mental health problems if they had participated in team sports.

Beyond mood regulation, sports play a vital role in building self-esteem and confidence. Mastering new personal and interpersonal skills, successful teamwork, and the supportive environment fostered by positive coaching can significantly enhance a child's sense of self-worth.⁴ Cognitive benefits are also notable, as sports participation has been closely associated with improved concentration, enhanced problem-solving abilities, and even increased creativity. These cognitive gains are not only beneficial within the sporting context but are transferable to academic and other life domains.⁵

A national study of youth aged 9–13 found that participation in team sports is associated with fewer mental health difficulties, including lower reported anxiety, depression, withdrawal, social problems, and attention problems.^{6,3} These observations suggest that the collaborative and socially interactive elements of team sports may offer unique protective mental health benefits. In contrast, the same study indicated that youth exclusively involved in individual sports



Figure 1. Reported benefits of organized youth sports for underserved communities

(e.g., tennis, wrestling) may face greater mental health difficulties than those who do not participate in any sports at all.³ This does not inherently mean individual sports are detrimental, but rather that the psychological environment, such as pressures, social support systems within the sport, and coaching styles, is an important variable. Individual sports often place intense personal pressure on young athletes, likely associated with direct accountability for failure and potentially more solitary training regimens, in comparison with team sports.⁶ This distinction underscores that it is not merely participation, but the quality and nature of the sporting experience that significantly mediates its impact on mental health.

Building Physical Health and Preventing Chronic Disease

Without a doubt, the physical health benefits of consistent participation in organized sports are apparent and well documented. Engagement in regular athletic activity helps youth become stronger and develop greater aerobic fitness. Such activities are crucial for healthy weight management, showing decreased body fat percentage among sport participants.⁷ The physical benefits of sports are important for public health, given the rising rates of sedentary lifestyles and associated chronic illnesses. Improved sleep patterns are another documented physical health benefit of the exercise and physical activity integral to sports.⁸ The establishment of these healthy physical habits in young people is critical, as adolescents who play sports are reported to be eight times more likely to be physically active at age 24 than those who do not. In other words, individuals who have participated in youth sports at a young age are likely to remain more active during adulthood, consequently leading to fewer health complications.⁹

These benefits create a positive feedback loop. For instance, improved physical health, such as better sleep quality and increased energy levels, can positively impact mental alertness and concentration.⁵ Reduced stress and anxiety through physical exertion and social engagement in sports can free up cognitive resources, thus enhancing learning capacity.¹⁰ Similarly, the confidence gained from mastering physical skills in sports can motivate greater effort in academic pursuits, leading to success that further boosts self-esteem and overall mental well-being.⁵ This holistic impact underscores the profound value of sports as a comprehensive developmental tool.

Fostering Academic Success and Essential Life Skills

The advantages of youth sports are also observed in the academic realm. A compelling body of research shows that sports participation can lead to higher academic achievements, including better grades and an increased likelihood of high school graduation.¹¹ For example, one study found that boys involved in organized sports were ~15% more likely

to earn a high school diploma, while girls who participated were ~7% more likely to graduate and also tended to achieve higher grades.¹¹ Girls involved in artistic sports such as dance or gymnastics showed particularly notable increases in academic performance.¹¹

A primary mechanism for this academic boost may be related to the development of crucial life skills through structured athletic engagement. Sports environments consistently foster skills such as teamwork, discipline, effective time management, goal setting, perseverance, and resilience.^{12,4} These skills are highly transferable to academic settings. For example, the sustained attention required in many sports and the ability to behave constructively within a group are skills that directly benefit students in the classroom and in their study habits.¹² The structure provided by team commitments and coaching can also instill a sense of discipline and responsibility that supports academic endeavors.¹² Furthermore, students involved in sports often report a stronger sense of belonging to their school community, which can motivate them to perform better academically.¹²

Long-Term Trajectories of Childhood Sports Involvement

The literature collectively suggests that the impact of childhood sports participation extends far beyond the immediate developmental years, influencing lifelong health habits, educational pathways, career prospects, and overall well-being. The nature and continuity of these early experiences are critical determinants of these long-term trajectories.

Cultivating lifelong health habits and sustained well-being

One of the most significant long-term benefits of childhood sports participation is the cultivation of lifelong healthy habits. Engagement in youth sports may help instill a pattern of regular physical activity, supported by a study showing that adolescents who participated in sports are eight times more likely to be physically active at age 24 than their nonparticipating peers.¹³ The sustained physical activity is crucial for long-term health, as it contributes to a reduced risk of obesity and chronic conditions such as heart disease, cancer, and diabetes in adulthood.^{14,13}

The mental health benefits of youth sports also extend into later life. Continuous participation in organized sports until young adulthood is associated with significantly fewer symptoms of depression and anxiety during adulthood.¹⁵⁻¹⁷ Sports participation is positively associated with better quality of life, with team sports offering more benefits than individual sports.^{15,16} Prolonged engagement in sports was associated with better psychosocial wellbeing in a dose-dependent manner.^{15,16} In addition, the long-term mental health benefits of organized adolescent team sport participation have been observed in adults who experienced adverse childhood experiences.¹⁸ Although adverse experiences in childhood tends to result in mental disorders in adulthood, this risk is attenuated by youth sport participation.¹⁸ These

findings suggest that youth sport participation has long-lasting, positive effects on mental health.

Educational Pathways: High School Completion, College Enrollment, and Success

Childhood sports involvement is significantly correlated with educational attainment. Numerous studies demonstrate that high school athletes are more likely to earn their high school diplomas. This effect is particularly noteworthy for at-risk students, given that athletic participation has been shown to significantly reduce dropout rates by 16–17%.¹⁹ It is suggested that the structure, discipline, and sense of belonging fostered by sports play a vital role in keeping these students engaged in the educational system.^{20,21}

Beyond high school, former youth athletes are more likely to attend and graduate from a 4-year college.^{22,23} This connection is also observed among first-generation college students. Studies suggest that first-generation students who participated in high school varsity athletics may achieve higher high school and college grade point averages and tend to graduate from college in fewer semesters than their nonathlete peers.²⁴ Their athletic experiences can aid in the often-challenging transition to college and bolster persistence towards graduation, possibly by enhancing academic preparedness and self-confidence.²⁴ While academic performance in high school is a key predictor of college retention for first-generation college athletes, the supportive environment and skill development in high school sports can contribute to this preparedness.

Career Prospects and Socioeconomic Mobility

The skills and experiences gained from participating in youth sports can translate into tangible benefits in professional life. Attributes such as determination, perseverance, grit, critical thinking, teamwork, and leadership are developed through athletic competition and training, and they represent highly valued occupational skills.²⁵ Consequently, individuals who participated in youth sports may exhibit greater productivity in the workplace and potentially earn higher annual incomes, with some research suggesting an earnings advantage of 7–8%.²⁶

For many young people, especially those from marginalized communities, sports are often perceived as a pathway to success and upward socioeconomic mobility.^{27,28} This perception fuels intense aspirations, particularly among African-American and Hispanic youth and their families, who may view sports as a route to college scholarships and professional careers.^{27,28} However, the actual statistical likelihood of achieving these elite levels is very low, creating a high-pressure environment that may not always align with realistic long-term career planning. The economic structure of youth sports itself plays a role in who might ultimately reap these career-related benefits. As youth

sports have become a significant industry, access to high-level training and competitive opportunities is increasingly skewed towards wealthier families who can afford the associated costs.²⁹ This economic divide means that youth from lower-income backgrounds may have fewer opportunities to develop their athletic talents to a level that might translate into scholarships or professional careers, thereby limiting one potential avenue for socioeconomic advancement through sports.²⁹ While the intrinsic skills learned through any level of participation are valuable, the more visible pathways to sports-related economic success are less accessible to those from underserved backgrounds.

Sports Participation among Underserved Youth

While the benefits of organized sports are clear, access to these opportunities is far from universal. Significant disparities in participation among various demographic groups have been revealed, which underscore the importance of equity to ensure that all children can access these developmental advantages. In the context of youth sports, “underserved populations” refer to groups of children and adolescents who face greater inequalities and have fewer opportunities to be physically active and participate in organized athletic activities. In this review, we focused on low-SES groups and racial/ethnic minorities, which represent children from families with lower household incomes or whose parents have lower levels of educational attainment. Their economic status is typically determined by parental income and wealth.

Persistent disparities: unequal participation rates and access gaps

Despite the clear and often amplified benefits, youth from underserved backgrounds consistently participate in organized sports at lower rates than their more advantaged peers. These disparities are well-documented and highlight systemic inequities in access.

Data from 2020 in the United States indicate that non-Hispanic White children (60.4%) were more likely to have participated in sports than non-Hispanic Black (42.1%), Hispanic (46.9%), and non-Hispanic Asian (51.4%) children.³⁰ This pattern of lower participation among racial and ethnic minority groups is a persistent concern. Furthermore, a longitudinal view reveals that between 2012 and 2021, participation in sports by White adolescents (13–17 years old) dropped by less than 1%, whereas the participation rate among Black and Hispanic adolescents dropped by 8% and 4%, respectively.³¹ This widening gap suggests that existing approaches to youth sports are failing to adequately serve these communities.

SES is a powerful determinant of sports participation. National data show a clear trend: as family income increases, so does the likelihood of children and adolescents participating in sports.³⁰ In 2020, only 31.2% of children from families with an income less than 100% of the federal poverty level

(FPL) participated in sports, compared to 70.2% of children from families with an income of 400% or more of FPL.³⁰ Similarly, participation rates increase with parental education levels, rising from 36.8% for children whose parents have a high school education or less, to 67.6% for those whose parents hold a bachelor's degree or higher.³⁰ The Aspen Institute's findings further corroborate this pattern, showing a 10% decrease in sports participation among adolescents from families with household incomes under \$25,000 during the pandemic, compared to only a 2% decrease in families with incomes over \$100,000.²⁹ This disparity is also reflected in school settings, where youth from lower-SES backgrounds attend schools with the lowest rates of varsity sports participation.³²

The persistence of these participation gaps, especially for groups that stand to gain disproportionately from sports, indicates that current approaches to youth sports are failing to address fundamental structural inequities. The awareness of benefits alone is insufficient to drive participation if formidable systemic, economic, and social barriers remain unaddressed. This points to a critical need for systemic change in how youth sports are funded, organized, and delivered, moving beyond individual-level solutions to tackle policy, economic, and community-level factors that perpetuate exclusion.²⁹

Barriers to Sports Participation for Underserved Populations

The path to sports participation for many underserved youth is fraught with significant obstacles. These barriers are not isolated issues but often form a complex, interconnected web of disadvantages that systematically limit opportunities. Understanding these multifaceted challenges is crucial for developing effective strategies to promote equity in youth sports.

The high cost of play: economic constraints and financial burdens

One of the most significant and pervasive barriers to youth sport participation, particularly for low-income families, is the escalating financial cost. Youth sports have transformed into a substantial economic enterprise, estimated to be a \$30–\$40 billion industry in the United States.²⁹ This commercialization has driven up expenses across the board. In 2024, the average US sports family spent \$1,016 on their child's primary sport, a 46% increase since 2019, and nearly \$1,500 annually for all of that child's sports experiences.²⁹ These costs encompass registration fees, specialized equipment and uniforms, travel and lodging for competitions, private lessons and instruction, and participation in camps or athletic schools.²⁹ Some sports are notably more expensive; for example, in 2024, average annual family spending for baseball was \$1,113, for soccer \$910, and for basketball \$875.²⁹ Dance emerged as a particularly costly primary sport, averaging \$2,048 annually.²⁹

These financial demands disproportionately impact families with limited resources.^{33,34} In 2024, wealthier families (household income \$100,000+) spent \$1,471 more annually on their child's primary sport than parents in the lowest-income group (under \$50,000), yet this expenditure represents a far greater proportion of disposable income for lower-SES households.^{29,33,34} Consequently, children from lower-income families are significantly less likely to participate, and if they do, they are six times more likely to quit sports due to cost constraints.³² This “pay-to-play” system effectively sidelines many children whose families cannot afford the escalating fees.³⁵ Even if initial registration fees are manageable, the ongoing costs for equipment, travel for competitive teams, and specialized coaching can quickly become prohibitive, limiting opportunities for skill development and advancement for talented youth from low-income backgrounds. This financial strain forces families to make difficult choices, sometimes forgoing other essential expenditures or dipping into savings, which can lead to long-term financial stress.³⁶

Limited access: facility shortages, transportation woes, and geographical divides

Beyond direct financial costs, underserved youth often face significant hurdles related to the availability and accessibility of sports facilities and programs. Low-income neighborhoods and communities of color frequently have fewer public sports facilities, and existing ones may be of poor quality, inadequately maintained, or lack necessary equipment.^{35,32,36} Studies have shown disparities in park quality, with lower-income, minority neighborhoods sometimes having fewer or lower-quality physical activity facilities and amenities.³⁷

Transportation is another critical barrier. Many low-income families may not own a reliable vehicle, or parents working multiple jobs or inflexible hours may be unable to transport children to practices and games, especially if facilities are not located within their immediate community.^{37,38} For example, while 91% of District of Columbia children from high-income homes are driven to sports by family, only 50% of low-income youth in the same city receive that benefit.²⁹ This reliance on often inadequate public transportation or the inability to travel to distant locations effectively curtails participation.

Geographical disparities further compound these access issues. Rural schools, often smaller and with fewer resources, may struggle to offer the same breadth and quality of sports programs as urban schools, and socioeconomic factors heavily predict sports involvement in these settings.^{32,36} Transportation is a particularly acute problem in rural areas, with greater distances between homes, schools, and facilities.^{32,36} Regional differences in participation rates also exist, with areas such as the Southern US showing lower overall youth sports engagement.^{32,36}

Finally, a lack of awareness of available programs and facilities can prevent participation, especially for new immigrant families or communities where English is not the primary language.³⁹ Without targeted outreach and information disseminated through culturally appropriate

channels, many potential participants may simply not know what opportunities exist or how to access them. These combined factors of facility shortages, transportation challenges, geographical isolation, and information gaps create a formidable barrier to entry and sustained participation for many underserved youth.

Amplified Gains: Mental, Physical, and Social Benefits for Underserved Youth

While sports offer universal benefits, emerging research suggests that these positive impacts can be particularly pronounced for youth from underserved backgrounds. This phenomenon of “amplified gains” indicates that sports may fulfill a more critical set of unmet psychological, social, and even physical needs for these groups compared to their more advantaged peers.

A significant study conducted during the COVID-19 pandemic revealed that adolescent athletes from racial and ethnic minority groups and those from lower-household-income areas experienced disproportionately greater negative mental health impacts from sport restrictions.³¹ Conversely, these same groups showed greater decreases in anxiety and depression symptoms when they returned to sport participation compared to their White and higher-SES counterparts.³¹ This suggests a notable reliance on sports for mental well-being among these young people. The restrictions may have removed a crucial coping mechanism or source of stability, and its return filled a larger void. This differential impact suggests that sports can be more than just a recreational activity for youth facing systemic stressors such as discrimination or economic hardship.

Another study analyzed the association between organized youth sports and mental health, using Adolescent Brain Cognitive Development data from 11,235 US children and adolescents aged 9–13 years.³ From the literature-presented data, we identified a notably amplified gain in terms of mental health of underserved youths participating in organized sports. The incident rate of anxiety and depression in Black youths participating in sports is up to 35% lower than that of their White counterparts.³ However, the outcomes in Hispanic youths showed no statistically significant difference from those in White students.³ This discrepancy is likely associated with sport-specific culture and environment or the data adjustments made for covariates (e.g., race/ethnicity and family household income). Given the limited availability of such details, it is unclear whether a meaningful correlation between race/ethnicity and SES exists in the analyzed dataset.

However, a distinct observation was revealed in terms of academic performance. A study using Youth Risk Behavior Surveillance data in 2019 from 9th–12th graders in the United States has reported that participation in organized youth sports likely leads to better academic performance.¹² This study analyzed the self-reported survey data from 6,946 participants aged 14–17 years, with controlled potential confounding variables such as sex, age, grade, race/ethnicity, body mass index, sleep, screen time, and physical

activity.¹² The data clearly demonstrated a significant association between sports team participation and academic performance. Notably, the improved academic performance associated with sports participation was lower in certain racial/ethnic groups compared to all the other races. For example, Black and Latino/Hispanic students showed 0.57 and 0.64 times the academic performance change compared to non-sport participants, while all the other races showed 1.46 times the improvement.¹² This is an interesting finding without clear explanations, thus likely necessitating comprehensive follow-up studies.

Some evidence supports the role of sports as a protective factor. For minority youth, participation in after-school sports programs has been linked to decreased delinquency and can serve as a buffer against the negative effects of low SES, discrimination, and neighborhood crime.⁴⁰ In environments where safety and positive adult engagement may be scarce, sports programs can offer a structured, supervised, and affirming space. However, another meta-analysis review suggests that there is no statistically significant association between organized youth sport participation and juvenile delinquency.⁴¹ This discrepancy is likely associated with the sample characteristics.

Sports also play a crucial role in fostering social acceptance and integration for minority adolescents.⁴² Participation can help these youth navigate cultural differences, feel more accepted by peers, and develop a stronger sense of belonging, which is particularly important when confronting prejudice or discrimination.⁴³ The shared goals and collaborative nature of team sports can break down social barriers and help minority youth feel more connected to mainstream culture and develop a positive self-identity. This is complemented by findings that sports participation is associated with higher self-esteem among minority youth, with specific studies highlighting benefits for Latina girls in developing positive body image and confidence through athletic engagement.⁴⁴ For these young women, sports can provide a unique avenue to feel strong, competent, and in control of their bodies, countering societal pressures and stereotypes.

A recent study using an agent-based model representing all 6- to 17-year-old children in the United States found that eliminating the disparity in youth physical activity levels across SES groups would decrease the prevalence of overweight and obesity by 0.826%, leading to \$15.60 billion in cost savings over the youth cohort's lifetime. Reducing the disparities in youth sport participation by 25% would result in \$1.85 billion in direct medical costs averted and \$2.48 billion in productivity losses averted.⁴⁵ This finding suggests the financial gain of organized youth sports for low-SES groups.

The above-described observations that underserved youth may derive amplified benefits from sports participation strengthen the argument for prioritizing equitable access. They suggest that sports can be a powerful tool for addressing health and social disparities, as the return on investment in terms of well-being and positive development could be significantly higher for these populations, who often have

fewer alternative positive outlets. Comparative benefits of sport participation between general youth and underserved youth are summarized in Table 1 below.

Limitations of the Existing Studies on the Amplified Gain of Youth Sport Participation

Despite the acknowledged importance of organized youth sports for underserved youth and adolescents, the existing research findings are limited in providing comprehensive, quantitative assessments of expected outcomes. For example, the amplified gains from organized youth sport participation in the underserved communities have frequently been analyzed qualitatively.^{42,2} The limited availability of previously obtained quantitative data also delays the progression of the field of study. In related work, the effects of covariates on the quantitative benefits gained from organized youth sports have rarely been analyzed in previous studies.^{1,34,46} Although one of the more important factors is likely the type of sport, the earlier studies have often analyzed data without considering the sport type.^{12,3}

The level of sport participation among racial/ethnic minority youth varies significantly by sport type. For example, basketball has long been a popular sport for Black youth. Despite a recent decline in participation, over 35% of Black youth in the United States aged 6–17 regularly participate in basketball.²⁹ In contrast, only 8.4% of Black youth participate in baseball, whereas White and Hispanic/Latino youth are the dominant racial groups playing baseball.³⁴ In soccer, Hispanic/Latino youth show the highest participation rates, followed by White and Black youth. In some White-dominant sports such as lacrosse and ice hockey, Black youth account for only 0.71% and 1.6%, of participants,

respectively, while White youth represent 91.4% and 77.35% of all youth participants.^{29,34} Given the notable variances in the racial/ethnic distributions by the type of organized youth sport, the type of sport must be recognized as a significant covariate in study designs examining the benefits of organized youth sports among the underserved communities.

Leveling the Playing Field: Strategies for Equitable Youth Sports Engagement

Funding to increase access

In the United States, various government- and state-level funding programs are available to promote youth sport participation in the underserved communities. The Community Development Block Grant (CDBG), administered by the US Department of Housing and Urban Development, is one of the examples. CDBG provides annual grants to states and local governments intended for community development activities that primarily benefit low- and moderate-income people. However, the data are not available on how much of the total CDBG funding (~\$3.3 billion in FY24) was used for youth sports programs targeting underserved communities. The US Department of Agriculture Rural Development offers programs such as Community Facilities Direct Loans & Grants to develop essential community facilities in rural areas, which can be used for sports and recreational facilities, and may be vital for rural low-income communities to establish or improve the physical spaces needed for youth sports.

Some state and local government funding programs are specifically designed to support the sports participation of underserved youth and adolescents. For example, the New York State Office of Children and Family Services Youth

Table 1. Comparative Benefits of Sports Participation between General Youth versus Underserved Youth

Benefit area	General youth population	Underserved youth (especially racial/ethnic minorities, low SES)
Mental health—anxiety/depression	Lower rates of anxiety and depression	Disproportionately greater decreases in anxiety and depression symptoms with sport participation, especially after periods of restriction ³¹ Blacks and Asians showed better outcomes in mental health compared to Whites and Hispanics ³
Academic performance	Improved academic performance	Blacks and Latinos showed less effectiveness than the general youth ¹²
Social integration and belonging	Improved social skills and teamwork	Quantitative comparison with the general youth is not available
Buffer against adversity/protective factor	Develops resilience	Serves as a buffer from the negative effects of low-SES, discrimination, and neighborhood crime; decreases delinquency. Provides a safe environment and escape from community troubles ⁴⁰
Physical health	Improved physical fitness and reduced risk of chronic diseases	Quantitative comparison with general youth is not available.

Sports Grants has allocated \$15 million for 2024–2025 for youth sports programming statewide, distributed to municipalities and community-based organizations, with a strong focus on historically underserved neighborhoods and youth. The states of Maryland and Massachusetts have recently distributed grant funds to local organizations providing youth sport programs. The city of Boston has recently initiated a funding program to promote youth sports, with a focus on underserved communities. These public funding programs are operated through local sport organizations and public schools. Besides the public funding, several private organizations provide grant programs to support sports participation among underserved youth and adolescents, such as the Dick's Foundation Sport Matters program. Unfortunately, no quantitative outcome evaluation data are available for these grants in terms of reducing social disparities in youth sport participation.

Interestingly, a recent study using a data-driven simulation model based on data from 1,854 Austrian football clubs has suggested that the effectiveness of public subsidies is significantly affected by factors such as location, club size, and socioeconomic conditions.⁴⁷ The research data argue that public funding strategies need to be tailored specifically to regional socioeconomic contexts to significantly enhance children's sports participation.⁴⁷ Similarly, other studies suggest that financial support alone has limitations in addressing disparities in youth sport participation, as socioeconomic factors play critical roles in the successful implementation of organized sports for youth and adolescents.^{48,36} Collectively, these findings may advocate for community-oriented, close-knit engagement in youth sport participation, rather than simple financial support, to result in meaningful outcomes.

Holistic approaches designed specifically for target communities

An interpretative phenomenological analysis discovered several unique roles of organized sport participation in making real-life changes for socially vulnerable youth.⁴⁹ The reported data suggest that youth sport participation leading to real-life improvements offers: i) a safe place allowing the vulnerable youth to escape from struggles in everyday life; ii) learning experiences contributing to valuable insights into life and society; iii) instruments to reach goals; and iv) fulfillment of a purpose in life. However, research findings also indicate the potential negative impact of sport participation, possibly instigating a negative spiral of vulnerability, thus requiring support to remain critical towards positive youth development.⁴⁹ This may suggest a critical need for holistic approaches, beyond financial support, with high-level awareness of community-specific needs, socioeconomic factors, and cultural aspects.^{47,49} Such holistic, multifactorial approaches are aligned with the National Youth Sports Strategy (NYSS), a US federal roadmap developed by the Department of Health and Human Services.

For successful implementation of the holistic approaches through youth sport participation, the roles of local

community-based programs are critical. Exemplary programs include, but are not limited to, Hoops & Leaders Basketball Camp, Tenacity, Harlem Lacrosse, and Ice Hockey for Harlem (IHH). Hoops & Leaders Basketball Camp in New York City (NYC) provides a free-of-charge program to at-risk urban youth, with a mission to leverage basketball to provide mentoring, leadership skills, and exposure to different educational and career paths. Similarly, Tenacity is a free tennis program in Boston that serves underserved youth and is designed to provide a holistic pathway to success for its students, from middle school through their postsecondary pursuits. Tenacity integrates academic enrichment, tennis and physical fitness, and mentoring and life skills.

Harlem Lacrosse is a nonprofit organization with a mission to use sport as a vehicle for academic and social development. Since its start at Harlem in 2011, the organization has grown significantly and currently serves over 1,200 youth each year across five cities: New York, Boston, Los Angeles, Baltimore, and Philadelphia. Over 90% of participating students are African-American, Hispanic, or multiracial. As a holistic program, Harlem Lacrosse emphasizes a high level of mentorship, with staff members maintaining a daily presence in the schools and lives of the students. Consistent with the above-listed benefits of organized youth sports, Harlem Lacrosse's reported statistics that its students pass their classes at a rate 20% higher than their peers at the same schools. A total of 36 alumni have played college lacrosse and earned over \$1.5 million in grants and scholarships. These represent outstanding accomplishments given the White dominance of lacrosse.

IHH is a well-regarded program that uses a traditionally White-dominated sport as a vehicle for academic and social development. While ice hockey is one of the "Big Four" professional sports leagues in the United States, it has the least racial diversity, with 90% of its players being White. This makes IHH's work particularly impactful. Since its inception in 1987, IHH has served thousands of children and teens from the Harlem community, with most participants being African-American and Latinx youth. The program's core philosophy is "Education is the Goal," combining on-ice instruction with off-ice academic and enrichment programming. This includes homework assistance and classroom sessions that use hockey as a teaching tool for subjects such as math and geography. IHH also focuses on life skills and literacy development, with initiatives like its Book Club for participants aged 9–16. A key measure of the program's success is the achievements of its alumni. Many IHH participants have gone on to attend prep schools on scholarships, which demonstrates the program's ability to create a clear pathway for future leaders. The program also provides a safe, structured after-school alternative that helps improve school attendance and grades for its students.

While programs like Harlem Lacrosse and IHH are exemplary and have produced real-life impacts on underserved youth, they are highly scarce. Compared to the number of programs available for popular sports such as soccer, baseball, and basketball, the availability of free youth programs for sports with high financial barriers, such as ice hockey

and lacrosse, is very low. These vital programs, though highly successful, are currently available only in a few metropolitan areas.

Conclusion: Advancing Health and Opportunity through Inclusive Youth Sports

The research findings summarized in this review underscore the profound and multifaceted benefits that organized childhood sports confer upon young people. Participation is linked to enhanced mental and physical health, improved academic outcomes, and the development of crucial life skills that contribute to long-term well-being and success. Critically, these benefits are often amplified for youth from underserved populations, for whom sports can serve as a vital protective factor and a source of unique developmental opportunities.

However, a stark reality persists: these same populations face the most significant and deeply entrenched barriers to accessing and sustaining involvement in organized sports. Systemic inequities, prohibitive economic costs driven by increasing commercialization, limited access to safe and adequate facilities, transportation challenges, and sociocultural hurdles collectively create an uneven playing field. This exclusion not only denies individual children the chance to thrive but also carries substantial long-term societal costs, including poorer public health outcomes, unrealized human potential, and the perpetuation of social and economic inequalities.

Although multi-level support from government and private entities shows promising outcomes, quantitative measurements of the benefits of these efforts are still limited. There is also a significant lack of research on the specific impacts of different types of sports and their associated outcomes. While a few highly successful nonprofit organizations have created real-life impacts on underserved youth through holistic approaches with traditionally inaccessible sports, their numbers are critically low. Therefore, it would be beneficial to conduct a retrospective study of participants in these exemplary programs, followed by a comparative analysis with data from programs for more popular sports. This research could help delineate the sport-type and community-specific gains of youth sport participation and provide a more precise roadmap for future initiatives.

The success of programs like IHH and Harlem Lacrosse demonstrates that youth development can be effectively advanced through nontraditional sports. The significant outcomes in academic achievement, mentorship, and life skills for underserved youth in these programs are not coincidental; they are a direct result of comprehensive, holistic approaches. Given this evidence, there is a critical need to further increase the number of successful programs that target low-socioeconomic communities and use traditionally inaccessible sports as a vehicle for change. Expanding these types of programs will not only broaden athletic opportunities but, more importantly, will create a greater number of pipelines for educational success, mentorship, and social mobility where they are most needed.

Data Availability Statement

The authors confirm that the data supporting the findings of this study are available within the article and the cited references.

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