

Socioeconomic Prerequisites and Baseball Participation: Exploring the Dynamics of Youth Involvement and Access

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ABSTRACT

Youth participation in baseball has witnessed a decline, with notable losses of 3.7 million players aged 7 to 17 reported from 2002 to 2013. This decline can be attributed to various factors, including the intricate interplay of socioeconomic status, accessibility, and other pertinent dynamics. The sport's demanding financial requirements, coupled with the formidable challenges of achieving collegiate recruitment, compound the issue. This study endeavors to scrutinize the impact of diverse socioeconomic factors and access to sports facilities on the participation in baseball. The analysis revolves around a purposive sample comprising 43 collegiate baseball players, with the aim of unraveling the intricate connections between these factors and their influence on baseball involvement. Through rigorous data collection, meticulous analysis, and thoughtful comparisons against U.S. averages and benchmarks, the study paints a comprehensive picture. The results consistently reveal a compelling correlation between the necessity for socioeconomic advantages and the feasibility of pursuing collegiate baseball. Evidently, parental income analysis underscores that collegiate baseball players exhibit higher average incomes compared to the national median income. An overwhelming majority—90%—of survey participants conform to this higher parental income trend. Subsequent investigations into various other factors converge to a consistent conclusion: securing socioeconomic advantages is pivotal for individuals aspiring to engage with baseball at the collegiate level. In essence, this research shed light to socioeconomic prerequisites that intertwine with the pursuit of collegiate baseball participation, emphasizing the pressing need for equitable access to opportunities within the realm of baseball.

Introduction

Socioeconomic factors encompass elements related to family dynamics, social interactions, financial status, and geographical placement. These multifaceted factors wield substantial influence over a family's capacity to facilitate various forms of youth engagement in sports activities. Within such families, an array of obstacles significantly hampers youth participation in sports. Concerns arise from the potential risks of injury to their child, which could lead to unforeseen medical expenses in instances where insurance coverage might prove unreliable. Moreover, the overall cost associated with a particular sport can present a substantial financial burden, compounded by challenges related to accessibility and dependability of transportation. This interplay of factors is particularly evident among families with lower affluence, as evidenced by statistical indicators such as reduced instances of physical activity and diminished rates of sports engagement.

Accessibility factors can also hinder a families ability to support their child playing a sport as they are in relation to socioeconomic factors. These factors can vary from access to transportation, club sports, and equipment. When families don't have the necessary socioeconomic factors to support their child playing, it affects their accessi-

bility. Playing any sport requires some sort of transportation, from home to the school, etc. When families lack transportation and rides this is an accessibility factor. This can also come into play when participating in club sports, club sports are almost entirely based on parental transportation. Additionally, if a child lacks the skill to join a club team because of their diminished skill when compared to affluent families who have spent money for private lessons, this is an accessibility issue.

Geographical factors can also influence participation in sports. How accessible and how many public fields are open are significant. When more public fields are available to the public in a city, the more of an opportunity it gives athletes to go out and play/practice. How friendly the neighborhood can also contribute to participation, when there is more of a friendly neighborhood (low crime), the more children are encouraged to go out and play. However, the less affluent a community is, the more of a likelihood of a less friendly neighborhood and public fields.

Case Studies

Notably, organized sports involvement and specialized athletic pursuits tend to be less prevalent among children hailing from families of lower socioeconomic status. A study conducted by Emily Kroshus sheds light on the primary drivers behind these trends. Factors contributing to reduced participation include concerns about potential injuries (35%), feelings of exclusion from team environments (27%), financial constraints (27%), and logistical difficulties in attending practices and games (18%). An additional 23% of children from economically disadvantaged families expressed that familial responsibilities hindered their ability to partake in sports activities (Kroshus et al., 2021). The cumulative impact of these factors is the uneven distribution of opportunities for physical activity and sports engagement, leading to inherent disparities in the benefits accrued from participation.

Highlighting this disparity, adolescents from more affluent backgrounds exhibit a threefold higher likelihood of engaging in sports activities compared to their less privileged counterparts (Tandon et al., 2021). Evidently, the economic disparity is glaring, with 30% of children from households with incomes below \$25,000 per year abstaining from sports participation (Tandon et al., 2021).

Even if low affluence families can support their child to play high school sports, some won't play because of their accessibility to different resources. Depending on the school size, most schools will have a freshman, junior varsity, and varsity team. With these three teams, many schools can only select a few athletes who can make each team. Athletes who have played years and have received private training and clubs will be chosen over athletes who have just participated in recreational levels because that is all they could afford (Green & Greenberg, 2016).

A telling contrast emerges when comparing affluent neighborhoods to their lower-income counterparts. Affluent locales often boast pedestrian- and cyclist-friendly amenities, enhanced safety from crime and traffic, aesthetic advantages, and superior access to recreational facilities—a stark divergence from the less fortunate neighborhoods (Tandon et al., 2021). Distinct trends emerge in the attitudes of lower-income versus higher-income parents towards sports. Lower-income parents prioritize factors like keeping their children out of trouble and the potential for college athletics scholarships as key benefits of sports involvement. In contrast, higher-income parents predominantly focus on the inherent advantages of sports. Consequently, decision-making regarding sports participation hinges on a balance between costs and benefits for lower-income parents, while benefits take precedence for their higher-income counterparts (Kroshus et al., 2021).

Comparison of Cost of Participation in Popular Sports

Compared to other sports, baseball stands out as a skill-intensive endeavor demanding extensive time investment and repetitive practice to attain proficiency. This sport is characterized by its propensity for players to face failure, making it both challenging and easily abandonable. In a typical scenario, out of 10 plate appearances, a player might fail to

achieve a hit in 7 to 9 instances. The prevalence of failure often leads young athletes to exit the sport due to a perceived lack of success in comparison to their expectations.

Baseball's demanding nature necessitates near-perfect mechanics to excel, which presents a substantial hurdle. Attaining optimal mechanics requires persistent practice, and sometimes even instruction from private coaches. At the high school level, players confront pitches thrown at speeds ranging from 70 to 80 miles per hour, originating just 60 feet away. This necessitates skills such as making contact, exhibiting plate discipline, and achieving hits—a formidable challenge that mandates unwavering practice in hitting and swinging. The multifaceted nature of baseball extends to fielding and throwing as well. Executing accurate throws and employing gloves effectively entail substantial practice, particularly for young players. Developing the skills to consistently field and throw correctly demands focused effort to minimize errors and master these fundamental aspects.

Mental acumen is equally paramount in baseball, with comprehensive understanding of rules and strategic decision-making playing a pivotal role. However, the complexity of the game can render it overwhelming for many young players. Remarkably, baseball poses one of the most daunting paths to professional success. The statistics reveal a stark reality: only 12% of high school players progress to college baseball, and a mere 1% of college players transition to the professional leagues. This journey is made even more challenging by the increasing unaffordability of the sport, particularly for minority communities. Since 1981, the representation of African American players in Major League Baseball has consistently declined. This decline is attributed to the substantial financial requirements of baseball, with equipment costs alone amounting to up to \$1,000 per season. In contrast, sports like basketball require minimal gear, primarily a ball and appropriate footwear. Consequently, families with limited financial means often opt for more financially viable sports like basketball or football. Illustrated in Table 1, the financial commitment associated with baseball compared to other sports is significant across various aspects. This cost disparity, coupled with the sport's intricate demands and increasing financial barriers, underscores the need for comprehensive reform to ensure that talent flourishes without being hindered by economic circumstances.

Table 1. Youth Sports Annual Cost Comparison.

Sport	Registration	Equipment	Travel	Lessons	Camps	Total
Baseball	\$166	\$121	\$175	\$106	\$100	\$660
Basketball	\$86	\$74	\$114	\$61	\$88	\$427
Soccer	\$158	\$125	\$107	\$66	\$73	\$537
Tackle Football	\$91	\$110	\$83	\$116	\$76	\$485
Track and Field	\$51	\$47	\$49	\$20	\$14	\$191

Even if the average family in the U.S. can manage the expense of annual baseball equipment, progressing to the collegiate level and catching the attention of college scouts requires additional financial outlay. To attain "the next level," affluent families often invest thousands of dollars in cultivating their children's talent. Unfortunately, disparities in economic resources are intertwined with racial demographics, as areas with greater resources tend to be predominantly populated by white individuals. A striking statistic reveals that 1 in 5 families with elite high-school athletes spends approximately \$8,000 annually, contributing to a substantial participation gap between low-income and affluent families. This financial discrepancy results in youth sports participation rates being nearly half for low-income families compared to their affluent counterparts.

Further accentuating this issue, a significant portion of recruited athletes in the class of 2022—46.3%—originate from households with incomes exceeding \$250,000. A noteworthy observation is that 90% of college-level athletes have undergone recruitment, signifying that they established contact with coaches before submitting applications. To vie for collegiate opportunities, it is often imperative to be part of club teams, which entail various costs such as travel expenses, tournament entry fees, coach salaries, and consistent private training. These expenses are in addition to the recurring yearly equipment costs, as well as the constant year-round investment in private training that elite players frequently undertake. While high school-level out-of-pocket expenses are comparatively modest, the landscape shifts significantly when it comes to club participation. The annual cost for club team involvement can reach a staggering \$10,000, with competitive teams frequently undertaking travel almost every weekend. For context, the average median household income for all college athletes sits at \$96,918.89, with a median of \$86,420—figures notably surpassing the nationwide median household income of \$68,703. This financial divide isn't limited to baseball; it extends across sports in general.

The convergence of the inherent challenges of baseball and the exorbitant costs associated with playing creates a formidable barrier for athletes hailing from low-affluent families. The combination of the sport's inherent difficulty and the financial burden it entails makes it exceedingly arduous for such individuals to sustain their participation and engagement in baseball. This predicament underscores the pressing need to address these systemic inequalities, ensuring that talent isn't stifled by economic circumstances and that access to opportunities remains equitable for all.

Survey Design and Results

In this study, an online survey was sent out, via Google Forms, to active collegiate baseball players. The survey questions were designed and targeted to find patterns regarding socioeconomic factors impacting baseball participation in college. In the survey, the 43 participants were asked questions about past history in baseball participation as well as other personal questions regarding their hometown, income, etc. In addition to the survey, there was a control group using preexisting data already documented by other studies. With this information gathered, a comparison was able to be made between participants and their relationship between socioeconomic factors and baseball participation.

Results

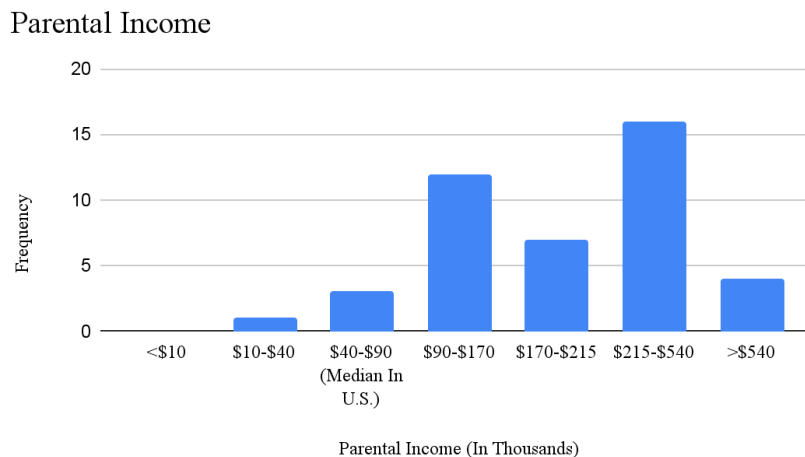


Figure 1. Parental Income

When surveyed individuals were asked what their parental income was, there were many mixed responses. However,

within those responses, it was very clear that the responses were skewed left. Of the responses, 4 out of the 43 respondents stated that their income was over \$540,000. 16 respondents said that their parental income was over \$215,000 but not over \$540,000. 7 responses between \$170,000 and less than \$215,000. 12 reported that their income was around \$90,000 but less than \$170,000. 3 had incomes of more than \$40,000 but less than 90,000. And 1 had a parental income of more than \$10,000 but less than \$40,000.

Percentage of total age, years played baseball

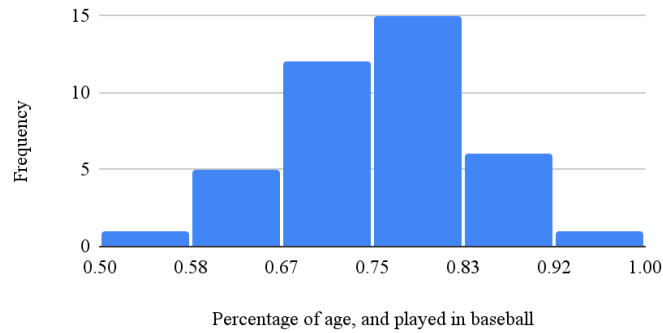


Figure 2. Percentage of total age, years played baseball

Participants were asked to state how old they were and how long they had played baseball. Using the data received, the percentage of years played baseball and age was created. When looking at the graph created, all respondents had played baseball for more than half their lives.

Table 2. Access Variables Comparison

Access Variables	Yes	No	Control Yes (U.S. average)
One car	43 (100%)	0 (0%)	91.5%
Two cars	38 (88.4%)	5 (11.6%)	37%
Club Baseball	40 (93%)	3 (7%)	14.40%
Shortages of participation/equipment on High School Baseball team	6 (14%)	37 (86%)	NA

When looking specifically at the access variables, there were a few specific questions that were asked. When participants were asked if they had one car, all of them (100%) responded that they did - the U.S. average is 91.50% of single car ownership. When asked if they had access to two cars, 38 out of 43 (88.4%) stated they did. The U.S. average of two-car ownership is only 37%, strongly indicating that the participants were from higher-affluence families. 40 out of the 43 (93%) respondents said that they had participated in club baseball, the U.S. average is only 14%.

Table 3. Socioeconomic Variables Comparison

Socioeconomic Variables	Yes	No	Control Yes (U.S. average)
Job in high school	30 (69.8%)	13 (30.2%)	30%
Job in college	18 (41.9%)	25 (58.1%)	81%
Private baseball lesson	34 (79%)	9 (21%)	NA
Attended private school in high school	17 (39.5%)	26 (60.5%)	9%

Looking at socioeconomic variables, participants were asked a series of questions. When asked whether they had a job in high school, 30 (69.8%) responded yes - the average U.S. average for jobs in high school was 30%. When asked whether they had a job in college, 18 responded yes - the average in the U.S. is 81%. When participants were asked whether they had received private baseball lessons 34 (79%) responded yes. Participants were additionally asked whether they had attended private school in High school, 17 (39.5%) said they had. The U.S. average is 9%.

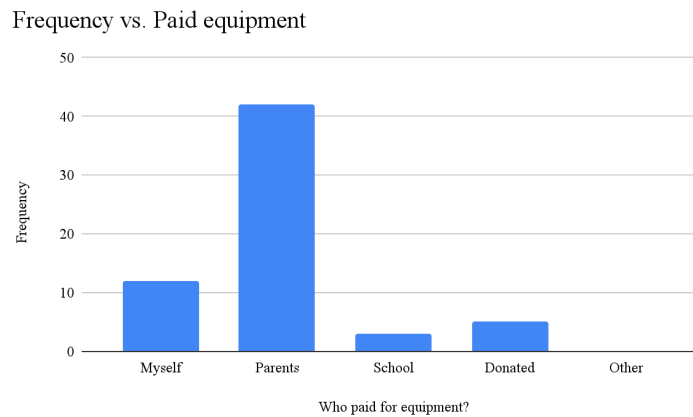


Figure 3. Equipment Availability

When participants were asked who had paid for their equipment, they were given five choices: myself (themselves), parents, school, donated, and others. (respondents could choose more than one). Out of the 62 chosen, 42 had chosen that their parents had paid for their equipment. 12 had said they had paid for it themselves, 3 said the school had paid, and 5 said it was donated.

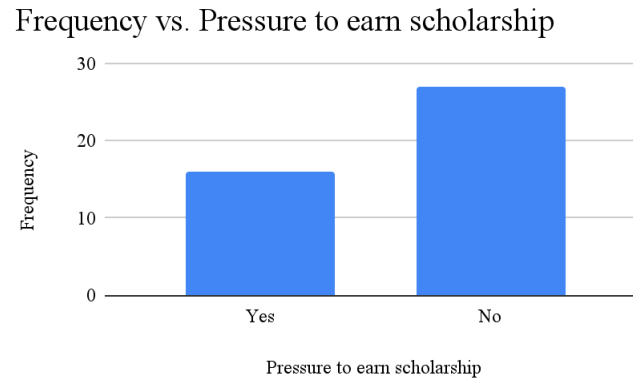


Figure 4. Pressure to Earn Scholarship

Participants were asked whether they had felt pressured to earn a collegiate scholarship to play baseball in college. 16 had responded yes, while 27 had responded no.

Conclusion

This study delved into the intricate relationship between socioeconomic factors and participation in college baseball. Upon analyzing the data and findings derived from our survey, a distinct positive correlation emerged between a higher socioeconomic status and engagement in baseball. Examining the statistical insights presented in Figure 1, it is imperative to acknowledge that the median income in the U.S. stands at \$31,000. With this benchmark in mind, out of the 43 participants surveyed, a significant majority—39 individuals (90%)—reported incomes surpassing the national median. Only 4 respondents declared incomes equivalent to or lower than the U.S. median. A pivotal indicator of financial investment in baseball, Figure 2 underscores the expenditure participants devoted to the sport throughout their lives, considering its substantial costs. Notably, a direct proportionality surfaces: the greater the extent of a participant's involvement in baseball over their lifespan, the higher their annual expenses associated with the sport. Table 2 illuminates the prominent role of club baseball in discerning participants from high-affluence families, given the considerable costs entailed. Of the surveyed individuals, merely 6 out of 43 (14%) reported facing constraints in participation or equipment availability.

Drawing from the aforementioned data, a compelling assertion arises: the respondents predominantly hail from more affluent backgrounds. A closer examination of Figure 3 underscores that the majority of participants, along with their parents, bore the financial responsibility for their own equipment. This suggests self-sufficiency and access to personal resources for equipment procurement rather than reliance on external funding. Respondents' feedback regarding reasons for discontinuing other sports activities aligns with this trend, as a prevailing motive for discontinuation pertains to injuries or waning interest, while financial factors appear less influential.

Socioeconomic and accessibility considerations wield substantial influence over an athlete's prospects for college baseball recruitment and participation. Specifically, socioeconomic factors wield a pivotal impact on college prospects, intertwined with opportunity and skill. The inherent advantage of higher-affluence families lies in their capacity to underwrite the sport's substantial expenses, recruitment process, and the preceding prerequisites. Among sporting disciplines, baseball commands one of the most substantial investment portfolios, a reality that often deters low-affluence families due to financial constraints, prompting them to explore less financially demanding athletic avenues. The prelude to collegiate recruitment typically necessitates club participation, entailing an array of costs such as team membership fees, coaching remuneration, travel expenses, and tournament costs. In addition to club participation, a prospective recruit must dedicate extensive weekly hours to private instruction due to baseball's intricate nature, further inflating costs. Consequently, baseball emerges as a capital-intensive pursuit, intricate and demanding

in ways that extend beyond mere skill. The crux of the data collated underscores the formidable expenses associated with baseball, culminating in a distinct set of prerequisites for college-level involvement. Unfortunately, not all athletes share uniform access to these prerequisites, perpetuating an uneven playing field; lower-affluence families are inadvertently disadvantaged in terms of both participation and skill development.

Leveling the Playing Field

To rectify the undue reliance on socio-economic advantages within baseball, several strategic measures can be implemented by the baseball community. These steps aim to foster inclusivity and equal opportunities for all aspiring players, irrespective of their financial backgrounds. Firstly, the establishment of comprehensive youth development programs in economically disadvantaged regions across the nation holds immense potential. Such initiatives would provide underserved communities with access to play and refine their skills in baseball. By bridging the gap between affluent and less privileged areas, these programs can nurture talent and open doors that would otherwise remain closed. Moreover, instituting dedicated funds for equipment assistance within each district or organization can be a game-changing endeavor. These funds would help offset the financial burden associated with acquiring necessary equipment, making the sport more accessible to a wider range of individuals. This approach democratizes access to the sport, ensuring that talent isn't stifled by financial constraints. Enhancing coaching quality and implementing robust learning programs are also crucial components in leveling the playing field. Communities lacking the resources for private lessons, which are often accessible to high-affluence families, can greatly benefit from well-structured coaching programs. By equipping coaches with the skills to nurture talent effectively, regardless of the players' socioeconomic background, these initiatives foster growth and equity in skill development. A significant stride toward inclusivity involves offering scholarships and financial aid to those who demonstrate talent but lack the means to access personal training or club participation. By identifying promising players within financially restricted circumstances, these scholarships dismantle financial barriers that might otherwise impede progress. This approach ensures that players' potential is the primary determinant of their success, rather than their financial situation.

A precedent for such endeavors can be found in initiatives like "Leveling the Playing Field," established in 2013. This organization dedicates itself to diminishing the inequality stemming from the exorbitant cost of sports equipment. It achieves this by setting up sports equipment food banks, channeling donations to schools, recreational programs, sports leagues, and youth initiatives. Similarly, the Cincinnati Squash Academy serves as an exemplar by collaborating with schools in historically underserved urban areas. By focusing on academic and squash instruction, this nonprofit empowers hardworking students, fostering both educational and athletic growth. Their ultimate objective—to facilitate college opportunities for youngsters from low-income communities through scholarships—exemplifies the transformative potential of such initiatives. In sum, by embracing these proactive measures and fostering partnerships akin to the aforementioned examples, the baseball community can transcend the constraints of socioeconomic disparities. Through equitable access to resources, coaching, and opportunities, baseball can become a sport where talent flourishes independent of financial circumstances, enriching the game and the lives of its players.

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