Excellence in Women Basketball: Sport Career Development of World Champions and Olympic Medalists Brazilian Athletes

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Abstract

This study investigated the career of seven Brazilian athletes who hold the title of world champions and Olympic medalists in basketball. The aim was to identify individual's multiple factors that influenced them to reach the excellence level throughout their sport career. The data was collected through semi-structured retrospective interviews and was analyzed using Thematic Analysis, having the Personal Assets Framework as the main supporting theory. The results suggest that autonomous and diversified practice was essential for players' development on the early years of their sport careers, as well as financial support on the specializing years. During the investment and maintenance years, intrapersonal skills have become more important, training time has increased and there was a disregard with social living; historically significant achievements and financial recognition provided a sense of reward and worth.

Keywords: sport career, athlete development, sport excellence, women

Introduction

Since the end of the 20th century, studies on the development of athletes' carriers have contributed to the investigation of sport excellence (Baker and Côté, 2006; Baker and Farrow, 2015; Côté, 1999; Durand-Bush and Salmela, 2002; Galatti, Collet, Folle, Côte and Nascimento, 2016; Stambulova, 1994). A sporting career can be defined as the years of sporting activity related primarily to improvement and achievement in sport (Stambulova, Alfermann, Statler, and Côté, 2009). Bruner, Erickson, Wilson, and Côté (2010) affirm that there is still a gap in studies of higher level athlete's careers, especially world champions and Olympic medalists. Güllich and Emrich (2014) remarked that studies on the sporting career of elite athletes are scarce as access to this group tends to be restricted. Research on elite South American athletes is particularly lacking as little relevant data is collected, especially in women's sports (Beneli, Galatti and Montagner, 2017; Bruner, Erickson, Wilson and Côté, 2010). So, this study helps to fill this gap, once we studied Brazilian women world champion and Olympic medalist basketball players.

In the pathway for sporting excellence, several non-linear and dynamic factors play an important role (Côté, Turnnidge and Evans, 2014; Macnamara and Collins, 2013). Côté, Turnnidge and Evans (2014), from Lerner's (2002) "developmental theories", proposed the Personal Assets Framework (PAF) to describe personal, relational and

environmental factors integration over time to describe development in sport and through sport. We assume those three factors from PAF as the framework to analyses and understand the excellence basketball women player's generation pathway in Brazil.

In PAF, personal factors are associated with personal engagement in sport activities which is related with the activities' characteristic, as the individual adaptation to challenges and the level of fulfillment, experience on training, practice, and competition. The diversity, quantity and quality of sport experiences, as well as the (un)balance between structured and not structured sport activities through sampling, specialization and investment years help to engage more or less people in sport in different stages of life, being this process essential in an excellence athletic career development (Côté and Vierimaa, 2014; Fraser-Thomas, Côté and Deakin, 2005). Relational factors concern to quality of relationships, including those with coaches, teammates and family. Finally, environmental factors are those elements that combine appropriate settings for personal and interpersonal development in sport, and can make the difference for maintaining an athlete in the road to excellence. It involves the sport setting and structural factors, such as diet and training regime, city and installations, access to centers of excellence and financial support (Côté et al., 2014).

Considering that, this study aims to identify, in Brazilian Women Basketball World champions and Olympic

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medalists, individual's multiple factors that influenced them to reach the excellence level throughout their sport career.

Method

This is an empirical qualitative research using retrospective interviews (Phillips et al., 2010). This type of research allows to solicit the athlete's views on what factors were relevant or critical at different stages of their sporting development (Côté, Ericsson and Law, 2005; Durand-Bush and Salmela, 2002).

Ethical Procedures

All interviewees provided written informed consent, and the study was registered with the National Council of Ethics in Research – CONEP, number 130008 (Brazil), has been approved by the Ethics Committee of the School of Medical Sciences of the University.

Participants

The participants were Brazilian women basketball excellence athletes that have won a FIBA (International Basketball Federation) World Champion and at least one Olympic Medal. From a group of nine possible participants, seven accepted to be part of this investigation. All interviewees were born in São Paulo state (Brazil), and six have been living in the country side of this state. All have played in Brazil and abroad and for the National Youth Teams.

Instrument

The instrument was a semi-structured retrospective interview considering athlete's sportive pathway from childhood to excellence, looking for adjusting "the questions to the particular background and development of the athletes, and yet collect information in a standardized manner", as recommended by Côté et al. (2005). Those authors proposed three main interview contents: (i) Measures and Description of Current and Past Levels of Performance; (ii) Engagement in Domain-Related Activities; (iii) Factors Limiting the Quality and Quantity of Training. Côté, Turnnidge and Evans (2014) also have proposed the PAF, explained in introduction and integrating personal, relational and environmental factors integration over time to describe development in sport and through sport. Based on this perspective, the interview guide was structured by themes as: (a) structure and financial status of training facilities; (b) structure of training; (c) relationship between the coaching staff and the athlete; (d) the nature and extent of family encouragement and support; (e) relationships with teammates. On retrospective interviews it is recommended to help participants to standardized their memories from their experiences in face of having a better consistent data. Because of this, athletes were asked to talk about each one in four different career periods: (a) childhood before sport first experience; (b) experiences on Physical Education at school and initiation into sport; (c) sport specialization and the process of professionalization; (d) experience on the Brazilian national team. The first author was responsible for the first data analysis, which was checked by a second researcher experienced in this kind of analysis.

A pilot study was conducted with two elite athletes in women's basketball to assess the specificity of the instrument and the quality of the generated data; this was used to refine the interview guide and hone the interviewing skills of the interviewers.

Data Production and Analysis

Two experienced women researchers, former basketball players, one PhD and other PhD candidate, conducted all the interviews. Participants were interviewed individually and in person, in the place and time suggested by them. All interviews were recorded on video and transcribed *verbatim* in Portuguese language for analysis, being translated to English language by the authors; interviews lasted from 70 minutes to 116 minutes (88.28 on average), in a total of 618 minutes, resulting on 166 pages (23.71 pages on average, letter Times New Roman 12, simple space).

Thematic Analysis method was assumed. It is a method for identifying, analyzing, and reporting patterns, named "themes": A theme captures something important about the data in relation to the research question, and represents some level of *patterned* response or meaning within the data set" (Braun and Clarke, 2006, p.10). It is characterized for been flexible and for providing a rich and detailed complex data, if rigorously build.

In this study, data was collected looking for the most relevant factors that conducted the interviewed athletes to sport excellence. We used the Côté, Turnnidge and Evans (2014) PAF model as an epistemological guide for a 'theoretical data analysis' and themes organization. This kind of analysis approach is a more explicitly analyst-driven, looking for a detailed analysis of a more specific issue of the data (in this case, personal, relational and environmental factors through athletes' carrier) (Braun and Clarke, 2006).

Results and Discussion

This section is organized according four stages related to interviewed athletes career:

- "Introduction to sport": diversified preliminary experiences;
- "Becoming a basketball player": transition from sampling to specialized experiences;
- "Feeling themselves as elite athlete": access of high level of basketball performance;
- "Being excellent": being and maintaining the excellence level.
- Results related to personal, relational and environmental factors by stage is presented and discussed.

Introduction to Sport

In personal factors, athletes declared a high level of personal engagement and involvement in a wide range of enjoyable and socially important physical activities, in several types of sport facilities, which they associate with their personality and physical characteristics development: "And it was a good childhood, with a lot of freedom, I used to play on the street until 11 o'clock at night (A1)"; "(...) in a very playful way, and did not think about what happened afterwards" (A3).

Involvement in sports practices from the early age facilitates the development of personal qualities such as competence, confidence, connection and character through interaction with different environments (Côté and Hancock, 2014; Machado, Galatti and Paes, 2014). Six of the seven athletes practiced and competed in other sports: "I was a girl who liked to play, to practice sports" [...]. athletics, swimming, table tennis, chess, I used to practice everything at sport club"(A3).

Such evidence is consistent with several studies that indicated that early specialization is not essential for elite performance in adult life (Bailey and Morley, 2006; Baker and Côté, 2006; Burgess and Naughton, 2010; Côté, Lidor and Hackfort, 2009). These findings also agree with literature indicating that children and young athletes' involvement in informal sports practice can also result in elite performance on adulthood (Ford, Ward, Hodges and Williams, 2009; Leite, Baker and Sampaio, 2009; Feu, Ibáñez, Buñuel and Fuentes-Guerra, 2008; Soberlak and Cote, 2003);

In environmental factors, participants were born and lived during childhood in cities were local government offered systematized sport practice for free and the streets were seen as a leisure space: "I used to play a lot in the street; My family was very humble; my mother could not buy me toys. There were lots of people on the street to play. Lots of kids, the friends I had from my street were like a family" (A2).

Although access sport in Brazil is historically most practiced in the private sport clubs, more recently and particularly in women sport, governmental sport programs seem to be impactful (Beneli et al., 2017; Darido da Cunha, Gorgatto Fraiha, Darido, Pérez and Galatti, 2017). About the local setting, one athlete grew up in a big city (São Paulo) and reported few playing experiences in childhood, the other six grew up in smaller cities, with a lot of recreational physical activity (deliberate play) experiences, which seems to facilitate athletes' development (MacDonald, King, Côté and Abernethy, 2009; Morales Junior, Alves, Galatti and Marques, 2017). They had free access to the municipal council sport facilities or local sport clubs, with professional coaches' supervision. It occurred in parallel with deliberate play and activities, completing a diversified context for sport participation (Balish and Côté, 2013).

About relational and personal factors, our group was strongly involved with friends and siblings in different

playing and sport context, with high support from parents and relatives (but low involvement), which considered sport a safety environment, such as school. Finally, in this favourable environment and with pairs support, the personal factors in this stage are described as positive, with a lot of grateful and funny experiences, pleasure and freedom feelings: "My mother used to work all day long, my father worked too. So, they did not have time available to let to training sessions and competitions. I said to them: let me go alone. I was very independent." (A2)

Becoming a Basketball Player

The choice of basketball was influenced by family and friends, and their support was determinant, which is not different from other cultural contexts (Hopwood, Farrow, MacMahon and Baker, 2015; Feu et al., 2008), and the sport experience lived by the interviewed players transited from a sense of fun for a meaning of obligation: [...] "Basketball started to become my profession, when I was 12 years old, then started to take my time a lot, because I used to play in all youth teams and I also had to go to school" (A3).

In this stage, the interviewees' training time (around 4 hours daily) has increased. They left their home town and club and moved to more structured clubs, starting to play with elder athletes. This stage was shorter than literature suggests to other social contexts (Côté, Baker and Abernethy, 2007; Durand-Bush and Salmela, 2002): "It was a quick process, and I think it lasted around 2 years. Because I moved from my city when I was 13 (years), and at 16 I was already called up to the Senior National Team for the first time "(A1); " I was U17, and I played for U17, U19 and senior teams" (A7).

About environmental factors, moving from hometown was the more highlighted issue and had a direct relation with families' financial conditions: around 12-14 years old, athletes received proposes for changing club with financial rewards, like employment for parents, house accommodation, feeding and scholarship. The fact that they were born in São Paulo state was also determinant, once the main basketball clubs in Brazil are historically concentrated on this state (Beneli et al., 2017; Darido da Cunha et al., 2017): "I did not have money for the bus ticket, I had no money for lunch, and the coach was the person who gave me everything; he said: I will give you the ticket, which was paid by the municipal government, and I will provide lunch to you; he did it every day "(A2); "The whole family said, let's go ... They (club managers) got a job to my mother at the club and we lived there for four years (A7)."

In this context, important changes were observed in relational factors. Gould, Guinan, Greenleaf, Medbery and Peterson (1999) and Durand-Bush and Salmela (2002) identified family support as important during athletes' entire sporting career whilst suggesting that their involvement is most critical during the early years. However, in this study, family also represented a stress factor to athletes, mainly because the financial support earned from clubs was an im-

portant contribution to the family income, and a considerable responsibility to players. Relationship with other athletes became more difficult too, once many of them started to live together, sharing the same home; with the increase of acquaintanceship, they had to face personal conflicts inside and outside sport environment: "Actually, I did not know if it was going to be basketball, but I knew that the sport could lead me to travel, to do things that my father still would not let me do. My father was a very strict person with me and my sisters, once he just had daughters" (A1); "I think there were two phases [of the familial support]! That first I have already mentioned, the one of supporting, when the support was fundamental. Then came the second stage that causes damage: the pressure for good results" (A3).

On this period, coaches have started to have a major influence on athletes, been attributed to them big responsibility in keeping athletes within sport environment when young, both with personal and financial support.

Personal challenges also have increased: many of the interviewees felt alone and missed family or their hometown. Athletes were charged for a high level performance from the age of 13, and adapting themselves to a much higher training volume and intensity was very hard. They have started to be aware that sport was not for fun anymore: "When I was 12 years old I left home! And then everybody started to speak that I would play for the National Team. I heard a lot that I was talented, but I had no idea what that meant" (A3).

Feeling Themselves as Elite Athlete

Once interviewed athletes opted to invest in basketball, their rising to better levels of performance were fast: as soon as they started to play basketball, they began to compete, including in senior categories. Two interviewed players have joined to the senior national team at 14 or 15 years old. So, since youth ages, they considered themselves as elite athletes: "I was 14 years old! That was when I was called the first time for the Brazilian Senior National Team! They [team managers] made a total renovation on roster and took away all the older players, offering an opportunity to our generation" (A3). "The wages were good, professionals. I had salary, health insurance, as in a company common enterprise; I even had a formal contract [...] I had the luxury of choosing the club to play. I denied and WNBA opportunity because I had an above-average salary in Brazil" (A5).

Güllich and Emrich (2014) argued that early sport specialization is associated with athletic success at youth level, but that the effect does not necessarily extend into adulthood. Within the interviewed group, a short specialization phase was preceded by diverse informal and formal sports experiences; this may have contributed to the subsequent achievement of these adults on youth and adulthood.

Beside they have played on elite level, the discontinuation of sponsorships led many athletes to move abroad, despite the good salaries for athletes at the level of excellence in Brazil: "I lived through the process of looking for a

sponsorship! It made athletes insecure, once the club could be finished in the end of the year [...] It should not be me, but a company specialized on this process. But either I assumed this assignment or the club was over and everyone was going to be unemployed" (A3).

This was highlighted as an illustration of the semi professionalism status that women basketball presents in Brazil. This condition can be considered a barrier to having a secure and stable sport career (Beneli et al., 2017; Galatti, Paes, Machado, Gonçalves and Seoane, 2015).

On relational factors, our participants reported that felt both supported and charged by their family to achieve sporting success. This increase of familial support to sport career may have been transformed because sport is commonly considered a more accessible way of achieving social mobility; this is an important issue for athletes from families with fewer resources, particularly in developing countries, but it is still little discussed in women basketball literature (Galatti et al., 2015).

This players' life period was recognized as the most intense in personal relationships: sporting career was a hindrance to construct a family, especially because of the dedication to the intensive training regime; the hierarchical organization of the sport and the importance of respecting the coach; the challenges of living with other athletes and learning new cultures: "I always respected the coaches. I have never contested their position. But I always used to ask a lot, I always had a good relationship with the coaches" (A7).

On personal issues, been unable to reconcile studies with a sports career was singled out as the most frustrating point. Some athletes in this study continued their academic studies but invested more heavily in basketball as a profession, which meant that after their athlete sporting career the basketball has continued to be a central topic on their life. We found less commonplace of family participation during the early stages of an athlete's sporting career. However, in the elite level they faced an increasement of family demands because sport was their profession and their way of life, and many played a central role in improving the life conditions of their family, as they came from a poor background: [...] "you have practice in the morning and in the afternoon. If you want to go to college you are by yourself and have to do this at evening" (A7); "I think it is something that we have a lot of disadvantage today. This this issue that athlete does not usually conclude the basic educational programs. If we were more aware about the importance of the studies, we might have had a different sport performance than we had "(A3).

In personal factors, we have two perceptions: for oldest, those who joined the national team at a very young age, the experience was both rewarding and scary, because of the seriousness of the commitment. For the younger, it was gratifying and was seen as recognition for their work and most found themselves living with the athletes who have been their idols, which seems to be positive for excellence level athlete's development (Galatti et al., 2015).

Being Excellent

In this fourth stage, about environment, athletes highlight the better work conditions on national team (Galatti et al., 2015), in comparison the not ideal condition of labor on clubs.

We found that Brazilian elite athletes reported that have spent a lot of time preparing for competitions, including travel and training camps: "Depending on the period, we got to train 6 or 7 hours a day in the last years" (A7).

Coaches were also cited and became important: athletes expressed appreciation for coaches who allowed them to participate in collective decisions, listening to their opinions. Especially in excellence level of performance, players want to be respected: I always enjoyed to have a good relationship with the coach, to have dialogues" (A3).

Gould et al. (1999) reported that elite athletes that considered coaches who gave them confidence as the ones most valuable and influential; earlier research by Coté, Saimela, Trudel, Baria, and Russell (1995) highlighted the relevance of the coach-athlete relationship to achievement of excellence level in sport.

The personality characteristics highlighted by our athletes as most important for their success in sport were self-confidence, motivation and competitiveness, coupled with a strong desire to train and develop their skills: "I think that a lot of positive and negative experiences were important for us. As well as all this process of building a generation identity[...] to become this process as a virtuous circle, a more positive circle" (A3).

Ethical sense and mental strength were also mentioned, as in other studies (Durand-Bush and Salmela, 2002; Feu et al., 2008; Santos, Graça, and Tavares, 2013; Sáenz-López Buñuel, Jiménez Sánchez, Giménez Fuentes-Guerra, and Ibáñez Godoy, 2007; Sánchez et al., 2006);

Final Considerations

The results have showed that the Brazilian Excellence Basketball athletes had a physically active childhood, with high level of deliberate play, especially in open access public spaces.

The access to structured sport practices was more difficult and dependent from tax free activities promoted by local government, which was more facilitated in smaller cities, being this sport participation influenced by relatives. From multiple sport practice to becoming a basketball player, it was decisive the financial support from clubs, government or even coaches. Still young, some players have had to move from their cities and joint to important basketball clubs. They have highlighted the predominance of technical skills development practices and a sense of belonging to a group within these clubs.

The rising of the feeling of become an athlete is related to sponsorship offer and being part of the senior national team (what happened in a very young age in the case of this group), training with older athletes, contact with their idols and the recognition that their sporting careers were important and worthwhile.

The excellence level was achieved between 8 and 21 years of career length and is associated with a big desire of being part of the sport history. This phase was characterized by a high level of dedication, large volume of training sessions, commitment to the group of athletes and coaching staff, and as a result of previous positive and negative experiences.

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Baloncesto femenino de excelencia: desarrollo de carrera de atletas brasileñas campeonas mundiales y medallistas olímpicas

Resumen

Esta investigación trata de la carrera de siete brasileñas que ostentan el título de campeonas de mundo y medallistas olímpicas en baloncesto. El objetivo fue identificar los múltiples factores individuales para alcanzar el nivel de excelencia a lo largo de la carrera. Los datos se recolectaron a través de entrevistas retrospectivas semiestructuradas y se analizaron mediante Análisis Temática, teniendo el Marco Teórico de Activos Personales como la principal teoría de soporte. Los resultados sugieren que la práctica diversificada fue primordial durante los primeros años de sus carreras deportivas, así como el apoyo financiero durante los años de especialización. Durante los años de inversión y mantenimiento, las habilidades intrapersonales se han vuelto más importantes, con dificultad de desarrollar la vida social; los logros históricamente significativos y el reconocimiento financiero proporcionaron un sentido de recompensa y valor.

Palabras clave: carrera deportiva; excelencia deportiva; mujeres.

Basquetebol feminino de excelência: desenvolvimento de carreira de atletas brasileiras campeãs mundiais e medalhistas olímpicas

Resumo

Esta pesquisa aborda a carreira de seta brasileiras campeãs do mundo e medalhistas olímpicas de basquetebol. O objetivo foi identificar os múltiplos fatores individuais para alcançar o nível de excelência ao longo da carreira. Os dados foram coletados por meio de entrevistas semiestruturadas de caráter retrospectivo e analisadas por Análise Temática, tendo a teoria

dos Los datos se recolectaron a través de entrevistas retrospectivas semiestructuradas y se analizaron mediante Análisis Temática, tendo o Quadro Teórico Para o Desenvolvimento de Valores Pessoais como a principal teoria de suporte. Os resultados sugerem que a prática diversificada e autônoma foi primordial durante os primeros anos de prática, assim como o apoio financiero durante os anos de especialização, correspondente ao início da carreira esportiva. Durante os anos de investimento e manutenção, as habilidades intrapersonais se tornaram mais importantes, se somando a dificultades de desenvolvimento da vida social; as conquistas historicas e o reconhecimento finaceiros proporcionarm um setimento de recompensa e valor.

Palabras-chave: carreira esportiva; excelência esportiva; mulheres.

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