

Published: 27 May 2022 doi: 10.3389/frym.2022.684710



TALENT DEVELOPMENT IN SPORT: HOW DO YOU MAKE IT TO THE TOP?

Camilla J. Knight 1,2* and Victoria M. Gottwald 3

- ¹Department of Sport and Exercise Sciences, Swansea University, Swansea, United Kingdom
- ²Department of Sport Science and Physical Education, University of Agder, Kristiansand, Norway
- ³School of Human and Behavioural Sciences, Bangor University, Bangor, United Kingdom

YOUNG REVIEWERS:



LEILANI AGE: 11



ZELYA AGE: 8 Around the world, billions of children participate in sport, and many are identified as being talented. However, only a small number of these individuals go on to become elite athletes. In fact, you have more of a chance of being struck by lightning than becoming an elite athlete! So how do those who do become elite athletes make it happen? What enables a talented young athlete to become an international superstar? In this article, we will review key information about talent development and answer some important questions: How early should I start my sport? Should I focus on one sport or try lots? How important is "failing" in the journey to stardom? We will discuss various talent development pathways and why some may be better than others. We will also look at the factors that might influence an athlete's chances of success.

Have you ever wondered what would increase or decrease your chances of becoming an elite athlete? Well, the short answer is LOTS

of things! Some things you can control and change, others you cannot. Some factors have to do with you as a person and others have to do with the environment you grow up in. In this article, we are going to discuss a few of these things, to help you understand how elite athletes make it to the top.

WHEN WERE YOU BORN AND WHERE DO YOU LIVE?

Incredibly, one thing that can influence your chances of becoming a future champion is the month in which you were born! If you are one of the youngest on your team or in your competition year, then your teammates and competitors might be bigger and stronger than you because they were born before you and have had more time to grow. Lots of adults forget this and, when they pick teams or label children as talented, they often choose the bigger, stronger children, forgetting that those children might just be older. These children then get better coaching, train in better facilities, have more opportunities to develop their sporting skills, and become more confident. All of this means that these children are more likely to become elite athletes. If you are one of the youngest on your team, do not give up! Hanging in there can make you pretty tough, and scientists have shown that, if you do manage to keep going, chances are you will end up being really good. This is called "the rise of the **underdog**" [1]!

Not only does the month in which you were born influence your chances of becoming an elite athlete, but where your parents choose to live does, too! Children born in smaller cities and towns often have more chances to play many different, less-organized sports. There are fewer children competing for spaces on teams, meaning there are more chances for everyone to play and practice. Children born in bigger cities often have to compete for places on teams, and the teams usually compete in very structured programs run by high-quality coaches. This means young athletes in big cities often play in more structured, professional teams and programs. It might seem that having lots of competition and good coaches would help you become an elite athlete, but it does not always! Athletes from smaller cities who have more chances to play sport in fun, safe, less-structured programmes are more likely to be successful [2].

In fact, both the number of sports you play when you first start out and how much you practice are quite important in helping you become an elite athlete. Depending on where you live, you might have opportunities to play more than one sport, but sometimes it can be difficult to know whether to just practice one sport or try lots. Scientists have found that if you just do one sport from a young age, you might get bored with it as you get older and sometimes even get more injuries. Therefore, it is probably better to try lots of sports. Practicing various sports is likely to make you happier and help you to learn lots of skills that you can use across sports. Look out for Zlatan Ibrahimović

UNDERDOG

A competitor thought to have less chance of winning a fight or contest. playing football. He does some amazing high kicks, which he learnt in taekwondo! Playing games just for fun can also make you better [3]! This may be playing a game of HORSE on the basketball court with your friends or kicking a ball around in the park. Once you have had a chance to play lots of sports and learn many skills, if you want to be really good you do need to put your energy and focus into practicing just one sport. This usually happens when you are about 14, but it varies depending on the sport you decide to focus on.

WHO ARE YOU AND WHAT DO YOU THINK ABOUT WINNING AND LOSING?

Having certain **personality** characteristics can help you to develop into an elite athlete. Some of your personality is there from birth, influenced by your genes. However, some of your personality develops as you grow up because of your parents and the experiences you have. Scientists have shown that super-elite athletes (those who win lots of medals at the Olympics) have different personalities than athletes who win only a few medals or do not win any medals at all [4]. The best athletes are often very organized, **optimistic**, and hopeful! They also work really hard to get things right. Perhaps most importantly, super-elite athletes really want to win, but also want to perform well. They know they must work on developing their skills and abilities, not just at being better than others.

The way you think about winning and losing is an important part of your sporting experience and might affect whether you become an elite athlete. Most athletes do not just win and have lots of success. In fact, this is very uncommon! Most elite athletes experience a bumpy path to the top and often fail, lose, and feel disappointed along the way. Athletes may also experience difficult things outside of sport. Amazingly, some of the best athletes of all time have experienced some really big challenges growing up. These bumps and challenges can make athletes tougher and influence their personalities! In science, we call this a "rocky road" (Figure 1). Even Michael Jordan got cut from his high school basketball team! Imagine if he had stopped playing because of that! These bumps are so important that sometimes coaches may try to put some into training [5]. One example may be asking you to play in an older age group, which might be harder for you. When you experience these bumps—in real life or in practice—the support you get from your family and coaches will be really important!

NOBODY MAKES IT ON THEIR OWN!

Even the most skilled and talented young athletes cannot succeed on their own. Help from family, especially parents and guardians, is extremely important [6]. Parents/guardians often act as a taxi service,

PERSONALITY

The way a person usually thinks, feels, and behaves from day-to-day.

OPTIMISTIC

Feeling and showing hope and confidence about the future.

Figure 1

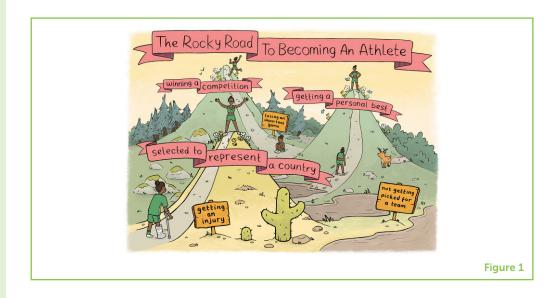
Becoming an elite athlete is often a rocky road. As shown, athletes will experience highs such as winning important competitions, achieving personal best times or performances, and representing their country. But it is not all positive, along the way athletes will also experience challenges such as injuries, missing out on selection or losing an important game. Coping with the highs and lows of sport are a key part of becoming an elite athlete.

NUTRITIOUS

Containing lots of the substances needed for life and growth.

SIBLINGS

A brother or sister.



taking you to training and competitions; as chefs, cooking healthy, and **nutritious** foods; as banks, paying for equipment and coaching; and as your number-one cheerleader, saying lots of positive things and supporting you whether you perform well or badly. Support from parents/guardians is extra important if you are having a tough time or hit one of those bumps in the path—you might get injured, find it hard to learn a new skill, or not play as well as you want. Lots of athletes thank their parents after they win gold medals or break world records because they know they could not have done it without them.

Other people in your family might also impact your chances of making it to the top. If you live near other family members like grandparents, aunts, uncles, or older **siblings**, this can be useful because they can help with some of the tasks that parents/guardians usually have to do. This means parents are less likely to be stressed out and can provide you with the very best support. Having older siblings is especially helpful for increasing the chances of becoming an elite athlete [2]. Younger athletes often watch their older siblings and want to play sport more and work harder because their siblings are doing it. Sometimes having a sibling who plays the same sport can provide a ready-made practice partner, but also a competitor. When siblings are competitive, it can help young athletes perform better. Think about Venus and Serena Williams—they practiced together all the time as children and then became rivals on the world stage. Serena is younger than Venus but usually beats her—probably for all the reasons above!

CONCLUSION

Even if you are very skilled, born in the right place, and have the most supportive parents (see Figure 2), you still might not become an elite athlete. Luck is also an important part—in fact, whether you are born in a big city or a small town is luck! Some young athletes have better luck than others. For example, athletes might get bad injuries that stop

Figure 2

Talent development is influenced by many things. For instance, as shown in the figure, where you live and your opportunities to sample a lot of different sports can influence your opportunities to develop your sporting talents. Additionally, support of family members, coaches and teammates is also really important.



them from playing, which is really unlucky. Other athletes might have their very best games when an important person is watching, meaning they get selected for a special team—this is really lucky. Sadly, there is nothing we can do about luck. However, if you play lots of sports when you are young, have fun and enjoy being active, try your hardest, and do not worry about messing up or making mistakes, you are doing everything you can to increase your chances of success!

ACKNOWLEDGMENTS

High five to our young reviewers; Leilani and Zelya as well as the pupils at Hyde Park Junior School who also helped with some pre-reviewing feedback.

REFERENCES

- 1. Gibbs, B. G., Jarvis, J. A., and Dufur, M. J. 2012. The rise of the underdog? The relative age effect reversal among Canadian-born NHL hockey players: a reply to Nolan and Howell. Int. Rev. Sociol. Sport. 47:644-9. doi: 10.1177/10126902
- 2. Hancock, D. J., and Côté, J. 2014. "Birth advantages, social agents, and talent development in youth sport," in Positive Human Functioning From a Multidimensional Perspective: Promoting High Performance, eds A. R. Gomes, R. Resende, and A. Albuquerque (New York, NY: Nova Publishers). p. 15–32.
- 3. Côté, J., Baker, J., and Abernethy, B. 2007. "Practice and play in the development of sport expertise," in Handbook of Sports Psychology, 3rd Edn, eds R. Eklund, and G. Tenenbaum (Hoboken, NJ: Wiley). p. 184-202. doi: 10.1002/9781118 270011.ch8
- 4. Hardy, L., Barlow, M., Evans, L., Rees, T., Woodman, T., and Warr, C. 2017. Great British medallists: psychosocial biographies of super-elite and elite athletes from olympic sports. Prog. Brain Res. 232:1-119. doi: 10.1016/bs.pbr.2017.03.004

- 5. Collins, D., MacNamara, A., and McCarthy, N. 2016. Putting the bumps in the rocky road: optimising the pathway to excellence. Front. Psychol. 7:1482. doi: 10.3389/fpsyg.2016.01482
- 6. Henriksen, K., Knight, C. J., and Daurte, A. 2020. "Talent development environments," in The Routledge International Encyclopedia of Sport and Exercise Psychology: Applied and Practical Measures, Vol 2, eds D. Hackford, and R. Schinke (Abingdon: Routledge). p. 658-70.

SUBMITTED: 23 March 2021; ACCEPTED: 06 May 2022;

PUBLISHED ONLINE: 27 May 2022.

EDITOR: Sam Nicholas Thrower, University of Roehampton London,

United Kingdom

SCIENCE MENTOR: Taissa Lytchenko

CITATION: Knight CJ and Gottwald VM (2022) Talent Development in Sport: How Do You Make It to the Top? Front. Young Minds 10:684710. doi: 10.3389/frym.2022. 684710

CONFLICT OF INTEREST: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

COPYRIGHT © 2022 Knight and Gottwald. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

YOUNG REVIEWERS

LEILANI, AGE: 11

I love to play soccer with my friends, and I am very good at it. But I also love to draw, like my mom. I liked the article, it was very cool, especially the part about the underdogs. They are just as special as those that win all the time. Because winning comes with a lot of practice, and that is a hard level to get to.

ZELYA, AGE: 8

I am good at gymnastics and soccer. I even got a ribbon in gymnastics. I am also good at math, I like numbers. I thought this article was very cool. My mom and dad are my cheerleaders. They are at every game making sure I do my best. They are my biggest fans and I love them very much.





AUTHORS



Camilla J. Knight is a professor of sport psychology and youth sport. That means she gets to spend her time reading and teaching about sport and trying to find out how to make sport more enjoyable for children and their families. She is spent over a decade talking to parents, coaches, and young people to find out about their experiences in sport. As someone who grew up playing sport and still loves to be active and have adventures, she cannot think of a better way to spend her time! *c.j.knight@swansea.ac.uk



VICTORIA M. GOTTWALD

Vicky M. Gottwald is obsessed with basketball and, as a twin, has always been very competitive. She spent a lot of her playing career playing basketball for Wales before coaching with several of the Wales National Team Junior Squads. It has always been important to her to make her passions her job, and so she is also a researcher and teacher in skill acquisition. She is very interested in how athletes practice and best develop their skills.