

American and Australian Sprint Car Racing: Increasing Standardization as a Motivator for Economic Growth

McKenna Haase

Drake University, mckenna.haase@drake.edu

Thomas Mueller

Appalachian State University, muellerts@appstate.edu

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Recommended Citation

Haase, McKenna and Mueller, Thomas () "American and Australian Sprint Car Racing: Increasing Standardization as a Motivator for Economic Growth," *International Journal of Motorsport Management*: Vol. 7 , Article 1.

Available at: <https://scholar.wssu.edu/ijmm/vol7/iss1/1>

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American and Australian Sprint Car Racing: Increasing Standardization as a Motivator for Economic Growth

Abstract

This study provides an analysis of sprint car regulation in Australia and the United States, related to the economic concept of standardization. Standardization is many times associated with the value of network effect. Network theory posits social actors will be motivated to defer from immediate economic gain, instead opting for enrichment of relationships through reciprocity and trust. Using Speedway Australia as a model, we advocate for a sanctioning organization in the United States that governs standardized racing classes, particularly at the youth level. This will allow the sprint car motorsport industry to attain an increased economy of scale, decrease costs and increase the value of the sprint car motorsport brand. Recommendations to increase youth racing are provided including a proposal for STEM education opportunities in collaboration with the new standardized national sanctioning body.

Keywords

Sprint car, motorsport, motor racing, sprint racing

Cover Page Footnote

The authors would like to thank those who contributed to this paper: Bob Baker, Bill Wright, Laci White, Mike Noftsgger, and Lori DeMoss at the National Sprint Car Hall of Fame & Museum; Tim Savell and Steve Green from Speedway Australia for providing information on the history of Speedway Australia and racing "down under;" announcer and photographer Wade Aunger; Brooke Tatnell, insight from a driver's perspective in both countries; Steve Sinclair from K&K Insurance; and Kendra Jacobs from Knoxville Raceway for help in finding sources.

Introduction

A sprint car is a lightweight, high-powered open wheel racing vehicle consisting of a narrow frame, V8 engine, and both a large and small aerodynamic wing on the top and front of the car to control airflow and handling. Sprint cars were developed in the United States from what began as “big cars,” which were popular after World War I and grew in popularity into the 1940s. These big cars stemmed from different forms of racing cars that were developed after the Indy 500 began in the 1910s (Mays, 2016).

The early big cars did not feature wings and roll cages. Instead, the driver’s upper body was exposed above the car. This led to exciting, yet extremely dangerous racing. Deaths were reported at many racing facilities. Around the 1950s the term “super-modified” was coined to describe this form of hyper-developed sprint car. That term is still used today (Brown, 1994). Sprint cars developed from different forms of racing across the country. It evolved into “big car” racing in the East and “super-modified” racing in the Midwest. However, sprint cars eventually converged into one vehicle design, which is what drivers and fans acknowledge as today’s sprint car (B. Baker, Executive Director, National Sprint Car Hall of Fame and Museum, personal communication phone interview, February 25, 2018). The cubic inch displacement of the engine dictates classes while the car chassis is

standardized among classes. The three most popular classes are 305, 360 and 410 cubic inch classes (Brown, 1994).

While sprint car competition was developing in the United States, a comparable counterpart was finding its way “down under.” Dirt track racing began in Australia in 1923 with motorcycles, followed by midgets, sedans, modifieds and then sprint cars (Land, 2017). Sprint cars have become the dominant speedway attraction in Australia (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017).

Australian and American sprint car racing converged when American racing legends Johnny Anderson, Bob Trostle and Danny Smith, among others, began transporting cars to Australia from America. The first sprint car was shipped to Australia from Northern California in the American winter of 1970 (Eckert, 2002). During this period American sprint racers spent more time racing in Australia than their Australian counterparts spent competing in America. By the early 21st century, over 80 percent of sprint cars at the Australian Classic were U.S. steel (Eckert, 2002). Today, thousands of Australians travel to the United States to participate in sprint car events as spectators, competitors and announcers during the American summer racing season (W. Aunger, Marketing and PR, Madetoogo Pty Ltd, personal communication phone interview, November 13, 2017).

When the Australian racing season commences during winter in the U.S., an American contingent travel to, and competes in, Australia. The perfect inverse relationship between seasons creates more demand for the sport and allows professional racecar drivers the chance to increase income year-round. For example, 9-time World Series Sprintcars champion Brooke Tatnell was a top performer in Australia and was the first Australian to win with the World of Outlaws in America (B. Tatnell, professional sprint car driver, personal communication phone interview, November 15, 2017).

The history of sprint car racing and the relationship between Australian and American competitors was important for the growth of motorsport. Accelerated trade created an increase in market size and led to the need for regulation (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017). This study provides a rhetorical analysis of international sprint car regulation, related to the economic and business concepts of standardization. Concepts used in Australia can be applied to grow the economics of American motorsport. It has been posited that standardization is comprised of five unique factors including commonalities related to product, pricing, advertising, distribution and overall global acceptance of products that require minimal customization (Powers & Loyka, 2007). For example - in a different industry over the past three

decades - offshore drilling rig equipment has become increasingly standardized. Today, there are only a few equipment providers, and contractors are likely to order multiple copies of the same design to improve supply chain and downtime metrics (Dupre, 2015).

Standardization is many times associated with the value of network effect. Network theory posits that social actors will be motivated to defer from immediate economic gain, instead opting for enrichment of relationships through reciprocity and trust. The theory indicates that as trust builds, transactional insecurity decreases and there are more exchanges of services and goods (Uzzi, 1996). This study illustrates how network theory will impact standardized racing classes and lead to a stronger foundation for motorsport, particularly at a youth motorsport level. The sprint car motorsport industry can attain an increased economy of scale, decreasing costs and increasing the value of the sprint car motorsport brand.

Insights from this analysis will assist sprint cars racers, event producers and product manufacturers in maximizing business opportunities and profitability. Increasing standardization in sprint racing has potential to positively affect market values. Standardization in youth sprint car racing has potential to increase participation and enhance overall economic growth.

Infrastructure of Sprint Car Racing and Economics

American industrialization, world wars, natural disasters, technological advancements and globalization have affected the development of sprint car racing. Many associate the history of the automobile with mobility; moreover, racing was an instrumental component of auto development as manufacturers tested parts and technology using racecars (Shook, 2007). Historical industrial revolutions were fundamental in developing products made through capital intensive production that led to growth in productivity, corporate hierarchies, and significant capacity. These revolutions are continuing into the 21st century (Jensen, 2012). From payphones to smart phones, from shifting gears to self-driving cars, from cash to cryptocurrencies, modern society is a continuous circumvolution of cultivation, maturation and proliferation in an insuppressible fashion.

As the world became smaller trade increased, foreign direct investment increased, trade barriers decreased and globalization went from becoming available to becoming inevitable for firms worldwide (Hill & Holt, 2016). These transformations affected all industries, from the world's largest conglomerates to the smallest private firms, including professional sports like sprint car racing.

Initially, the structure of sprint car racing regulation was similar in both Australia and America. Fragmentation

in racing vehicle classes and series was prevalent across tracks and sanctioning bodies. In 1997, a sprint car crashed through a fence and injured a child (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017). The fear of government intervention in sprint car racing caused the formation of a national controlling body. World Series Sprintcars, the professional Australian sprint car series, collaborated with other sport administrators to form the National Association of Sprint Car Racing (NASR) (Savell, 2018).

Originally, industry leaders resisted NASR, fearful of losing power in their respective organizations. There was also a heightened concern of the NASR raising industry costs (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017). There are more sprint car fans per capita in Australia; however, the population of Australia is about one tenth that of the United States (Eckert, 2002). A national regulatory racing body such as NASR was difficult to implement in America due to difficulties regulating a much larger population. America had different racing organizations or clubs that enforced different rules. There was no national uniformity. In the largest class of sprint cars, 410's, Knoxville Raceway ("Sprint Car Capital of the World") led the way with safety rules. The World of Outlaws often matched Knoxville's safety rules along with

other sprint car classes throughout the United States. Each individual series created their own competition rules (B. Wright, Museum Coordinator, National Sprint Car Hall of Fame and Museum, personal communication phone interview, March 19, 2018).

In Australia, the founders of NASR sought investors to purchase 167,000 shares of ownership in the organization priced at \$1 a share, dividing the shares evenly by placing a cap on the amount of ownership each individual investor could hold. A board was formed consisting of four competitors, four promoters and one independent source (typically a lawyer or an accountant) to govern speedway operations throughout Australia. The association was formally associated with the Federation of Australian Speedway. This sanctioning group was instrumental in helping to unify standards in safety, competition rules and classes and speedway operations (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017). By 2006, NASR was ratified by the FIA (Fédération Internationale de l'Automobile) through CAMS (Confederation of Australian Motorsport) as the internationally recognized body of speedway racing in Australia. When this occurred it became the first speedway organization globally to hold FIA delegation of authority (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017).

The organization changed its name to Speedway Australia in 2011 (Savell, 2018). One of Speedway Australia's main roles involved licensing competitors and tracks, a system not found in America. Licenses provided competitors with a more unified system that allowed them to race the same type of equipment at a larger majority of racetracks across the country. This differed from the United States in which competitors had a wide variety of equipment for different tracks (W. Aunger, Marketing and PR, Madetoogo Pty Ltd, personal communication phone interview, November 13, 2017). The Speedway Australia license provided greater insurance coverage in the case of an accident, specific safety gear requirements and safer racing facilities (Savell, 2018).

Today, Speedway Australia governs the sport with approximately 140 tracks and all major classes of racing vehicles under a unified umbrella and insurance structure (S. Green, previous General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017). As part of their mission to enhance the safety of the sport, Speedway Australia monitors tracks to assure they are meeting safety requirements set by the organization. Tracks that are unable to meet requirements are provided grants funded through license fees, which help improve infrastructure and safety rating. A group arrangement for the insurance structure has allowed Speedway Australia to decrease costs by increasing safety (S. Green, previous

General Manager, World Series Sprintcars, personal communication phone interview, November 17, 2017).

American Speedway Association

The model and development for a comprehensive governing body is limited in the United States. The level of independence in American motorsport regulation creates barriers to entry for the consumer, limiting the number of new participants in sprint racing and minimizing the opportunity for industry growth. Large sunk costs are an entry barrier due to fragmentation of classes and rules. It is noted here that in a standardized sanctioning environment, equipment and rules create scale economies, leading to industry equilibrium (Pindyck, 2009).

A laissez faire economic structure in grassroots racing exists. Laissez faire is supported as a freedom to start one's own business, own property, and have free markets in trade. Some economists believe a free market economy creates an incentive for creativity and capitalism (Reed, 2001). Therefore, individual sanctioning bodies such as the World of Outlaws, United States Auto Club, All Star Circuit of Champions, and American Sprint Car Series operate independently as the governing organizations in American sprint car racing (B. Wright, Museum Coordinator, National Sprint Car Hall of Fame and Museum, personal communication phone interview, March 19, 2018). This case study demonstrates that promoting similarities in

competition among countries encourages network effect, prompting relationships through reciprocity and trust. Trust and standardized competition could increase sales and profitability for the sprint car motorsport industry in America, similar to unrestricted free trade increases in other nations (Hill & Holt, 2016).

Using the model of benefits and advantages offered by Speedway Australia, a standardized regulatory structure would create a more marketable value proposition to entry-level competitors. This is the case in sprint youth racing. A common regulatory process presents a more secure, reliable product for families interested in getting their child into motorsport. Increasing youth membership through licensing has increased the virtual market value of Australian motorsport and in other youth sport organizations. For example, the American Tae Kwon Do Association, an international franchise, provides participants with a variety of benefits including nationally recognized rank, eligibility to participate in tournaments and camps and membership accident insurance (American Tae Kwon Do Association, 2013). In addition to the increased economic efficiency of this structure, long term economic growth of the industry would be subsequently affected, securing a brighter future for sprint car racing.

To grow the market value of sprint racing at the higher levels of motorsport, a national association is

necessary; one that embraces youth participants as “members” of the national racing association, akin to Speedway Australia. A membership license would provide youth racers with more unification and standardization in racing classes, safety grants, camps and clinics, and educational resources. An insurance incentive through the Short Track Independent Drivers & Associates (also known as STIDA) could be provided (S. Sinclair, Motorsports Division, K&K Insurance Group Inc., personal communication phone interview, November 21, 2017). This would decrease barriers to entry and sunk costs for new participants entering the industry, once again adding momentum to the sport.

One rational course of action would be to organize the American Speedway Association under a governing board including promoters, competitors and independents. The association would begin by operating at a youth motorsport level, working to unify the mini mod, micro sprint, cage kart, outlaw kart, go-kart, quarter midget and related programs across the country through a membership program on the participant side. Through a license, participants could receive STIDA insurance incentives (minimum of \$100,000 coverage comprised of \$85,000 in benefits plus a \$15,000 deductible in excess medical coverage), safety grants, safety seminars and other additional resources (S. Sinclair, Motorsports Division, K&K Insurance Group Inc., personal communication phone interview, November 21, 2017).

This is part of the standardization model, creating value for manufacturers and encouraging customers through network effect.

Developing a Youth Culture in Motorsport

Growing the motorsport industry begins at a youth level; however, growing the market value of the motorsport industry requires exposure to, and engagement with, the general consumer population. The National Association for Stock Car Auto Racing (NASCAR) currently attracts fans from mainstream and extends their reach to children through programs for youth fans such as “Acceleration Nation.” A unification provided by the American Speedway Association would present a simplified, marketable product. Inquiring parents could easily grasp and invest in sprint car racing. Building upon the foundation built in youth motorsport, the American Speedway Association can progress from the participant aspect of youth motorsport to implement the model in other sprint classes and divisions.

Timing is critical in developing a “youth upward” motorsport movement. Sprint car racing is currently relying on declining sponsorships or family funding, which decreases long term industry stability, especially during macroeconomic downturn. For example, note the current state of NASCAR. Television ratings indicate viewership is declining to historic lows, with races such as the Kentucky 400

down 19% in ratings and 16% in viewership year-over-year (Brown, 2018). Furniture Row Racing, a competitive organization that fielded cars for 2017 NASCAR Champion Martin Truex, has announced it is going out of business due to lack of sponsorship funding. Sources indicate owners of NASCAR are working with investment bank Goldman Sachs to explore a sale of a majority stake in the sanctioning body (Velin, 2018). Other than sanctioning bodies, there are no national membership organizations or nonprofits that provide for youth racer education and safety.

Consistent, efficient, standardized production of youth racing vehicles and classes create a streamlining effect that boosts the quality of potential consumer actions and increases response rates. Studies indicate standardized products and marketing increases customer satisfaction 15 percent and decreases costs by 40 percent (Baumgartner, 2005). Increase in participation by youth racing families will in turn increase investment and value in youth racing vehicles, equipment, tracks, suppliers and sponsorship dollars. These increased investments are likely to be retained and continued into the higher levels of the sport as the current youth under the proposed regulatory body progress in the sport. Resources that emerge out of future investment can include race equipment maintenance sheets, career resources, networking contacts, motorsport financial advice and digital content on youth racing topics. Youth racing through a

standardization model creates shared access to goods and services that can benefit the community as a whole.

Future Growth through Science, Technology, Engineering and Math

Opportunities exist for the proliferation of youth racing through scholastic programs. Academic institutions such as Purdue University have launched the M-STEM³ program, which encourages students to use racing affiliation with Indianapolis Motor Speedway to prompt advancement in STEM (science, technology, engineering and math) (“On your mark! Get set! Learn!” n.d.). STEM education federal funding totaled over \$1.6 billion in 2017 (Wolfe, 2017). Similar programs are already being used across the country in other forms of motorsport. Clemson University develops partnerships with motorsport venues in diverse communities. Teachers in these communities are invited to the Driving SCIENCE STEM Institute that takes place during a race week. To date, Driving SCIENCE has provided STEM in eight racetrack communities for 270 teachers in 84 schools, impacting 40,500 students. Teachers explore the world of motorsport through activities using readily available or low-cost materials, listen to speakers, take tours and spend a day at the races watching STEM in action (National Science Teachers Association, 2014).

In North Carolina, middle school students have experienced NASCAR racing through the BioMoto STEM

Challenge, a program that connects STEM with physical fitness and motorsport. At the end of the two-semester program, students compete in a modified pit crew in the BioMoto Capstone Challenge, held at Rockingham Dragway, using an apparatus they created at their schools (National Science Teachers Association, 2014). These types of activities could be integrated into camps and clinics provided for youth racers and fans. As funding for STEM programs increase across the nation from preschool through secondary education curriculums, the motorsport industry has an opportunity to partner with STEM programs to educate young people using motorsport and sprint car racing.

The American Speedway Association, through its youth segment, would provide the following through a 501(c)(3) in which youth racers pay a small fee (roughly \$100) in order to be a member. This organization would work in unison with sanctioning bodies (NASCAR, USAC, World Racing Group, IndyCar) to provide better opportunities for racers as well as increase safety in the sport. Standardization among sanctioning organizations will promote a growth model for alternate forms of racing.

Organizing Youth Motorsport Camps

Youth sports has become a \$15 billion industry, complete with national tournaments, sports camps, individual

instruction and private coaches. It has been documented parents are allocating as much as 10 percent of their income on registration fees, travel, equipment and camps. (Dallas Morning News, 2017). Since the program NFL 60 was launched in 2007, the NFL has committed more than \$325 million to youth health and fitness through programming, grants and media time for public service announcements. The NFL and its teams have constructed more than 200 NFL Youth Fitness Zones and integrated programs into more than 73,000 schools since the campaign launched (De Quesada, 2017). The American motorsport industry lacks camps, clinics, programs and educational opportunities. The youth segment of the American Speedway Association would offer camps and clinics for youth racers like those provided through NFL Play 60, US Kids Golf, the American Tae Kwon Do Association, or organizations such as the YMCA.

A standardized motorsport affinity organization might offer member benefits including camps and clinics, with training beneficial to youth in motor racing. A standard package would be created that could be distributed to local top-level drivers and tracks, giving them the knowledge, resources and information needed for their own clinic or camp. A clinic would include an afternoon or all-day event that enables local racers, families and tracks to engage in educational activities that enhance the skills and knowledge of sport participants.

“Camps” will offer a combination of the above clinics in single day or multi-day format. The extended version will offer at track camps that involve actual on track activity modeled from motocross camps. A driving clinic mixed with on track practice will allow youth racers to apply skills acquired in personalized coaching sessions.

1. Safety grants (tracks and drivers) – will be provided to members who apply through safety manufacturers and funds donated to the 501(c)(3) as well as through funds raised from memberships and partnerships with safety manufacturers.
2. Educational resources – would include print or digital materials containing information similar to what is taught in clinics in the areas of racing, life/character, business, and school (STEM) for members or available for purchase or distributed for free through youth racecar manufacturers.
3. Insurance – would be provided through STIDA (Short Track Independent Drivers and Associates) at an additional fee, less than \$279 for \$100,000 (\$85,000 plus a \$15,000 deductible) in excess medical coverage. The insurance policy is good for a two-year benefit period (or until the maximum of the policy is met) and covers drivers when they are racing anywhere in the world.

Driving

Youth participants will participate in a foundational clinic that involves a pro or

semi-pro driver or drivers working with their local racetrack and/or appropriate facility to engage participants in an intensive driving clinic. Forms would be provided for local pro or semi-pro drivers to coach at the clinic on their respective form of motorsport with much of the information shared at their discretion. American Speedway Association would provide scripts containing guiding questions. The goal of this clinic would be to give youth racers an in depth education on driving skills that help significantly increase their on track talent through teaching seminars, activities and games. American Speedway Association would provide non-racing class specific materials for the clinic. These materials would include character training materials such as water bottles, t-shirts, or decals.

Safety

Three essential elements – racers, parents/crews, and track safety personnel – will be addressed. The goal of this clinic is to show youth racers why they use safety gear, how each element works, why safety rules are important on the track (yellow flags, red flags); ways they can be safe on the track (safe driving, kill switches, alerting track personnel of parts on the racetrack); how they would be extracted or taken care of after a crash by track safety personnel (to decrease fear); and how they can check themselves and their bodies after a crash. The parent clinic will include how to interact with track safety personnel; insurance

information; how to make their child's car safe; how to properly purchase and put gear on their child; basic first aid/CPR/emergency training for practice or tracks that might not have safety personnel; or simply how to examine their own child. The safety personnel side is training for volunteer or local safety crews to allow them to learn better methods from local fire departments or professional track safety personnel and then practice those methods with the cars and drivers. This clinic will also include the safety grant aspect of the program, by providing safety item giveaways and/or grant applications from youth driving students who take part in the clinic.

Business marketing

It's essential youth competitors receive full scope view of the business side of motorsport. The drivers will be taken through an age appropriate intensive training on how to get sponsors, the importance of sponsors and motorsport funding, how to save and invest their personal money, the industry side of money. The parents will go through a similar training at a higher level when it comes to how to get and maintain sponsors as well as managing family finances.

Moving forward, this model can be extended through higher levels of adult motorsport competition, to racetracks with adult classes in order to provide safety grants for local tracks and racers. By having a stronger foundation for youth motorsport and an increase

participation level, the fan base of professional motorsport would grow by garnering more aspiring youth racers who are likely to aspire to professional competition. This would also bring a more diverse range of incomes to the sport, funneling capital into the higher levels of motorsport and providing a better product to fans over the long term in American motorsport.

Discussion

The concept of global free trade increasing the GDP of all nations has been modeled through the relationship between Australian and American sprint car racing. The regulatory developments in Australia can be integrated, rather than duplicated, to increase value in American motorsport. These methods can increase the efficiency of trade and broaden the production possibility frontier, which would secure the growth of motorsport for many years to come.

The economics of high level motorsport are critical and require the attention of industry leaders. Implementing national regulation at all levels of motorsport in America is virtually impossible. However, refining and developing youth motorsport is a beginning. It is important for the industry to recognize that youth racers form the foundation for professional levels in future racing seasons. A stronger and more viable youth motorsport movement will affect future growth in the major leagues of the sport. This funneling upward is applicable to

both industry population size and fiscal capacity.

The establishment of products as a market standard is especially important for companies that are acting in “network markets” – markets where users want to buy products compatible with those bought by others (Besen, 1994). Youth motorsport contains multiple products compared to other youth sports – the racecars themselves in addition to the athletes. Therefore, having products as a market standard for both the athletes as members of an organization and racecars as a market standard asset owned by their teams is essential for growth.

Rather than meeting only a minimal amount of time each week to compete, the racing association can also provide options for youth racers to indulge in the sport and find diverse ways to apply it to their life. Young racers will have the opportunity to develop career skills as a racecar driver, while also becoming educated on how racing skills can be applicable to a business, mechanical, or technology career in motorsport in the future. Training will present the sport in a broader perspective and provide a wide variety of career opportunities in the industry.

Regardless of whether drivers end up as professional drivers or not, an increase in engagement in youth motorsport leads to long term financial growth and sustainability for the higher levels of motorsport. Extensive research has shown that that youth sports play a role in shaping Americans' economic, academic, and social prospects. All else

equal, athletes earn roughly 6 percent more than non-athletes, translating into around \$1,000 per year extra wages. Economists Mark Hugo Lopez and Kimberlee Moore of the University of Maryland examined the effect of participation in sports on civic engagement. After controlling for factors such as age, educational attainment, and income, they found that athletes are 15 percent more likely to be registered to vote, 14 percent more likely to watch the news, and 8 percent more likely to feel comfortable speaking in public. It should be noted that for public speaking the effect on females is twice as large (Ganz, Hassett, 2008).

Why provide so many benefits? Distinguished sports historian Allen Guttmann notes that ancient sports were highly religious affairs and competition was organized in order to please the gods. Modern sports, however, have an entirely different character, as we no longer run to appease gods or to save our souls, but we can set a new record. Small tastes of that immortality are available to today's athletes at many levels. No matter how low the stakes the participants' emotional attachment to competition is intense. There seems to be little distinguishable difference between the transcendent joy of a World Series victor and a local Little League champion. A kid who has never had a hit in his life will feel like a Major League all-star when he rounds first base after his first line-drive up the middle. It's doubtful there is a former Little Leaguer around who doesn't rate

his first home run as one of the happiest moments of his childhood. The positive feedback between effort and results can then lead to snowballing commitments to excellence (Ganz, Hassett, 2008).

This emotional attachment at a young age could lead to further support or attachment to the sport at higher ages, even if not as a participant.

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