

## EXCELLENCE IN SPORT: A STUDY CENTERED ON THE LIFE STORY OF 14-TIME WORLD CHAMPION THIERRY GUEORGIU

### A EXCELÊNCIA NO DESPORTO: UM ESTUDO CENTRADO NA HISTÓRIA DE VIDA DE THIERRY GUEORGIU, 14 VEZES CAMPEÃO DO MUNDO

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**Resumo.** This paper seeks to identify the factors and characteristics that determine the development and maintenance of excellence in orienteering, by examining the life of an athlete who has been a world champion 14 times. "Life Stories" were used as a method to collect data. The data was collected by conducting semi-structured interviews and an analysis of various documents. This data was then analyzed using the content analysis method. The results highlight the need for successful interaction between socio-contextual and socio-personal factors over time. Therefore, achieving excellence in orienteering is a multidimensional process that must be understood using a bio-psycho-socio-axiological perspective.

**Palavras-chave:** elite; development factors; athlete development; sport excellence; life history

**Abstract.** Este artigo busca identificar os fatores e as características que determinam o desenvolvimento e a manutenção da excelência na orientação, examinando a vida de um atleta que foi campeão mundial 14 vezes. As "Histórias de Vida" foram usadas como método de coleta de dados. Os dados foram coletados por meio de entrevistas semiestruturadas e análise de vários documentos. Esses dados foram então analisados usando o método de análise de conteúdo. Os resultados destacam a necessidade de uma interação bem-sucedida entre fatores sociocontextuais e sociopessoais ao longo do tempo. Portanto, alcançar a excelência na orientação é um processo multidimensional que deve ser entendido por meio de uma perspectiva biopsicossocioaxiológica.

**Keywords:** elite; factors of development; development of the athlete; sports excellence; life history of the athlete

## 1. INTRODUCTION

In sports, as in other areas, achieving excellence is one of the main goals for many individuals, even if only a "small number" are in fact able to reach and maintain it (Gagné, 2007). Excellence has been one of the main topics discussed and studied through the years. As a result of the developments in science and technology, a higher interest in this topic has led to an increase in investigation, where the contribution of multiple scientific areas, based on different paradigms, searched for answers to better understand excellence (Bloom, 1985; Ericsson et al., 1993; MacNamara et al., 2010; Matos et al., 2011). Sport sciences have also been paying attention to this topic (Ericsson, 1996; Côté, 1999; Durand-Bush & Slamela, 2002; Baker & Horton, 2004). Investigation has also contributed to the progress of a set of conceptual



approaches and theoretical models (Matos, 2014), which have been searched for a clarification to this subject, as well as the necessity of developing a unifying and consensual theory.

Hence, it is possible to identify explanatory models that justify excellence by (Matos, 2014): a) the principle of the necessity to identify and develop talent and high performance levels; b) the identification of personal characteristics (personality, motivation); c) highlighting the variables and environmental factors in the progressive development of those abilities; d) those who associate excellence with intelligence and those who value practice, effort and dedication in the accomplishment of tasks. It is possible to conclude that excellence is the result of a successful interaction between multiple internal and external factors and constraints (Gagné, 2004; Matos, 2014; Celestino et al., 2019; Ericsson, 2020). Nonetheless, so far there is not a model that can explain the factors related to excellence.

Therefore, individual characteristics (motivation, cognitive and genetic aspects and training), and external factors both micro and macro (opportunities/resources, family, environmental and cultural factors), distinguished by factors of primary and secondary influence respectively (Baker & Horton, 2004), interact and influence each other resulting in the development of excellence (Sarmiento et al., 2018; Pereira et al., 2023), which should be validated by the cultural and social construct to which the individual belongs (Calvo, 2003). However, this multifactor supports the need to understand and conceptualize the topic as a multidimensional and dynamic (Burgess & Naughton, 2010), on which inter-action and influence of the several factors happens.

Evidence in this area of knowledge corroborate the importance of these key factors (Burgess & Naughton, 2010), as well as the necessity for interaction to occur in a specific period, following a set of stages inherent to the development in the sport (Bloom, 1985; Côté, 1999) which has its genesis when the first contact with sports extends to higher performances (Lorenzo & Sampaio, 2005). In the process, we observed a hierarchy ranking of a set of tasks and contents which promote the gradual increase of the practicing demands and the adequate development of athletes' skills and abilities (Côté, 1999), in order to obtain a constant improvement in performance and maximum efficiency in advanced ages.

Considering the above mentioned, it is commonly accepted that to develop and acquire excellence effective practice is necessary. Deliberate and properly structured practice are decisive factor in the process (Ericsson et al., 1993; Ericsson, 1996; Ericsson, 2020).

Orienteering is characterized by an individual running, against the clock, through various and unknown paths, properly identified by control points in the field which the orienteer must discover in the correct order. To accomplish it, the athlete uses only the information displayed in a map specially designed for this purpose and a compass, selecting the itinerary options himself. Orienteering is considered a complex sport and high level of performance requiring a skillful combination and perfect management of physical and intellectual components (Seiler, 1994, 1996; Ottosson, 1998).

The research of the underlying factors linked to an excellent performance in orienteering is divided between characterizing the physiological demands of the sport, psychological requisites, the interaction between psychological and physical aspects, training, coaching, teaching and social aspects, which relate to (Seiler, 1994) findings. However, the investigation is distributed by the isolated analysis of the factors impacting the performance. This type of analysis tends to limit the identification of some determinants of performance in sports (Lorenzo & Sampaio, 2005). Therefore, several authors have suggested the need for further studies in this area to understand the progress of the athletes' performance to excellence (Calvo, 2003), using qualitative analysis (Côté & Ericsson, 2005). Regarding orienteering, this study should be complemented with an analysis of the underlying factors of sociocultural and environmental dimension (Seiler, 1994), as well as the educational, psychological, moral and

political dimension the athletes are involved in, which are important contributors to the development and maintenance of excellence in orienteering.

Considering the above, it would be important to perform studies that enable data collection regarding athletes with excellent performance and the interpretations of their own experience, daily work, principles, attitude, and behaviour significance (Jones et al., 2003). Therefore, the main purpose of this study was to identify the factors and characteristics which define progress and maintenance of excellence in orienteering, based on the analysis of Thierry Gueorgiou, orienteering world champion's life story.

## **2. MATERIALS AND METHODS**

Given the multiplicity of variables which were difficult to measure objectively, we decided to collect data using life stories (Atkinson, 2005).

### **2.1. Study participant**

Our study focused on orienteering athlete, Thierry Gueorgiou. Born in Saint-Étienne, France, in 1979, he has a bachelor degree in biology from University of Saint-Étienne in France. Thierry has been an orienteering athlete since six years of age and since age 12 he has been part of the France Orienteering National Team. He was 14 times world champion and is considered one of the best orienteering athletes in the world.

### **2.2. Proceedings**

From the qualitative research methods, we have chosen Life Stories (Atkinson, 2005) considering it a powerful instrument to understand the greatest cultural phenomena of our days, sports, and because this method presents good possibilities of helping in the understanding of excellence in orienteering. Through the life histories method, it is possible to obtain personal and sports information from these excellent professionals, improving our knowledge on their social and cultural influences on training, competition, and life context (Sands, 2002). In other words, by listening to their personal stories we sought to understand their life trajectory, identifying people, moments/experiences, and places with significant impact on their lives. On the other hand, this approach is also justified by the scarce number of studies regarding excellence in this sport using this specific methodology.

### **2.3. Sources for data collection were the following:**

a) semi-structured interview – this type of interview is used in data collection for life stories studies (Atkinson, 2005). Thierry Gueorgiou, his teammates from the national team, club and friends were interviewed. The interview scripts were performed taking into account the aim of the study, literature research (Côté & Ericsson, 2005; Holt & Dunn, 2004), as well as advice from experts. The scripts were afterwards submitted to an expert panel, for prior evaluation (three with expertise in sport sciences, recognized in the scope of qualitative investigation; one with expertise in sport science, an orienteering coach and athlete). Following the suggestions for revision, the scripts were submitted for the pre-test process, rephrasing some questions. Scripts were again submitted for experts' approval. Interviews were conducted between January 31st and February 28th, 2014, and were recorded with participants consent and later transcribed.

b) Document analysis – This procedure works as a complement for qualitative investigation (Lessard-Hébert et al., 1990), allowing data triangulation (Patton, 1990; Miles & Huberman, 1994) obtained from the research. Therefore, several documents concerning Thierry Gueorgiou were analysed, namely articles and interviews from several international newspapers, as well as reliable blogs linked with orienteering.

Subsequently, data was analysed by content analysis technique (Bardin, 2008) using software QSR NVivo 10 for the codification of interviews. According to the objectives of the study and the dimension of the analysis, the creation of categorical systems a priori and a posteriori was performed (Ghiglione & Matalon, 2001). The resultant categories were submitted to the above-mentioned panel of experts to fulfil the faithfulness and validity of the entire process (Ghiglione & Matalon, 2001; Bardin, 2008).

### 3. RESULTS AND DISCUSSION

To identify the crucial factors and characteristics of excellence, we will present the main ideas and reflections from the life story of the interviewed. They emerge as the most representative and decisive categories of this study.

#### 3.1. The beginning: Social and sports involvement

Analysing Thierry Gueorgiou's life story, we observed that at an early stage of his development, social and sports involvement stood out as an important factor to the understanding of the process, acquisition, and maintenance of excellence.

Reference literature in this area of knowledge has identified the relevance of social and sports involvement as an important factor in the process of achieving excellence (Bloom, 1985; Côté, 1999; Barreiros et al., 2013; Celestino et al., 2019; Durand-Bush & Slamela, 2002). Therefore, in this case we highlight the importance of significant others, where father, followed by close family, take on the most important role in the progress of the individual as an athlete. Of equal importance we have identified the diversification of experiences, as well as having fun as the main influences in excellence in early stages of development. Analysing the information provided by Thierry, we have identified a special recognition and importance attributed to his father as the main person responsible for his growth and success as an excellent orienteering athlete.

*“When I was four years old, my father had already put a compass in my hands”.* (Thierry Gueorgiou).

*“I believe I was very lucky, because when you are young it is very important to have someone teaching you orienteering, and this person was my father. As I mentioned, he was a physical education teacher. He was very good and tried to pass on to me his experience in orienteering... my father always rooted for me and he is the one behind my success”.* (Thierry Gueorgiou).

*“Thierry Gueorgiou's father had an important role in Thierry's development as an orienteer.”* (Kocbach, 2007).

We have also observed the recognition Thierry gives to his close family as one of the main supporters for his development as an excellent orienteering athlete.

*“My parents were physical education teachers... all my family is engaged in this sport, so it was very easy... In the beginning my family influenced me, and it was easy to follow them”.* (Thierry Gueorgiou).

*“Everyone was very much involved in orienteering, my father was a coach, my mother was the president of the club, my brother was in the national team, and they were all very focused on orienteering”.* (Thierry Gueorgiou).

The evidences have effectively showed the family powerful influence as a catalyst for progress in the sport (Bloom, 1985; Côté, 1999; Côté et al., 2003; Barreiros et al., 2013; Celestino et al., 2019), adopting the role of initiators of sports practice (Bloom, 1985; Ericsson et al., 1993), and later on providing the social and active, emotional and logistic support

necessary for the continuity of practice representing one of the key factors to achieving excellence (Ottosson, 1998; Côté, 1999; Baker & Horton, 2004). In orienteering, this can also be observed since family seems to be one of the main reasons individuals choose to initiate and engage in orienteering (Celestino & Pereira, 2012). However, the fact that Thierry's parents were physical education teachers allowed them the possibility to be involved in a vast set of experiences which combined, offered sport diversity and sensorial skills which are essential for the achievement of excellence (Baker et al., 2003; Abernethy et al., 2005).

Thierry Gueorgiou also recognizes the relevance of having multiple experiences at an early stage of his sport career, to achieve, develop and maintain excellence in orienteering.

*“Since my childhood I have always enjoyed spending time in the woods. What I love more than anything is not knowing what is waiting for me around the next bend. That’s the beauty of this activity, that every time I compete there is a new playground and a new experience.”* (Thierry Gueorgiou).

*“Play different sports such as handball and many sports, running, cross country ski, stuff like that.”* (Thierry Gueorgiou).

*“Since they were physical education teachers, they had long vacations and we traveled abroad during the summer, to Switzerland or Scandinavia and it was important.”* (Thierry Gueorgiou).

Studies have emphasized that engagement in different sports is a positive factor in the development of physical and cognitive skills crucial to the practice of a modality (Gagné, 2021; Güllich et al., 2023; Leite et al., 2009; Rugg et al., 2018). On the other hand, investing and being committed to this diversification, whether it is informally or spontaneously, prior to the involvement in a more structured and regular practice, it is considered a pre-requisite to the development of excellence in sports (Bloom, 1985; Leite et al., 2009). Recognizing the value of diversification at the level of development and maintenance of excellence in performance in orienteering, and according to Thierry Gueorgiou, this diversity extends and shifts from sports diversification to locations of practice and orienteering training in more advanced stages.

*“My performance level started to improve more and more and I started to travel more, do training camps and world competitions.”* (Thierry Gueorgiou).

*“...experiencing different situations and the number of forests “visited” have played an important role.”* (Thierry Gueorgiou).

In orienteering, excellence requires a perfect combination of both physical and cognitive components. In the latter though, there is a necessity of utter efficiency in understanding and using map and paths information. This process does not exclusively depend on the current situation (Oliveira & Duarte, 2005), and it also requires the existence of a previous repertoire of experiences, which are triggered in key moments as Thierry Gueorgiou indicates.

*“For an elite orienteer, it is crucial to know many different paths and to be confronted with the way map designers create them and see them.”* (Thierry Gueorgiou).

*“In the world championship often the organizers maintain a certain paths for the competition, and, even if you had practiced in supposedly relevant grounds around it, they will never be exactly the same, therefore you need to show some flexibility. So, it is important to have a path database in your brain to quickly adapt.”* (Thierry Gueorgiou).

Being prepared for different situations, at an early age, enables the acquisition of a set of skills which allow a faster and more efficient physical and cognitive response depending on the conditions. On the other hand, and considering the cognitive component in orienteering, diversification raises the level of specific knowledge and memory adjustment which allows a faster and more flexible codification and retrieve of specific information during the race (Eccles, 2002).

An important factor, also identified in Thierry Gueorgiou career, with great impact in the early stages as an athlete is having fun when practicing a sport.

*“My parents never forced me into orienteering, I liked, it was fun. It was very important in the beginning to have fun and nothing else.”* (Thierry Gueorgiou).

*“...we had lots of fun and spent many good moments, had fun. We could be lost in the woods but it didn't matter, we were not worried and we had fun.”* (Thierry Gueorgiou).

*“I started winning in youth levels and of course, when you are young, you like winning, it helps with your confidence as a child... and I started to win more and more and had fun with it. It made me keep on doing it and liking the sport even more.”* (Thierry Gueorgiou).

One of the aspects that characterizes sport practice in early stages of training is in fact the pleasant environment, supporting, playful, and fun (Ramadas et al., 2012). It is considered primary in the process of captivating and motivating youth towards the practice of sports and more specifically in orienteering (Celestino & Pereira, 2012). Reference literature is unanimous in considering that before children and youth engage in a more regular practice, they should experience and get involved in recreational sports activities, typical for their ages (Ramadas et al., 2012). Whether it is the activity, immediate pleasure and fun are determinant elements (Côté, 1999; Côté & Hay, 2002).

### 3.2. The dream

One of the most important transitions an athlete must face in his career is when, during youth, they have to decide to specialize in a particular modality (Pereira et al., 2023). It will be determined by intrinsic motivation, by knowing more and wanting to improve their competencies, which later is translated into an increase of the commitment levels and responsibilities towards the sport and training (Bloom, 1985; Côté & Hay, 2002; Ramadas et al., 2012).

Considering the above, we could observe the significance Thierry Gueorgiou gives to commitment towards this dream of his, to focusing in achieving his goals and his passion for orienteering, as important factors in achieving excellence and with significant impacts in his career. As Orlick mentions (Orlick & Partington, 1988) excellence in sport, school, arts, and business or in your job starts with a dream or a goal to which you add commitment, dedication, and focus.

The data collected allowed seeing the existence of a strong commitment toward orienteering and the achievement of the child dream of being a world champion.

*“...when I was 12 years old it changed a little, it became a bit more professional.”* (Thierry Gueorgiou).

*“...he lives for orienteering, and even when at home, there is always something to be done...”* (Friend and teammate from the national team)

*“... Thierry has been a full time orienteer. It's not easy to be the best in the world. It really takes time. During the last two years, Thierry has spent a third*

*of his time in training camps, a third training in France away from home and a third at home. Thierry has been a full-time orienteer... ” (Borg, 2005).*

Commitment is an essential part of the process of achieving excellence, without which it would be difficult for the athlete to develop skills in an optimized way (Redding et al., 2011). Supporting this, studies developed in sports have demonstrated that excellent athletes are characterized by their high level of commitment towards the modality, considering commitment as one of the most essential elements to develop excellence (MacNamara et al., 2010).

Taking another perspective, and based on the excellence model developed by Orlick (Orlick, 2009), commitment along with confidence, focus, control of distractions, continuous learning and willingness, is one of the crucial elements to achieve excellence. Focusing on the goal is a visible characteristic in Thierry.

*“...It is interesting how focused he is, how he analysis each aspect...” (Frédéric Tranchand, friend and teammate from the national team).*  
*“There is only one race for which I long to all year, is the middle distance World championship, to take place in Italy this summer (2014). All my focus goes to this objective.” (Thierry Gueorgiou).*

The same author refers that achieving excellence obeys the need to commit and be focused, since these elements ensure enhancement of capacities and, consequently, a better performance independently of the circumstances (Orlick, 2009).

Also related with positive emotional aspects, and often mentioned in Thierry Gueorgiou’ and his teammates’ discourse, is the passion himself refers to have not only for orienteering, but also for achieving his goals.

*“As always, we must be passionate above all, because sometimes the paths may seem and be very long.” (Thierry Gueorgiou).*  
*“He likes orienteering and nothing else.” (Friend and teammate from the national team).*  
*“I am very passionate about what I do, I do it with a lot of passion.” (Thierry Gueorgiou).*

Indeed, being passionate about the modality each one practices, helps individuals to become more dedicated to their specific sport, and allows them to push harder and face obstacles towards excellence (Vallerand et al., 2008). Observing the literature, we identified coherence with our findings, as passion is effectively a differentiator element between these athletes and their peers.

*“He loves orienteering and is very professional.” (Lucas Basset, friend and teammate from the national team).*  
*“On departure to a competition I’m always very relaxed because Orienteering is really what I enjoy doing the most.” (Thierry Gueorgiou).*

Other authors have mentioned that being passionate for an activity and the pleasure associated with it is an important factor for motivation, engagement, time and energy investment, in the tasks needed to accomplish (Bloom, 1985; Vallerand et al., 2003). According with Vallerand et al. (2003, 2004) being passionate for certain activities may be a prominent characteristic in an individual’s identity, as observed in Thierry’s case.

#### 4. CONCLUSION

The purpose of this study was to identify the factors and requirements determinant to achieve, develop and maintain excellence in orienteering, based on the life story of Thierry Gueorgiou, 14-time world champion.

Data has revealed that it was at an early stage that the grounds of his excellence were built. It was possible to observe a strong relationship between his social and sports development and his excellence, highlighting the impact of family, more specifically his father. Also, of added value we identified the role of psychomotor and emotional experiences in achieving and maintaining excellent performances. A common denominator is having fun in the early stages of practice, a feeling that perpetuates.

Identifying Thierry's dream as also allowed understanding that excellence initiates at an early age, which is when commitment, focus and passion start to develop also. His long journey, marked by reflection, pursuing new experiences and knowledge, has allowed Thierry to grow and to overcome his dream of achieving excellence in orienteering. A set of factors have revealed to be determinant for this accomplishment, the constant pursuit of excellence, perfectionism and commitment and the intentional practice of the sport.

Of equal importance, we observed the role of peers/friends in the development and in the maintenance of the excellent performance of Thierry.

In summary, these factors, and characteristics in constant interaction with each other provided the conditions for the development of excellence in orienteering. In this interaction the highlights are, the personal and technical skills and contextual constraints as modeler of excellence. Similarly, it appears that excellence in orienteering requires the combination of skillful and psychological components. Experience, constant technical development and ability to simplify and anticipate the completion tasks are distinctive variables and characterize the performance of excellence in orienteering.

This study sought to contribute to the research in excellence in orienteering, since investigation in this area from a multidimensional perspective are scarce. Considering the above, it was important and a privilege to have studied an athlete with a unique sport record in this modality, which through the singularity of his experience and knowledge, has provided relevant information to the study of excellence in orienteering. On the other hand, the data may also be useful for the study of the subject in general.

The results corroborate with findings in other modalities, as well as reinforce the necessity of interaction between a set of essential factors (individual and of context). However, considering the specificities of orienteering, as well as the evolving and multidimensional characteristics of excellence, other studies should be developed focusing on: the role of positive emotions in the development of excellence; the influence of sociocultural contexts in excellence in orienteering.

#### REFERENCES

- Abernethy, B., Baker, J., & Côté, J. (2005). Transfer of Pattern Recall Skills May Contribute to the Development of Sport Expertise. *Applied Cognitive Psychology*, 19(6), 705–718. <https://doi.org/10.1002/acp.1102>
- Atkinson, P. (2005). Qualitative Research—Unity and Diversity. *Forum Qualitative Sozialforschung Forum: Qualitative Social Research*, 6(3). <https://doi.org/10.17169/fqs-6.3.4>
- Baker, J., & Horton, S. (2004). A review of primary and secondary influences on sport expertise. *High Ability Studies*, 15 (2), 211-228. <https://doi.org/10.1080/1359813042000314781>
- Baker, J., Côté, J., & Albernethy, B. (2003). Sport-specific practice and the development of expert decision-making in team ball sports. *Journal of Applied Sport Psychology*, 15(1), 12-25. <https://doi.org/10.1080/10413200305400>





- Bardin, L. (2008). *Análise de conteúdo*. Edições 70.
- Barreiros, A., Côté, J., & Fonseca, A.M. (2013). Sobre o desenvolvimento do talento no desporto: um contributo dos modelos teóricos do desenvolvimento desportivo. *Revi. Psic. Deport.*, 22(2), 489-494.
- Bloom, B. (1985). *Developing talent in young people*. Ballantine.
- Borg, E. (2005). Thierry Gueorgiou: I want to be better the next day. O-zine, 3. Retrieved on May, 19, from [http://orienteing.org/wp-content/uploads/2010/12/ozine\\_03\\_05.pdf](http://orienteing.org/wp-content/uploads/2010/12/ozine_03_05.pdf).
- Burgess, D. J., & Naughton, G.A. (2010). Talent development in adolescent team sports: A review. *Intern. Jour. Spor. Physi. Perfor.*, 5(1), 103-116. <https://doi.org/10.1123/ijssp.5.1.103>
- Calvo, A. (2003). Detección o desarrollo del talento? Factores que motivan una nueva orientación del proceso de detección de talentos. *Apunts. Educación física y deportes*, 1(71), 23-28.
- Celestino, T., & Pereira, A. (2012). The sport of orienteering: Performance of physically active people who partake in leisure activities but have no experience in this modality. *Cultura, Ciencia y Deporte*, 7(19), 45-52.
- Celestino, T., Leitão, J. C., & Pereira, A. M. (2019). Determinants for excellence in Orienteering: the representation of elite coaches and athletes. *Retos*, 35, 91-96. <https://doi.org/10.47197/retos.v0i35.59118>
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, 13(4), 395-417.
- Côté, J., & Hay, J. (2002). Children's involvement in sport: a developmental perspective. In J. Silva & D. Stevens (Eds.), *Psychological Foundations of Sport* (pp. 484-502). MA Benjamin.
- Côté, J., Baker, J., & Abernethy, B. (2003). From play to practice: A developmental framework for the acquisition of expertise in team sports. In J. L. Starkes & K. A. Ericsson (Eds), *Expert performance in sports: advances in research on sport expertise* (pp. 89-110). Human Kinetics.
- Côté, J., Ericsson, K. A., & Law, M. P. (2005). Tracing the development of athletes using retrospective interview methods: A proposed interview and validation procedure for reported information. *Jour. Appli. Spor. Psych.*, 17(1), 1-19. <https://doi.org/10.1080/10413200590907531>
- Durand-Bush, N., & Salmela, J. (2002). The development and maintenance of expert athletic performance: perceptions of world and olympic champions. *J. A. Spor. Psy.*, 14(3), 154-171. <https://doi.org/10.1080/10413200290103473>
- Eccles, D.W., Walsh, S. E., & Ingledew, D.K. (2002). A grounded theory of expert cognition in orienteering. *Jour. Sport Exer. Psych.*, 24(1), 68-88. <https://doi.org/10.1123/jsep.24.1.68>
- Ericsson, K. A. (1996). *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Lawrence Erlbaum Associates Hillsdale, New York, USA.
- Ericsson, K. A. (2020). Towards a science of the acquisition of expert performance in sports: Clarifying the differences between deliberate practice and other types of practice. *Jour. Sport. Scien.*, 38(2), 159-176. <https://doi.org/10.1080/02640414.2019.1688618>.
- Ericsson, K.A., Krampe, R., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100(3), 363-406.
- Gagné, F. (2004). Transforming gifts into talents: the DGMGT as developmental theory. *High Abili. Stud.*, 15(2), 119-147. <https://doi.org/10.1080/1359813042000314682>
- Gagné, F. (2007). Ten commandments for academic talent development. *Gifted Child Quarterly*, 51(2), 93-118. <https://doi.org/10.1177/001698620629666>
- Gagné, F. (2021). *Differentiating giftedness from talent. The DMGT perspective on talent development*. Routledge.
- Ghiglione, R., & Matalon, B. (2001). *O Inquérito: Teoria e prática*. (4ª ed). Celta Editora.

- Güllich A., Barth, M., Hambrick, D.Z., & Macnamara, B. N. (2023). Participation patterns in talent development in youth sports. *Front. Sport. Act. Livi*, 5, 1-7.  
<https://doi.org/10.3389/fspor.2023.1175718>
- Holt, N.L., & Dunn, J.G. (2004). Toward a grounded theory of the psychosocial competencies and environmental conditions associated with soccer success. *Jour. Appli Spor. Psych.*, 16(3), 199-219.  
<https://doi.org/10.1080/10413200490437949>
- Jones, R., Armour, K., & Potrac, P. (2003). Constructing expert knowledge: A case study of a top-level professional soccer coach. *Spor. Edu. Socie.*, 8(2), 213-229.  
<https://doi.org/10.1080/13573320309254>
- Kobach, J. (2007). Gueorgiou's story - Part I. Retrieved on May, 18, 2014, from  
<http://news.worldfo.com/2007/11/27/gueorgious-story-part-i/>.
- Leite, N., Baker, J., & Sampaio, J. (2009). Paths to expertise in Portuguese national team athletes. *Jour. Sport. Scien. Medic.*, 8(4), 560-566.
- Lessard-Hébert, M., Goyette, G., & Boutin, G. (1990). *Investigação qualitativa: Fundamentos e práticas*. Instituto Piaget.
- Lorenzo, A., & Sampaio, J. (2005). Reflexiones sobre los factores que pueden condicionar el desarrollo de los deportistas de alto nivel. *Aputs E. F. Depot.*, 2(80), 63-70.
- MacNamara, A., Button, A., & Collins, D. (2010). The role of psychological characteristics in facilitating the pathway to elite performance. Part II: Examining environmental and stage-related differences in skills and behaviours. *Sport Psycho.*, 24(1), 74-96.
- MacNamara, Á., Button, A., & Collins, D. (2010). The role of psychological characteristics in facilitating the pathway to elite performance part I: Identifying mental skills and behaviors. *The Sport Psychologist*, 24, 52-73.
- Matos, D. (2014). A excelência no desporto: estudo da arquitetura psicológica de atletas de elite portugueses. *Coisas de ler*.
- Matos, D. S., Cruz, J. F., & Almeida, L. S. (2017). Excelência no desporto: a importância de fatores pessoais e contextuais no percurso de campeões portugueses. *Rev. Iberoameri. Psic. Ejerci. Dep.*, 12(2), 287-295.
- Matos, D. S., Cruz, J. F., & Almeida, L.S. (2011). Excelência no desporto: para uma compreensão da "arquitetura" psicológica dos atletas de elite. *Motricidade*, 7(4), 27-41.  
[https://doi.org/10.6063/motricidade.7\(4\).87](https://doi.org/10.6063/motricidade.7(4).87)
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis*. (2nd ed.). Sage Publications.
- Oliveira, F., & Duarte, A. (2005). A tomada de decisão na orientação. In D. F. Araújo (Ed.), *O contexto da decisão: Acção táctica no desporto* (pp. 285-310). *Visão e Contextos*.
- Orlick, T. (2009). *Em busca da excelência: como vencer no esporte e na vida treinando a sua mente*. Artmed.
- Orlick, T., & Partington, J. (1998). Mental links to excellence. *Spor. Psych.*, 2, 105-130.
- Ottosson, T. (1998). Map-reading and wayfinding. *Scient. Jour. Orient.*, 4, 47-53.
- Patton, M. (1990). *Qualitative evaluation and research methods*. Sage Publications.
- Pereira, A., Leitão, J. C., Celestino, T., Sarmiento, H., & Silva, M. I. (2023). Determinants for sporting excellence: study centered on Brazilian physical education teachers. *Retos*, 49, 54-60.  
<https://doi.org/10.47197/retos.v49.97929>
- Ramadas, S., Serpa, S., & Krebs, R. J. (2012). Psicologia dos talentos em desporto: Um olhar sobre a investigação. *Revis. E.F.*, 23(3), 331-345. <https://doi.org/10.4025/reveducfis.v23i3.18564>



- Redding, E., Nordin-Bates, S. M., & Walker, I. J. (2011). *Passion, pathways and potential in dance: An interdisciplinary longitudinal study into dance talent development*. Laban London
- Rugg, C., Kadoor, A., Feeley, B.T., & Pandya, N. K. (2018). The effects of playing multiple high school sports on National Basketball Association players' propensity for injury and athletic performance. *Americ. Jour. Sport. Med.*, 46(2), 402-408. <https://doi.org/10.1177/0363546517738736>
- Sands, R. (2002). *Sport ethnography*. Human Kinetics.
- Sarmento, H., Anguera, T., Pereira, A., & Araújo, D. (2018). Talent identification and development in male football: A systematic review. *Sport. Med.*, 48(4), 907-931. <https://doi.org/10.1007/s40279-017-0851-7>
- Seiler, R. (1994). Recent trends and future directions of research in orienteering. *Scient Jour. Orient.*, 10, 3-23.
- Seiler, R. (1996). Cognitive processes in orienteering. *Scient. Jour. Orient.*, 12, 50-65.
- Vallerand, R. J., Blanchard, C. M., Mageau, G. A., Koestner, R., Ratelle, C., Leonard, M., Gagné, M., & Marsolais, J. (2003). Les passions de l'âme: On obsessive and harmonious passion. *Jour. Perso. Soci. Psyc.*, 85(4), 756- 767. <https://doi.org/10.1037/0022-3514.85.4.756>
- Vallerand, R. J., Salvy, S. J., Mageau, G. A., Elliot, A. J., Denis, P. L., Grouzet, F. M. E., et al. (2007). On the role of passion in performance. *Jour.Perso. Soci. Psyc.*, 75(3), 505- 533. <https://doi.org/10.1111/j.1467-6494.2007.00447.x>
- Vallerand, R., Geneviève, M., Elliotb, A., Dumaisc, A., Demersd, A., & Rousseau, F. (2008). Passion and performance attainment in sport. *Psyc. Spotr. Exer.*, 9(3), 373-392. <https://doi.org/10.1016/j.psychsport.2007.05.003>