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Elite Dreams: The Making of a High Level Athlete

Every young hockey player has the dream, whether enacted in play or their imagination, in which they hoist up the Stanley Cup on their victory lap. It’s the ultimate Canadian dream, as skates are laced and sticks are taped, to play in the big leagues with the big boys. Dreams only made stronger as we watch Canadian athletes perform, win and proudly stand on top of the podium with an Olympic medal hanging gracefully. While watching the Olympic athletes in Sochi, Russia, I began to wonder about their path, what did their road to the Olympics look like? Is pure talent enough or are there other factors at play? Highly successful athletes reach this level through a combination of genetics, opportunity and hard work.

Two of the factors that play a role in how successful an athlete becomes are beyond the control of the player, natural genes and the month of the year in which you were born. According to science reporter and author Malcolm Gladwell, fate hands you these cards and they seem to play an important role in the critical first years of moving towards the goal of becoming a successful, elite athlete (30) . The recipe for making such an elite athlete includes, without question, a genetic ingredient. An elite speed skater’s natural body type is much different that the body type of a long distance runner. Basically, to make the elite level of sport the first ingredient seems to be in the genes: body types, naturally faster reaction times, agility, flexibility, speed and so on. These are things we are born with and even as hard as we work to try to change or improve them, there are limits. Gladwell also states that natural talent only matters as part of the equation, up to a certain point. When this point is reached other things, like opportunities and hard work, start to matter more (85). This may help to explain things like why every naturally, gifted hockey player does not play at the level of the NHL. When the playing field of natural talent is equal then something else needs to become different to change the balance. Lucia, Moran, Zihong and Ruiz, scientist who study human kinetics, say it well, “Being an athletic champion takes much more than having championship genes. This is part of the beauty of sport“ (101).

In addition to the natural athletic factor, the month in which a player was born, also plays an important role in setting the stage for future success. In the current minor hockey system in Canada, attention to more talented players starts early. They are noticed for their ability to skate better and shoot harder than other players on their team (Gladwell 25). Sociologists, Adona and Yates, looked at something called the relative age effect (RAE) in National Hockey players and concluded in their research that, “ In many sports, including hockey, children born in the early months of the calendar year get noticed by their coaches because of the superiority they demonstrate due to their age advantage.” (1). This occurrence is now known as the relative age effect (RAE). This REA has been studied, since its discovery in the mid- 1980s, by a Canadian psychologist, Robert Barnsley. It was actually Barnsley’s wife Paula, who drew his attention to this interesting fact while reading the program roster at a Major Junior A hockey game. Most of the 16 to 20 year old boys had birthdays in January, February and March of their birth years. This caught his attention and he began to look into this pattern in elite level hockey players. He found that, by a large number, most players in the Ontario Junior Hockey League and the NHL were born in January, followed by February and March. His numbers showed that 40% of elite Canadian hockey players were born between January and March, 30% between April and June, 20% between July and September and only 10% between October and December (Gladwell 22, 23).

So here is his explanation: in Canada the cut-off date by birthdays is January 1st for minor hockey. A young hockey player turning eight on January 2nd will most likely be a teammate with players born in December of the same year. At these younger ages, 12 months is a huge advantage in both physical and emotional development. So by the time the dust settles, the athlete is an early teenager, the older athlete ( by a few months) , has widened the gap so wide it is very difficult for those born later in the year to catch up. Toronto Maple Leaf commentator, Mike Ulmer, in his online blog, states that by age nine, many younger children have become discouraged in the minor hockey system and according to some studies, up to 44% of children who started hockey early on have moved, by that age, to another sport. So with minor hockey coaches closely watching, two things, natural talent and an early birth date they have provided certain young athletes with a huge advantage. As a result of these two factors, these players now receive another ingredient in the recipe for success, opportunities.

The relative age effect combined with what is seen as natural talent opens doors for these young athletes, opportunities that may never be made available to the younger teammate. With the influence of opportunity, the development of the identified player almost becomes a self-fulfilling prophecy. This player, at age six, is noticed as being more advanced and better than the other kids their age and therefore are chosen to better, higher level teams. According to Gladwell, chances are 70 % more likely that these children have birthdays in the first half of the year (24). So what does this new opportunity to be on a different team do to provide this player with an advantage? Being selected to a more competitive rep team means many things : access to better trained coaches with more experience, access to many more practice hours in which to get better and many more games in which the player can use the skills taught at earlier ages in actual game situations (Gladwell 25). Even at a fairly young age children see the stigma, or advantage, in being selected for a AAA team rather than to a house league team. If the child does not see this, very few hockey parents miss this fact. Talking about parents of hockey players leads to another opportunity that can make a huge difference in making the elite levels of hockey or any other sport, parent commitment. At this age players cannot drive nor fund the costs associated with playing sports and therefore needs the parental commitment. This becomes an opportunity that is not controlled by the player. The cost of equipment and travel for one hockey season can be in the thousands of dollars, not an amount that can be spent by just anyone (Lucia, Moran, Zihong and Ruiz 101). This example looked at a young hockey player, but can be applied to any young promising athlete who has been identified, noticed and taken on by a more elite team. But chances are, without certain opportunities the naturally talented player will never make the elite level. So, specific opportunities provided to the naturally talented, usually older players sets the playing field for success. Now what’s the last ingredient that separates the strong from the weak? Practice.

A common assumption related to making it to the elite levels is based on the idea that the elite athlete has worked harder and practiced more hours. Jody Brylinsky reinforced this assumption stating, “we know that elite athletes come from good genes, and a common idea about how best to develop elite performance is to identify talent early, create a specialized environment, and watch talent grow” (16). According to Gladwell, the number of hours an elite athlete spends practicing and applying the necessary skills is a necessary ingredient in making it at the elite levels. Gladwell talks about a 10,000 hour rule in which he states that by the time an athlete has reached elite levels he or she has committed about 10,000 hours or roughly ten years into practice and competition (40). By doing the math this calculates to an amateur athlete spending 2.75 hours of practice a day every day for ten years to make it to the big leagues. No one argues with the fact that a talented person, whether it be an athlete, musician or chess player, needs to practice to get good enough to compete at national and international levels. But is that much practice really necessary? Other research done looking at elite level athletes in the USA and Australia shows that most of the members of a National sports team have been in their sport for an average of 10 to 12 years. They conclude from this research that it seems that many years of practice and games need to go into becoming an elite athlete, but the 10,000 hour rule is not a necessary thing .This research team also found that all practice hours are not created equal. They stated that athletes with qualified trainers that have specific practice plans seem to become better faster than athletes that just practice to practice (Pathways to Podium Research Team). This shows it is more important to practice effectively than just practice.

The idea that it is the best hockey players in Canada who make it to the top has more to it than just getting there based on their natural talent. One could say that in examining these facts, the Canadian Minor Hockey system’s current player development plan has missed the boat. By focusing on early “talented” kids it has possibly missed a number of potentially exceptional players who will develop skills at a slower rate than their older teammates. The older player then becomes better and better with more opportunities and more time to practice his skills, thus widening the gap. Looked at in this way the Olympic and national teams could be made better by having Hockey Canada possibly look at a different route to develop young players that would really bring Canada’s best hockey players to the international stage. So to stand on the podium at the next Olympic Winter Games will require more than just natural talent. The magical recipe appears to include a combination of personality, motivation, natural talent and opportunities that ultimately blend together to make an elite athlete.

Works Cited

Addona, Vittorio, and Philip A. Yates. "A Closer Look at the Relative Age Effect in the National Hockey League." *Journal of Quantitative Analysis in Sports* 6.4 (2010): 1-17. *Selected Works of Vittorio Addona*. Macalester College, 2010. Web. 1 Mar. 2014.

Brylinsky, Jody. "Practice Makes Perfect." *Sports Research /Intelligence Sportive* 4 (Jan. 2014): 16-19. *Sirc*. ASCA Newsletter, Jan. 2014. Web. 1 Mar. 2014

Gladwell, Malcolm. *Outliers: The Story of Success*. New York: Little, Brown and, 2008. Print.

"Is 10,000 Hours a Magic Number for Sport Expertise ?" Web log post. *Pathways to the Podium Research Project*. Victoria University, Melbourne, Australia, York University, Toronto, Canada, and the Australian Institute of Sport, 29 Nov. 2010. Web. 1 Mar. 2014.

Lucia, Alejandro, Maria Moran, He Zihong, and Jonatan R. Ruiz. "Elite Athletes: Are the Genes the Champions ?" *International Journal of Sports Physiology and Performance* 5 (2010): 98-102. Web. 1 Mar. 2014.

Ulmer, Mike. "World Junior Hockey Tournament Is a Chance for Hockey to Invite More Kids into the Game." Web log post. *The Official Site of the Toronto Maple Leafs*. MLSE and the National Hockey League, 20 June 2013. Web. 1 Mar. 2014