

LEVELING THE ICE:
RETHINKING ACCESS AND EQUITY IN YOUTH HOCKEY

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Abstract

Hockey in the United States has always been associated with high costs and limited accessibility, raising questions about who is given the opportunity to participate and advance to elite levels. This thesis examines how household income and geography affect access to elite youth hockey, looking at the structural and cultural barriers that affect young athletes' opportunities. While the existing literature discusses broad socioeconomic barriers, this thesis focuses the analysis to look at regional inequalities and social dynamics that can impact participation. Using secondary research and case studies, it investigates how the pay-to-play model can perpetuate unequal access to hockey across many different communities. Findings suggest that socioeconomic status and location are the strongest predictors of who is able to learn to play hockey and have sustained participation - although inclusion efforts have been growing, they are still rare. This research demonstrates the importance of expanding access so that participation in hockey is not limited to those with financial or geographic privilege.

KEYWORDS: (Hockey, Inequality in Athletics, Sports Economics, Youth Sports)

JEL CODES: (Z28, D63, I24)

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Regional Ice Skating Rinks

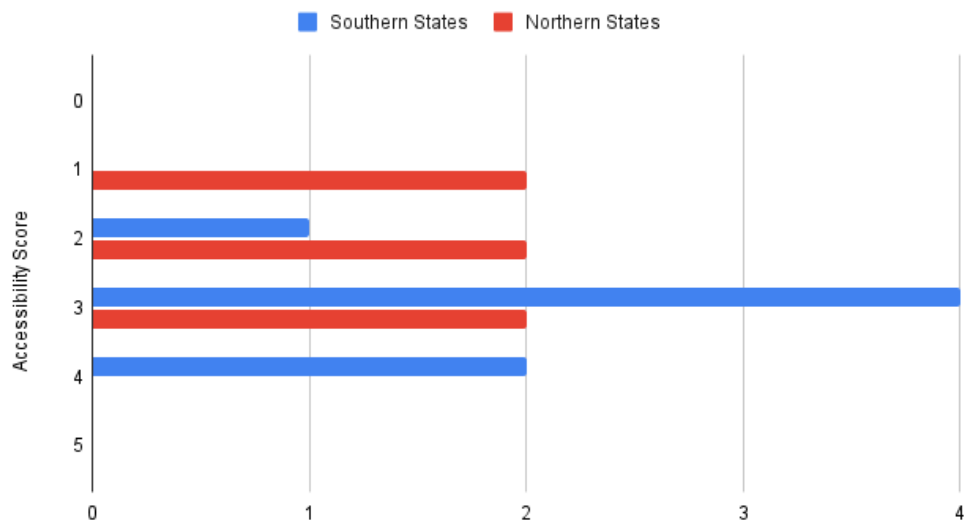
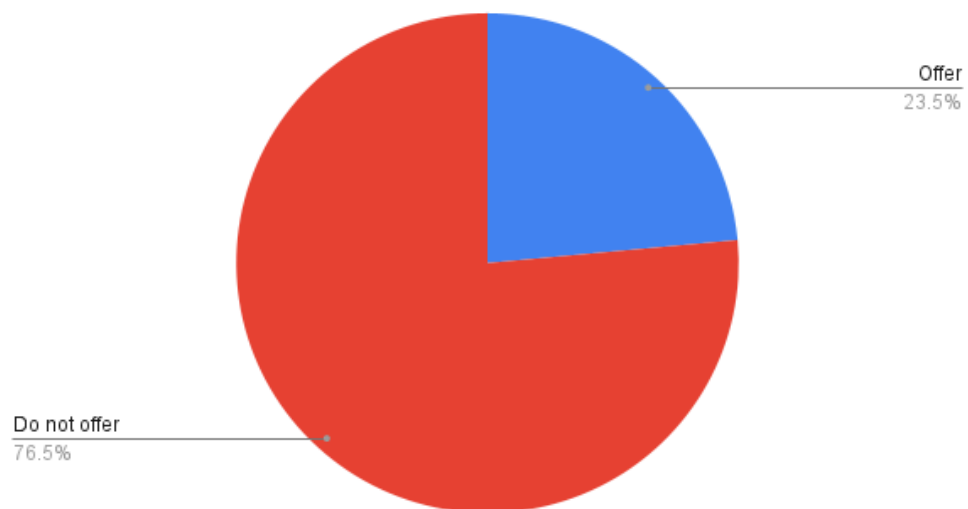


Figure 2

Rinks Offering Financial Assistance



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1. Introduction

The experiences of youth hockey players differ greatly depending on where they live and what their families can afford, showing major disparities in access to elite hockey development opportunities. For example, a player growing up in a wealthy region where hockey is popular, like the Twin Cities in Minnesota, usually has access to many indoor rinks, hockey-specific training gyms, and year-round high-level travel teams. These areas often have a strong local hockey culture, access to elite-level coaching, exposure to hockey role models, and greater visibility to college and even professional scouts. In comparison, a young athlete from a lower-income household in a geographically isolated area, like the rural South, may lack even a single nearby rink, let alone any sort of opportunity to join a hockey travel team.

As a real-life example, Mathieu Olivier is the only Mississippi-born hockey player to ever play in the NHL. He spent only 3 months living in Mississippi before moving away to follow the career of his hockey player father, eventually settling in his family's native Quebec, Canada (Bratten, 2019). Mississippi is also considered the poorest state in the United States, with the highest poverty rate and lowest income ranking in the US (Shrider et al., 2021). It is safe to say that if Olivier had grown up in Mississippi and without his father's influence, it is highly unlikely he would have been able to develop into the player he is today. In fact, children and teenagers in the South are less likely to participate in sports (48.7%) compared with *all* other regions of the country (Black et al., 2022). In comparison, Minnesota has had over 300 players in the NHL, and that number only keeps growing with the addition of more elite hockey gyms, better rinks, and growing popularity. Without access to leagues,

ice time, or training facilities, these players (or potential players) face huge obstacles compared to their wealthier peers. Additionally, the costs of hockey (including equipment, team fees, and tournament travel) can be thousands of dollars a year, which is an additional barrier for less wealthy families. A survey conducted by the Aspen Institute found that on average, American families spent nearly \$1,500 per year on just *one* child's athletic activities, sometimes even up to \$25,000 per child per year (Solomon, 2025). Hockey is even more expensive on average - in a 2014 survey of the Canadian sports market, hockey was the second most expensive of all 44 sports studied, coming in at \$1,666 average annual spending per child - and this was over a decade ago! (Solutions Research Group Consultants Inc., paragraph 11). In a 2024 Royal Bank of Canada survey, results showed that hockey players' parents spend a whopping C\$4,478 on hockey each year (Gridneff, 2024, paragraph 11).

Especially in the American South, racial barriers further complicate access issues in youth hockey, and sports in general. The NHL remains overwhelmingly white, with only 0.052% of players identifying as Black (Monteil, 2025, paragraph 3). Programs like the new NCAA Division I hockey team at historically Black Tennessee State University are trying to challenge this exclusivity and provide opportunities for Black students to play hockey on an elite level. Initiatives like at this HBCU show the ability to break down existing racial barriers in hockey, with the right programs.

This raises an important question: How do income level and geographic region influence access to elite youth hockey and the likelihood of reaching collegiate or professional levels? Specifically, how does the current system restrict opportunity for young athletes, and how are families responding (economically, socially, and politically) to these barriers?

This real-life example reflects a larger issue in American youth sports. The pay-to-play model requires families to pay for their children's participation in sports through fees, and this model results in limited access to sports in a way that disproportionately excludes lower-income children. For youth hockey specifically, annual costs can easily be over \$15,000 per player - and talented kids from lower-income backgrounds are often pushed out or never given a chance to compete. This results in a smaller talent pool overall. This is indicative of a larger overall issue - the right to participate in youth sports is earned through financial privilege, not skill or passion as it should be.

This study is important because it examines the broader conditions that shape who gets to participate in childhood activities that many assume are universally accessible. As Ndubuokwu and Oluwalose (2025) argue in their study of youth soccer, the pay-to-play system creates barriers that limit inclusion and the overall diversity of the sport. Grose (2024) expands upon this critique by discussing youth sports more broadly, pointing to the fact that high costs and time demands are pushing families to their limits. Unfortunately, kids from households without parents who cannot prioritize athletics due to income or work constraints suffer in the current system. In the United States, a country that emphasizes upward mobility through hard work and talent, it does not make sense that access to hockey is limited to those who are born into wealth in urban areas. Further, as Kaufman and Wolff (2010) emphasize, sports are not just for fun - they can also help develop real values like teamwork, responsibility, and resilience. If many young athletes are priced out of playing, it changes how youth sports work and who gets to be part of them.

2. Literature Review

Children from lower-income families and marginalized communities face consistent challenges when it comes to playing sports, particularly in sports such as hockey that are notoriously expensive. A combination of financial, cultural, and geographic factors comes together to create barriers that can limit participation, especially participation for an extended period of time. This literature review combines empirical research and theoretical discussions to show the complicated dynamics of youth sports as well as highlights potential approaches to creating more equal youth sports.

Financial barriers and the pay-to-play model

Important to the discussion of youth sports inequity is the pay-to-play system, which essentially requires families to pay the direct costs for their children's participation. Ndubuokwu and Oluwalose (2025) give an in-depth examination of this system within American youth soccer, saying that "the pay-to-play system not only limits access for low-income families but actively shapes the economic, social, and athletic fabric of the sport from the ground up" (Pius Chukwunwike Ndubuokwu & Mahmud Oluwalose, 2025, p.72). Their systematic review reveals that families often face average annual expenses around \$900 per child, including fees for travel, club membership, equipment, and extra training. Post-COVID-19 pandemic, these costs have increase by approximately 19%, making access issues even worse. For hockey specifically, costs are even higher, with initial gear and equipment costs starting at around \$1,000 per child - much of which needs to be replaced as the child grows (NationalTeamsOfficeHockey, 2019, paragraph 12).

The authors emphasize that this fee-based model in the United States is very different from youth soccer clubs in most European and South American countries, for example, where professional soccer clubs fund academies that provide free or heavily subsidized training for talented athletes. They argue that the American system functions almost as a form of systemic gatekeeping that limits talented players from lower-income or minority backgrounds, leading to a talent pipeline that is skewed toward wealthy suburban players. In turn, this actually ends up undermining the competitiveness of U.S. soccer overall on the world stage.

Research shows that the cultural shift from school seasonal sports to club year-round travel sports has exacerbated these inequities (Pandya, 2021, p. 441). Youth from lower-income families are consistently excluded from expensive after-school sports, especially in areas without accessible community-based programs. Beyond the obvious financial barriers, limited access to athletic trainers or high-quality affordable doctors for injuries disadvantages these poorer athletes even more, making it harder for them to resume playing after injuries (Pandya, 2021, p. 443). This highlights how structural inequalities in youth sports is not just about participation; it actually can affect long-term athletic development and overall health.

In a similar way to Ndubuokwu and Oluwalose, author Jessica Grose (2024) draws attention to the broader youth sports industry, estimating its value between \$30 billion and \$40 billion. She draws attention to the role of private travel leagues for youth sports, which have “skimmed off the best players” from the more underfunded local recreation leagues (Grose, 2024 paragraph 5). She presents data that seems to demonstrate these disparities: “34.1 percent of kids from the poorest families were on sports teams or had coaching outside of school, compared with 67.7 percent of the

wealthiest families,” showing a significant participation gap that relates closely to socio-economic status (Grose, 2024, paragraph 8).

Grose also points out the suburban nature of competitive youth sports. As Villanova University sociology professor Rick Eckstein says, “This is absolutely, positively 100 percent a suburban thing. Rural areas, like urban areas, there aren’t these kinds of opportunities. So those folks are also left out of the mix” (Grose, 2024, paragraph 7). There is lots of pressure on parents to enroll their children early in sports and have them travel and play often. After the interruption of the pandemic, this has gotten even worse with feeling the need to catch up and make up for lost time. In the Aspen Institute survey, parents living in rural areas reported spending much less on their children’s athletic activities than urban or suburban parents. In fact, rural parents spent less money on all of their child’s athletic expenses than the other parents spent on just their child’s *primary* sport (Solomon, 2025). However, across the board, families are struggling to keep up with the expensive and time-intensive demands.

However, some areas of the US have tried hard to counteract these trends. Grose (2024) specifically highlights Cambridge, Massachusetts, where local investment in recreational soccer has doubled player registrations between 2014 and 2022. Investment has taken the form of better coaching, more equipment, and scheduling equality. This example shows the importance of “concerted effort from parents, local governments, and private businesses” to create inclusive programming but also acknowledges the difficulty of scaling such models (Grose, 2024, paragraph 11).

In Seattle, the One Roof Foundation (ORF) is a great example of local community-driven efforts to tackle barriers to inclusion, especially in hockey.

Partnering with the Seattle Kraken NHL team and their home Climate Pledge Arena, the One Roof Foundation runs programs like Learn to Skate and Learn to Play that offer low- and no-cost opportunities for underserved populations. Executive Director Mari Horita explains, “When kids don’t have access to sport and play, they also miss out on the many associated benefits like social and emotional development, confidence building, resilience, teamwork and mental health” (One Roof Foundation, 2023, paragraph 7). Participation in youth sports has also been linked to improved physical health outcomes, including better cardiovascular systems, improved coordination, and higher overall activity levels, showing that access barriers affect not just social and mental health but physical health as well (Eime et al., 2013). ORF’s efforts go beyond just subsidizing fees, as they actually address transportation challenges and neighborhood safety concerns to help encourage continued participation. This kind of program shows the positive impact of strategic engaged partnerships and outreach in making youth sport equity more widespread.

Cultural capital and social exclusion

Financial concerns are only part of the problem. Bethan C. Kingsley and Nancy Spencer-Cavaliere (2015) argue that there needs to be a more nuanced definition of exclusion that takes into account the role of cultural capital (skills, knowledge, and behaviors) that are important in youth sports. Their qualitative study with youth and parents from lower-income families revealed that “sports settings generally required that young people acquire abilities from an early age and develop these concertedly over time” (Kingsley & Spencer-Cavaliere, 2015, p.24). This creates an expectation that participants come equipped not only with physical skills but also with cultural fluency - which children are unlikely to have if they come from

a low-income or rural family. The authors describe cultural capital in athletics as knowing the rules and etiquette, having appropriate equipment and attire, and aligning with the values and behaviors rewarded within particular sports communities (Kingsley & Spencer-Cavaliere, 2015). Young athletes that lack these forms of capital can experience exclusion by being placed on less competitive teams, being marginalized within teams, or having feelings of not belonging. It is important to note that this exclusion was not limited to external barriers but was deeply internalized in the children's feelings, sometimes resulting in self-exclusion.

Kingsley and Spencer-Cavaliere's analysis shows that while fee assistance programs are helpful, they "alone are not enough to alleviate social exclusion because of a broader demand for capital that is unequally distributed along class lines" (Kingsley & Spencer-Cavaliere, 2015, p.35). For many young athletes, the "costs of participating tended to outweigh the profits," leading to less desire to pursue sports in the future (Kingsley & Spencer-Cavaliere, 2015, p.35). The cultural disconnect between sport culture and the actual day-to-day of lower-income families is a huge obstacle to playing sports.

This pattern is not new - studies using national survey data from the 1990s indicate that both economic and cultural capital increase with enrollment in sports,, but cultural capital more strongly predicts participation patterns. Those with the highest cultural capital were more likely to participate in sports overall but less likely to engage in "working-class sports" (Wilson, 2002, p.42). Economic capital had little-to-no effect on participation in the lower status sports (like boxing or football, for example). This is a great example of how sports involvement is often reinforced along class lines.

Further, Kingsley and Spencer-Cavaliere argue that sports must be changed to “disrupt the narrow hegemonic discourses that continue to exclude a great number of young people” and to consider a broader definition of athletic ability and success (Kingsley & Spencer-Cavaliere, 2015, p.36). Without a shift like this, well-intentioned access initiatives can potentially “neutralize attempts to challenge the more deeply rooted processes of exclusion” (Kingsley & Spencer-Cavaliere, 2015, p.35).

Sports as social capital and change

Authors Kaufman and Wolff (2010) talk about a theoretical framework with youth sports as grounds for growing social capital and democratic participation. They argue that sport “is not merely about physical activity; it is also about entry into a social world that can cultivate values such as teamwork, leadership, and resilience” (Kaufman & Wolff, 2010, p.162). Their analysis draws on different case studies to show how sport can be a platform for both personal and community empowerment.

Authors Fraser-Thomas, Côté, and Deakin (2005) say that these developmental benefits of sports (teamwork, leadership, etc.) are not guaranteed for all young athletes. These outcomes depend on the quality and inclusivity of the actual programs, which can greatly differ. Since the system favors children that already have the cultural and financial resources, athletics can unintentionally reinforce existing inequalities rather than fix them, in the wrong situations (Fraser-Thomas et al., 2005, p.30).

Kaufman and Wolff (2010) emphasize that “sport’s potential for positive transformation is contingent upon inclusive access” (Kaufman & Wolff, 2010). When

financial, geographic, or cultural barriers prevent participation, it seems as though social benefits keep building to already privileged groups. This dynamic “undermines sport’s capacity to bridge social divides and challenge inequalities” (Kaufman & Wolff, 2010, p.172). By excluding lower-income youth, sports systems limit individual opportunities for growth as well as the social participation and athletic role models from sports.

Other studies, like by Thomas C. Wilson, indicate that children with higher cultural capital are more likely to participate in mainstream, socially-valued sports - which helps them grow their social network and people skills, as well as the admiration that comes with being talented at a socially desirable sport. In comparison, children with lower cultural capital are often limited to playing less popular sports, which can hinder their social development and social standing (Wilson, 2002, p.42).

Kaufman and Wolff also discuss the concept of “critical consciousness,” suggesting that inclusive sports environments can actually act as microcosms of democratic society, where all kinds of different people can learn collaboration, teamwork, and advocacy skills. Also, the visibility of athletes engaged in social movements can shift public perception and cultural attitudes. However, the current youth sports world with recruitment pipelines concentrated mostly in affluent communities, greatly limits the diversity of people able to stand out.

Systemic challenges and need for structural change

Considered together, these studies illustrate that youth sports inequality is not just about individual problems for athletes but actually about greater systemic patterns. Public funding cuts to parks and recreation have created gaps that have been

filled by expensive private leagues, which often occurs in affluent suburbs (Grose, 2024).

Ndubuokwu and Oluwalose (2025) identify potential ways to fix this, like the creation of fully funded academies modeled after popular European clubs, increased government subsidies, corporate sponsorships, and the restructuring of leagues to minimize expensive travel. They acknowledge big financial and cultural barriers to this kind of transformation but argue that these changes are essential to build a more sustainable and fair youth sport system (Ndubuokwu & Oluwalose, 2025).

The Seattle Times' report on the One Roof Foundation illustrates the impact of community efforts that can address multiple barriers (financial, cultural, logistical, and infrastructural) at the same time. These kind of programs aim for long-term participation and cultural inclusion rather than one-time participation, offering a pretty replicable model for other areas (One Roof Foundation, 2023).

Reflecting on current policy

While much of the current literature focuses on access barriers, some authors call for a full redefinition of youth sports culture itself. Kingsley and Spencer-Cavaliere's (2015) call to "reimagine sport" encourages people to move beyond just waiving fees but toward "challenging the hegemonic discourses" that marginalize large groups of young athletes (Kingsley & Spencer-Cavaliere, 2015, p.24). This involves redefining success not only as the amount of games won but also as creating happiness, a sense of belonging, and encouraging personal growth.

Further, the economic issues discussed in youth athletics are inseparable from broader societal inequalities, including differences in race, geography, and education.

Grose (2024) connects this with admissions preferences in D1 college athletic programs, saying that “athletes at elite schools are disproportionately white, suburban and wealthy,” further perpetuating the cycle (Grose, 2024, paragraph 9). Therefore, fixing this issue must actually first deal with the deep interconnected systems that reinforce this inequality.

Some promising strides have been made in leveling the playing field. Some cities and organizations have demonstrated scalable solutions - Cambridge’s investment in recreational leagues and ORF’s programs show how collaboration between governments, nonprofits, and sports franchises can make sports more accessible. However, these efforts are relatively new and require a lot of political backing, funding, and community involvement. Expanding volunteer groups, having more flexible leagues, and using technology for scheduling may help overcome some logistical barriers. Also, education for coaches and group leaders on cultural understanding could help create more inclusive environments for children.

Conclusion

The literature shows many related factors contributing to youth sport exclusion, including financial, cultural, and geographic factors. Pay-to-play models cause significant barriers that disproportionately exclude lower-income and minority athletes, while cultural capital requirements and social norms in athletics further limit young athletes’ engagement with their sport. The benefits of athletics as a way for kids to build social capital and become more empowered in their community is largely unrealized today. Therefore, efforts to increase access to sports must be more than just letting talented low-income athletes play for free. More people need to be

discussing infrastructural investment and broader reforms that allow kids of all backgrounds to participate. Income and geography determine whether a young athlete even sees a rink. In wealthy areas where hockey is popular, parents can pay for elite teams, travel, and coach visibility. In other places, poorer parents have to scrape together money or even relocate their entire family to give their children a chance to play on an elite level. That kind of financial gatekeeping prevents most kids from reaching collegiate or professional levels, unless steps are taken to break that cycle.

Future research should look into intersecting approaches that address all the complex barriers facing marginalized youth athletes. Using past successful local initiatives and expanding them to a larger scale, reforming policy in the process, will lead to staggeringly successful results. It would be interesting to investigate different sports across the United States, keeping their different barriers in mind. This will be very important to ensuring that youth sport, like youth hockey, lives up to its potential as a place of personal, social, and athletic growth for kids of all backgrounds.

3. Theory and Methodology

This thesis is designed to investigate how structural inequalities (like household income and geography) impact access to youth hockey in the United States. Since youth sports participation is already a thoroughly researched topic with a lot of literature and surveys, this project uses a qualitative research design with secondary data analysis. The goal of this approach is not to create new data, but to bring together the pre-existing data and literature with a new interpretation to create a model of the barriers to participation in youth hockey.

The research question, *How do income level and geographic region influence access to elite youth hockey and the likelihood of advancement?*, requires a broad approach using studies in economics, sociology, medicine, and management. All of these demonstrate different parts of the problem. By using a wide array of literature, this thesis aims to look at all the kinds of inequality in youth sports, with a focus on hockey. This requires this paper to draw on both empirical data (like survey statistics on family income, sports participation rates, and area demographics) as well as theoretical ideas (like the concept of cultural and social capital in sports).

Most importantly, this methodology is transparent and replicable. All sources are documented in the References, and the process is explained so that other interested economists could replicate the study with a different sport or in a different country.

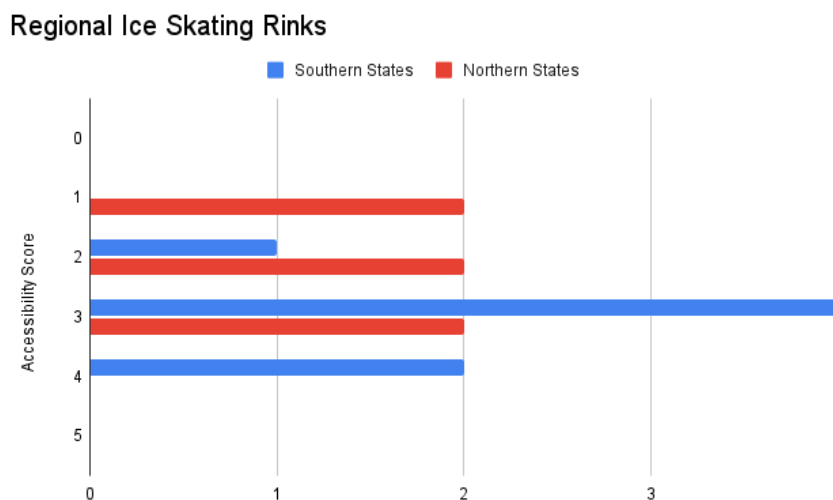
Model

To analyze rink accessibility, this research categorized a variety of ice rinks across the continental United States according to five binary variables that fit within the broader variables this paper discusses: Community Programming, DEI Initiatives,

Development Opportunity, Financial Assistance, and Cost Transparency. Each variable was coded as 1 (yes) or 0 (no).

To help with visualization, a bar chart was used to show the frequency of each attribute across rinks. A graph was also created to show the advantages of rinks in areas where hockey is popular (ex. Minnesota) as compared to Southern states. Additionally, an overall accessibility score was calculated by summing the “yes” of the five program-related attributes (Community Programs, DEI, Development, Financial Assistance, Cost Transparency), resulting in a score range of 0-5 for each rink. Howell Ice Arena in Howell, New Jersey and Braemar Arena in Edina, Minnesota had among the highest scores, while the Ice Chalet in Knoxville, Tennessee and the Arkansas Skatium in Little Rock, Arkansas had the lowest scores of the rinks surveyed. This score is visualized using a histogram to show the distribution of programming of Southern states as compared to Northern states.

Figure 1:

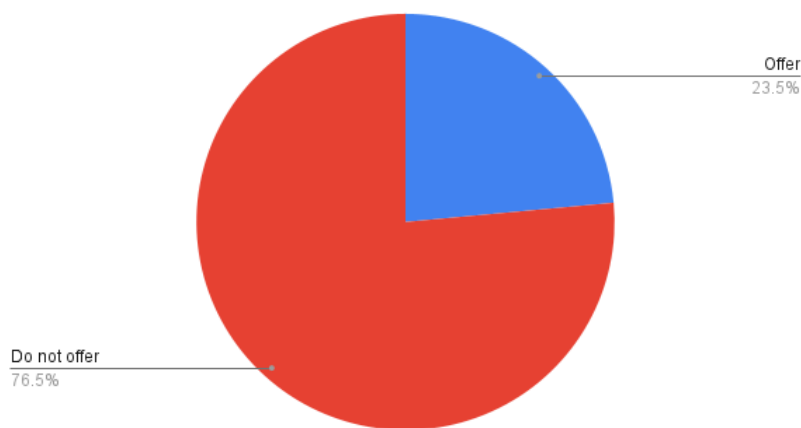


Source: author’s calculations

Additionally, a priority of this thesis was to investigate access for hockey beginners - and a good way to do this is looking at whether or not financial assistance, often in the form of free gear or lessons, was offered at the rink in question. Less than 24% of the rinks surveyed offered any form of financial assistance to potential future hockey players. All of the rinks that *did* offer assistance were in wealthy, hockey-centric areas. For example, in New Jersey, the Howell Ice Arena offers free hockey gear for first time skaters and those in learn-to-play-hockey classes, both for youth and adults. According to U.S. Census Bureau data, the median household income for Howell Township is \$129,855, compared to the United States overall at \$83,730 (US Census Bureau), demonstrating that this is a much wealthier community than the rest of the U.S.

Figure 2:

Rinks Offering Financial Assistance



Source: author's calculations

Variables

- **Dependent Variable:** Access to hockey opportunities and advancement

“Access” is defined in a few different ways: (1) opportunity to participate (having local rinks and team available), (2) sustained participation (ability to keep playing for years despite costs), and (3) advancement potential (visibility to college and professional teams, elite travel teams, or hockey-specific training). Quantitatively, this variable could be shown by data like participation rates and the number of diverse athletes.

- **Independent Variable 1:** Household income

Current research shows that hockey is one of the most expensive sports for kids to play, with families spending thousands every year on equipment, team fees, and travel. Income greatly influences whether a family can afford to enroll their child in hockey and whether they can sustain participation, especially as costs tend to grow with skill and age. This variable also can include indirect financial considerations, like the parent’s ability to take time off of work to travel for tournaments or drop off at practice.

- **Independent Variable 2:** Geographic region (urban/suburban/rural)

Location impacts opportunity in a major way, considering proximity to rinks, teams, and coaching. Urban and suburban areas where hockey is popular (in states like Minnesota and Massachusetts) often have year-round hockey programs, elite travel teams, and the best coaches. In comparison, more rural areas or states where hockey is less popular (like Southern states) may not even have a single ice rink within driving distance. In this study, geography involves both physical access to facilities as well as regional hockey culture.

- **Modifier:** Cultural and social capital

Cultural capital is the knowledge and skills that are needed to navigate the hockey world. This involves knowing what equipment to buy, understanding social cues within teams, or knowing the culture of the sport. Social capital is slightly different and is considered to be the network of teammates, coaches, and trainers. These kinds of capital act as a modifier of the independent variables of income and geography - a low-income child might keep playing the sport if they have strong friendships and mentors, while a high-income child may quit young if they feel like they do not fit in with the culture.

- **Qualitative Controls:** Race, availability of programs, climate

While these are not the main focus of this study, some important context needs to be considered. Hockey is historically a “white sport,” with few players of color. Race can affect young player’s feelings of belonging and representation. Local programs are often created by community initiatives, like subsidized teams or Learn to Skate programs. Also, climate (especially with warming winters!) affects outdoor rinks or local frozen ponds, potentially limiting what has historically been a cheap entry into hockey for many children. These controls are meant to account for external factors that can affect the relationship between the independent variables and the result.

Model Limitations

Like any study, this paper has a few limitations that could potentially impact its findings.

Reliance on secondary sources. Since this thesis does not collect new data or conduct any surveys, it depends on the existing published literature and data that can

be found on rink websites. This means the project is limited to the scope and strategies used by other researchers, as well as which rinks choose to update their web presence. This can make it more difficult to make comparisons, since different researchers have different definitions for similar variables, for example.

Challenges in measuring cultural capital. Cultural and social capital are important concepts in this study, but they are abstract and hard to quantify. Unlike variables like income or geography that can be described with numerical data, cultural capital is more qualitative and is measured by different behaviors or attitudes. This is subjective and can make it hard to make comparisons.

Limited data availability. A main part of this research paper is comparing access to hockey across different areas of the United States. However, detailed data is often available for hockey states such as Minnesota, but lacking for southern states where participation is lower. This runs the risk of overrepresenting areas that have better data while ignoring the underserved areas.

Hypotheses

Hypothesis 1: Higher household income is positively associated with more access to elite youth hockey opportunities.

Due to the pay-to-play structure in U.S. youth sports, financial resources are often the main barrier to participation. Hockey, with its high costs, is no exception. Families with higher incomes are more likely to be able or be willing to pay for things like equipment, team fees, private coaching, and travel to tournaments. Prior research (Grose, 2024 and Ndubuokwu & Oluwalose, 2025) shows that youth sports participation rates are directly related to family income.

Hypothesis 2: Geographic proximity to rinks and established hockey leagues increases the likelihood of sustained participation.

Even if a family can afford hockey, opportunities are limited in areas without hockey infrastructure. In areas with a strong hockey culture, young players have lots of ice time, access to travel teams, and greater visibility to scouts, while rural areas often do not even have a rink. Prior research shows that geographic availability of sports facilities influences both initial participation and long-term development (Pandya, 2021 and Hyde et al., 2020).

Hypothesis 3: Barriers to access hockey are higher for low-income or minority athletes due to financial, cultural, and/or racial exclusion.

Race and class struggles can be an additional challenge for minority athletes, especially in a sport like hockey that is (and historically has been) predominantly white. Beyond the high costs, minority athletes can deal with underrepresentation, racial or class stereotyping, or exclusion from “hockey culture.” New programs like Tennessee State University’s DI hockey team show an effort to deal with these issues, but the problem is systemic (Monteil, 2025).

Data Sources

This study does not collect new data. Instead, it relies on a variety of secondary sources, ranging from national-level surveys all the way to local case studies. Using different kinds of data helps the analysis by showing diverse perspectives.

Academic sources. Peer-reviewed journal articles from fields like economics, sociology,, and public health are the foundation of this research. These studies investigate barriers in youth sports, the pay-to-play model, cultural capital, and

differences in participation related to income and geography. These scholarly articles are important in grounding the study in established research.

Government reports. This thesis also uses official statistics that provide reliable data gathered on a large scale on income, wealth, and sports participation. U.S. Census Bureau data geographically shows household income and poverty. CDC data geographically shows children's participation in organized sports. Datasets like these make sure that the research is empirically accurate.

Sports data. Organizations involved in youth sports can help provide evidence to back up the hypotheses. USA Hockey's membership statistics are important for understanding participation trends in different states over time. Additionally, surveys from the Aspen Institute's Project Play describe household spending patterns on youth sports, which shows just how much more expensive and difficult hockey can be to play than other sports. These industry-specific datasets connect the current literature (that is not always hockey-related) to the specific context of youth hockey.

Case studies. This thesis uses a few specific case studies that show how barriers to access can be lowered. For example, the One Roof Foundation in Seattle, in partnership with the NHL Kraken, provides subsidized skating programs for underserved communities. Similarly, Tennessee State University has taken steps towards establishing the first NCAA Division I hockey team at a historically Black university (HBCU). These examples demonstrate how programs can try to address systemic inequities with smart models - that possibly could be replicated in other areas.

Time Frame of Study

Generally, the time frame of this study spans 2010 to 2025, with an emphasis on the past decade. The starting point of 2010 makes sense for this thesis because it was a time where the pay-to-play model was gaining traction in U.S. youth sports, elite travel programs were getting more popular, and people were beginning to have the tough conversations about affordability and access to sports. However, earlier works (ex. Wilson, 2002) are also included to create a foundation in sports theory and to provide historical context. Older sources make sure that the research uses contemporary examples with longer-term discussions about inequality in youth sports.

In terms of actual datasets, this study focuses on data from the past decade, including U.S. Census Bureau income reports, CDC participation data, the Aspen Institute Project Play survey, and USA Hockey membership statistics. These sources provide a holistic view of financial and regional barriers to youth hockey participation. Case studies such as the One Roof Foundation and Tennessee State University's DI hockey team are recent examples of new initiatives that try to make hockey more inclusive.

3. Results and Analysis

The rink accessibility data shows clear patterns of inequality in youth hockey across the country. Most rinks in the sample scored between 1-3 out of 5 on the accessibility scale, with only a few (primarily in hockey-centric states) reaching 4 or higher. These higher scores reflected access to community programs, elite-level teams, and/or financial support. In the five variables, community programming appeared most frequently, showing up at about 60% of rinks. This was a wide range that included learn-to-skate programs and local hockey teams. Financial assistance and DEI initiatives were much less common. Only about 25% of the rinks offered any kind of aid or subsidized programs, and none specifically mentioned diversity or inclusion initiatives on their websites. However, this is not necessarily the fault of the rinks - in poorer areas with fewer interested patrons, it is unlikely to have the funding to achieve full accessibility.

Regional differences were particularly interesting. Rinks in Minnesota and Massachusetts scored higher than rinks in states such as Alabama and Tennessee. Northern rinks were more likely to have structured development programs with transparent pricing, while southern and rural rinks had less detailed websites that lacked information, if they had a working site at all.

Income levels were also significant. Rinks in wealthier areas tended to offer free skates or learn-to-skate classes. None of the rinks in lower-income areas provided this kind of support. This suggests that wealthier regions are better able to support inclusion programs - with the irony being that the less-wealthy regions are the ones that need the accessibility programs the most.

Recent case studies support the findings of this data. Initiatives like the One Roof Foundation in Seattle and community investments in Massachusetts show how partnerships and funding can make youth sports more accessible. However, these examples are rare - access to hockey is still mostly dependent on where families live and what they can afford.

Wealthier communities not only have more rinks, but they often also have the institutional support needed to create scholarship programs, subsidize coaching, and hire elite-level coaches. In comparison, players in rural communities have fewer rinks, higher travel costs, and less opportunities to develop. Unfortunately, inclusion programs tend to benefit the areas that already have strong hockey infrastructure, rather than help people who really need it. This can also relate to cultural capital and the fact that knowledge and having friends who play the sport makes a difference in the kids who choose to play. In regions where hockey is part of the local culture, parents and players are more likely to want to get involved and understand how the sport works.

The research also shows that access is not just a financial issue. Cultural and social barriers, especially for non-white or first-generation players, greatly influences who feels like they belong in hockey rinks. Simply lowering costs will not fix the problem of exclusion if the broader culture of the sport is unwelcoming.

From a policy perspective, improving access to hockey requires more investment in infrastructure and broad cultural changes. Expanding community rinks in underserved regions, providing subsidies for travel and equipment, and training coaches to be more inclusive could all help. Progress is possible when teams, nonprofits, and the government work together.

4. Conclusion

This paper set out to examine how income level and geographic location shape access to youth hockey in the United States, and how these factors affect the likelihood of reaching collegiate or professional levels. Through a review of current literature and real-life examples, it is clear that financial barriers, geographic differences, and cultural expectations create a system with unequal opportunity. The research showed that families in wealthier, hockey-popular regions have access to elite coaching, high-quality rinks, and travel teams that can support their children's athletic development. Inequality is not just a logistical obstacle - it influences the whole pipeline of talent, determining who can actually pursue the sport at higher levels. Interestingly, another consideration is worsening climate change. Interestingly, another potential barrier in the future is worsening climate change. Warmer winters are limiting access to public outdoor ice rinks or backyard ponds, particularly in Canada and the northeastern United States, with shorter skating seasons becoming more common (Gridneff, 2024, paragraph 15). The Wilfrid Laurier University's RinkWatch project has shown these trends to be true and pointing to recent unseasonably warm winters - which demonstrates how environmental factors can influence participation in hockey (Gridneff, 2024, paragraph 16). Additionally, the current research showed that financial support alone does not guarantee inclusion in hockey or any sport. Cultural capital and social norms also play a big role in determining whether young athletes feel like they belong in a hockey environment.

The findings reveal that the benefits of youth hockey go beyond just athletic performance. Participation in sports can help build skills in teamwork, resilience, and leadership. Children from wealthier backgrounds are able to build these skills, while

children from less wealthy backgrounds are not due to the existing barriers. The paper demonstrates that structural inequalities in access to sports are actually tied to broader societal inequalities, like income, race, and geography. Programs like the One Roof Foundation in Seattle or investments in Cambridge recreational sports are evidence that community involvement can reduce these inequalities, but they are local and usually dependent on political support, private partnerships, and volunteer networks. The research shows that systemic inequalities, not individual talent, determine which young athletes have access to elite development opportunities.

This study contributes to the existing literature by combining research from youth sports socio-economic studies, local rink data, cultural capital theory, and empirical research on pay-to-play systems. The main takeaway is that inequities in youth hockey are widespread - financial, geographic, and cultural. Unlike earlier studies that focus just on financial costs, this paper emphasizes how cultural knowledge, social groups, and perceived belonging come together with financial barriers to limit participation. It is important to consider the actual lived experiences of marginalized youth athletes, which can show how unfairness is reinforced by the current system.

The implications are significant for policymakers, community organizations, and sports administrators. Addressing inequities in youth hockey requires more than just fee waivers or one-time programs - it requires investment in infrastructure and more public funding that supports talented young athletes regardless of socio-economic background. Policies that subsidize rink construction in areas without hockey infrastructure, travel support, or coaching in underserved areas could broaden the talent pool and make hockey more inclusive. Similarly, increasing cultural

competency of coaches, along with programming that helps personal growth and fosters feelings of belonging, could help eliminate social exclusion. For future research, examining these interventions by tracking participation and outcomes across different sports and regions would provide valuable insight into how programs can be scaled to benefit more young athletes. Additionally, comparative studies between hockey and other sports could show interesting results. Ultimately, the research in this paper argues that youth sports have the power to foster personal growth and promote social equity, which makes them an important focus for research and reform.

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