

AGE PERCEPTION AND SPORTS CAREER IN THE WOMEN'S ARTISTIC GYMNASTICS

Ivana Montandon Aleixio & Myrian Nunomura

Federal University of Minas Gerais, University of Sao Paulo, Brazil

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Abstract

Women's Artistic Gymnastics (WAG) is an Olympic sport that has produced young girls celebrities over time, which has been extensively criticized for producing "little pixies." The present research was generated by the project "Coming of age: Towards best practice in Women's Artistic Gymnastics" (Kerr, Barker-Ruchti, Schubring, Cervin, Nunomura, 2015), whose focus was to analyze the experiences of older gymnasts and the factors that contributed to the prolongation of their career. The participants of this study were former gymnasts and are still active in Portugal, at the high level. We conducted a semi-structured interview to collect participants' reports and the thematic analysis was used as data treatment. The perception of becoming physically older was the most difficult fact to manage among the majority of respondents. The experience of being "older" gymnasts has helped them to understanding how particular contexts happen and thus face the challenges of the new phase of their careers. The factors that influence the development of the career have been to soften the myth that mature women would not compete internationally in the WAG; to propose alternatives for training in order to preserve the general health of gymnasts; propose guidelines for the management of the sports career. In short, we bring about future research into what could be done, which should not be done; or what should be avoided, by coaches, gymnasts and stakeholders in general to further the career of WAG gymnasts.

Key words: *Women's artistic gymnastic, body; extended career.*

INTRODUCTION

The Women's Artistic Gymnastics (WAG) is an admirable sportsmanship that attracts audiences to the spectacle, in which gymnasts demonstrate strength, daring, and aesthetics.

There are, however, misguided orientations reflected in an inappropriate attitudes and procedures that could compromise the integrity of the development of children and young people,

which would cause irreversible harm and lead to the withdrawal of practitioners even when very young. This situation is due to the fact that infants and youngsters are not rarely subjected to an intense training load requiring early results in the competition.

Until the late 1960s, WAG consisted of mature women dominated by the balletic and feminine style (Kerr, 2006). During the 1970s, however, the

performance and did not awake to the fact (Barker-Ruchti, 2009). Thus, the sport has been extensively criticized for the production of "little pixies" as successful athletes instead of adult women (Kerr, 2006). And, particularly since the appearance of Olga Korbut and Nadia Comaneci, when gymnasts gradually became younger and smaller.

WAG is commonly understood as a sport which whose onset is precocious, intense training occurs during childhood, and high performance is achieved before adulthood (Nunomura et al., 2010, Bergeron et al., 2015, Barker-Ruchti et al., 2016).

We have observed that older gymnasts have already been in high performance at WAG, but in the last four decades the sport has moved further away from this reality, and the emphasis on high difficulty movements and acrobatization, provides the main context for analyzing changes in the bodies and the styles of practiced gymnastics. It was common for

14-year-old gymnasts to achieve international success, and even the International Gymnastics Federation (FIG) did not wake up to the fact (Barker-Ruchti, 2009). Today, we find that there are older gymnasts, 25 or over 30 years of age, experiencing a longer career. Our greatest example is the gymnast Oksana Chusovitina, currently 41 years old and who became the longest female gymnast in history (Mujika, 2012). A study by Atiković et al., (2017), on the age structure of men and women participants at the Olympic Games and at the World Championships from 2003 to 2016, pointed out that the average age of gymnasts in WAG and MAG has increased. Male gymnasts are on average older.

The FIG has responsibility for regulations and publications that guide gymnasts, coaches, and referees in the preparation, composition and evaluation of the series in all events. Over time, the FIG has suffered due to the diverse criticisms and health problems of the children and adolescents involved in the high

performance in WAG. Thus, the entity began to require the minimum age of participation of 16 years for official international competitions as of 1997 (Kerr, 2006, FIG 2017, article 5.2.pg.37).

The purpose of this article was to understand and discuss the perception of the factors that led to the prolongation of the career in the WAG in Portugal.

Perception of getting older by the lens of cultural theory of learning

Hodkinson et al., (2008), present the "cultural theory of learning", which proposes to explain how and why the situation influences learning, and the cultural context is the central concept.

The authors' concern suggests that culture is (re) produced by individuals just as individuals are (re) produced by cultures. These learning cultures are highly synergistic and effective. Having a cultural view of learning that decentralizes conceptual change and cognition its social context and develops robust ways of integrating the individual and the situation into a learning process. In WAG, with the appearance of Nadia, a new style of gymnastics was established and that shaped the new culture of this sport, that is, smaller, lighter and androgenic girls would have more success in the spectacle-acrobatic style; so they would need to specialize earlier, usually before reaching menarche.

Thus, individual learning, through its social context, that is, the experiences of being "older" gymnasts, helps to understand their particular contexts, and then to develop a new phase of the career and deal with this transition.

By transcending individual and cultural learning situations, cultural learning theory offers a perspective to understand how gymnasts in a culture strongly linked to high-performance children's sport have been able to extend their careers into adulthood. In addition to breaking the paradigm established culturally in this sport, these older gymnasts need to understand learning as

part of a long life process, it would also be to learn to accept the new body and learn to deal with this change.

This perspective proposes that learning is the construction of identity in different situations, such as the context or environment in which learning occurs, and Hodkinson et al., (2007; 2008) use the metaphor "to become." Becoming is understood as a continuous and ubiquitous process of learning, of how particular practices impact on learning.

According to Barker-Ruchti et al., (2016), the cultural perspective of learning presents dimensions, the idea that learning occurs throughout life, as in the long term, the perspective of career development, involving practices, interactions and communication. The WAG culture is based on the challenge of a career ending in pubertal development, athletes are shaped by the sports culture, and the learning process is influenced by reflexive interactions between structural, situational, social, cultural and individual factors between the environment and the individual.

In these recent studies by Hodkinson et al., (2008) and Barker-Ruchti, et al., (2015), individuals move through life stages and can be seen as a product of learning that occurs in the interactions that are established between the learning individual and the other mediators of his or her culture, that is, parents, coaches, and several others that are important in the process of knowledge construction.

METHODS

The project was approved by the Human Ethics Committee of the University of Lincoln (HEC 2013-42). Participants of this study were gymnasts from Portugal, distinguishing themselves as the first and the second group of former high-performance gymnasts who were at least 20 years old at the time of their active career, being the first group participants of the decade of the Olympic cycles of 1984 and 1998; the second, Olympic cycles 2008

and 2012. The third, gymnasts who are still active above the age of 20 years of the 2012 and 2016 Olympic cycles. The high-performance competitive level was chosen because the training requirements and performance targets are more intense in this level of the gymnastics.

Data collection took place through a semi-structured interview, divided into three sections: a) oral history approach (Denzin & Lincoln, 2005) for the production of information about the trajectory of the gymnastics career; b) thematic approach (Flick, 2005) that focuses on the ideals related to age, body and training; c) reflective approach (Miethling & Krieger, 2004). There was an image of a sexually immature young woman and another image of an older, sexually mature gymnast, so that each subject would comment on the content of each image. The analysis was focused on the narratives of their experiences in an attempt to identify how contextual and individual factors influenced the evolution and maturation of gymnasts and the consequences these factors had for the future learning (Sparkes & Smith, 2014).

The interviews were transcribed verbatim and the free and axial coding procedure was used (Hammersley & Atkinson, 1995) to extract themes: factors that prolonged the career of gymnasts; normative perceptions regarding age, body, training and performance. Data analysis was conducted through thematic analysis (Ryan, Bernard, 2000; Braun & Clark, 2006).

RESULTS AND DISCUSSION

Historical background of the WAG in Portugal and its cultural particularities

In the Portuguese Gymnastics Federation there is a Technical Committee, usually composed of the coaches who decide on the ranking of the gymnasts in the high performance, on the selections of national representations, by judges more graduated and some people with relevant curriculum for this sport. This has the role

of discussing and presenting proposals for action for this sport.

The gymnasts are divided into 1st division and the division of base. In the 1st division, the gymnasts follow the FIG regulations for the competitions.

The participants of the present study began their practice in the WAG when they were children and had as main support the family, being the parents main incentive of the continuity of the sport and financing of their careers. Their influences were mainly the parents, coaches, other gymnasts with international reputation. According to the reports:

E5: *My mother enrolled in gymnastics when I was 3 years old, after that I developed a taste for the sport, until I got to the national and then international championship.*

E1: *I started with 7 years old. It was my parents who thought it was okay for me and they always did everything I could to continue my practice.*

E2: *My coach influenced my career, and then clearly I loved Nadia Comaneci.*

E3: *My parents influenced me, my mother is a gym teacher and since I know I walk in a gym.*

All were involved in the 1st division throughout their career and succeeded in the WAG, and were national champions, participated in European Championships, World Championships and Olympic Games. The transition from the initial phase to the middle and adult stages was somewhat easy, and was accepted by both the family and the gymnast.

At the beginning of sports practice of the young the family becomes determinant for the entrance and the stay in the sport, which, besides financing the expenses from the practice, are the main motivators for the development of the talents and the search for excellence (Nunomura, Oliveira, 2013).

In WAG, the role of the family is more commonly in the stage of childhood, the daily life of sports initiation is directly linked to the family in persistence, self-esteem and motivation, since the family presents a primary social

environment (Samulski, 2009). According to reports, there was no negative involvement of family members:

E3: *I started to have training or small gym classes at age 3 and I entered in training of competition from the 5 years. My most influential parents in my career and motivated me all the time.*

E2: *I went to the gym because my Uncle / Godfather did gymnastics and so he put me in the gym.*

E1: *Naturally my parents, because they were the ones who took me to the gym. And they always did everything for me to continue my practice.*

Family support was a preponderant factor for the progress towards high performance, financial and motivational support also contributed to the athlete's development and to his/her permanence (Salmela and Moraes, 2003). The perception of the arrival of the age passes through the support of the family and was witnessed in this study mainly in the initial phases (Winner, 1998, 2000, Chagas, 2007).

The perception of the older age

The WAG has changed in recent years with respect to the judging system and in the format of competitions and, since the turn of the century, the population of female gymnasts at the highest competitive level has 'aged' (Barker-Ruchti, et al., 2015), according to reports: E4: *I thought I was older at age 17, I was seeing everything with different eyes, I went further, I followed the trainings that at this age many stop. I think it was a divisor, I think we started to have more responsibility in our training, to be examples for others.*

E2: *The arrival of the age realized when I had finished the normal course and start my professional life, was a divisor, in training or professional career, I went up to the Universiades.*

E3: *From a certain point the chip was changed, the reasons for stopping it were left out and the will to continue prevailed.*

WAG's aging population offers a unique opportunity to consider how such a career advancement from a culturally child sport would bring knowledge to the establishment of more effective practices that would further and further the athletic career (Barker-Ruchti et al., 2015). Several studies have raised the question of the perception of the arrival of age as important and significant in WAG (Nunomura, 2009, Barker-Ruchti, 2009, Nunomura et al.,

2010, Kerr et al., 2016). This perception of becoming older passes through different transitions, according to the report:

E6: *I think from the moment we pass the age favorable for this sport, but still we continue our colleagues take us as examples, I do not feel older just with more time*

E7: *We are more autonomous, we are aware of what we need to work to become better athletes without having to always have the coach to look at, whereas when we are younger we always need to have someone to see.*

The Theory of Social Representations (Moscovici, 2003), which objective is to provide a differentiated look at the individual and the collective. The purpose of the social representation is to abstract the meaning of the world. The theory allows us to understand social representations as almost tangible entities, they circulate, through a word, gesture, in our daily life (Moscovici, 2010).

The theory helps to understand the perception of getting older insofar as they involve aspects related to the subject's history, its culture, beliefs, values, ideologies, attitudes, affectivity, among others. In this perspective, social representations are the understanding about daily life, the interrelation between subject and object, and how the process of knowledge construction occurs under the guidance of concrete social contexts of the WAG in Portugal. Comments indicate that the perception of the mature age passes by

moments in a combination of individual factors and social influences:

E5: *As I mentioned earlier, over time the group has been increasing and younger gymnasts have been arriving every year. At that time I began to perceive gymnastics goes a long way by being able to surpass our abilities, getting older we come to think of it.*

E4: *I think getting older, we begin to have more responsibility in our training, often the younger ones ask us for help during the training, I think they have us for reference, let's understand.*

In the course of his sports career, the athlete undergoes several phases, arising both from the personal development and learning stages of the sport, and from his own life history (Samulski, 2009), and the "social context change" (Moscovici, 2010). Thus, the individual and collective relations before the social reality of their times in learning the cultural context, makes us reflect on how we act in our daily lives, how we think and the implications of our way of thinking.

Puberty a key period of transition

Adolescence is considered a key period when athletes undergo several transitions that can be identified as shifting from sport initiation to more intense training and high performance. Numerous individual factors such as the maturation stage, age, difficulties with the technical team and social influences that would constitute these transitional actors.

WAG is considered a competitive modality where the peak performance happens at much lower ages, which could promote the occurrence of early specialization (Baker & Côté, 2006, Nunomura, et al., 2010). Thus, the adolescence phase, considered as a strong point in the transition to adulthood, is a period marked by the search for identity and permanence in this sport.

Some factors that would contribute to the early dropout of the WAG are commonly found in the pubertal phase, and consist of the very rigid

organization of the training processes; the monotonous application of excessive system loads; competitive failure and stagnation in the achievement of results; in performance, in training saturation; weight gain; the most common injuries lesions; which result in discontent and thus demotivating us to move forward at this stage.

The interviewees point out that this phase was highly relevant, as follows:

E3: *I became a teenager who was heavy and had difficulty managing weight and training. The drastic changes these phase were the most difficult, but as in everything there is to be aware of what is happening and try to work to improve.*

E5: *Many girls as they enter puberty are faced with a whole world of opportunities to make new experiences. It is up to them at that point to set priorities, which are often not gymnastics. On the other hand, we always have the injury factor that can also arise at this time, if there is an excessive training load at earlier ages, which happens more often than we imagine.*

Gymnasts categorized pubertal development as a difficult phase, mainly due to the body changes and the effects they had on performance (Barker-Ruchti et al., 2011).

The perception of bodily change in adolescence becomes important for the gymnast and her coaches, as the age advances, the changes are visible, but more difficult to obtain performance success due to these changes and to the aging of the organism. The way the interviewees perceive these changes in their body image, ie, negative feelings about body weight and shape, causes physical and mental stress, and feeds an environment of possible abandonment. On the contrary, this scenario could generate the strength to overcome this moment and, thus, to promote the longevity of the race, according to the reports:

E3: *From 12 to 13 years I gained 10 kg. I was quite lean and strong at age 10, but at 12 I had an injury, I was out 1 year. I*

became a teenager who was heavy and had difficulty managing weight and training.

E5: *At 10 years of age, I gained weight very easily. The exercises became more difficult to perform mainly, since the strength gain was not proportional to the weight gain. When we are heavier, injuries begin to emerge much more easily. I had difficulty gaining muscle mass and my body was different that bothered me.*

E1: *When I started to practice gymnastics I was quite thin. With menarche, I became heavier.*

The understanding of social and internal relations during the period of puberty brings a new look on the subjects that we propose to understand, and to communicate with the social reality that surrounds the WAG.

Contrary to what has been observed in most studies conducted in other sports in several countries, the results obtained in this study demonstrate that the reality of WAG in Portugal is characterized by an expressive use of the performance of athletes who, at very young ages, are able to achieve benchmark national results and have managed to maintain a solid hegemony throughout their careers up to the age of seniors.

The perception we obtained in the present study was that, collectively, the gymnasts felt that from the moment they understood the "awkward, difficult" phase, they were able to continue their career in the WAG. The factors of support or charging of the coaches, the individual perception, and the understanding of the injuries, facilitated the transition from puberty to adulthood. The perception of the bodily change was detected, mainly, in the physical part. Some of the gymnasts reported this fact:

E2: *at age 10 he was thin and at 20 was much heavier, but he had developed a lot of strength for the body he had.*

E3: *drastic changes in body perception were the most difficult to understand, but since everything has to be aware of what is happening and try to work to improve ... It is important to realize that these changes*

(in my case) were normal and relative to the growth and development of my being. Changes were the most difficult in terms of the relationship with the body.

There are gymnasts who perceive these changes only as minor bodily changes, such as the respondent explained:

E4: my body did not undergo major changes, I could not perceive in this drastic way the exchange of child, young, adult, because weight gain and small modifications are normal. I realized in fact change after I left the gym.

The gymnasts indicated that in this transition phase there were unexpected and even undesirable effects, such as injuries, considerable increase of weight, nonconformity with these changes. On the other hand, they had support, both from coaches and people outside the gym as well as family members. The fact allowed them more self-knowledge and created self-responsibility, that is, control their knowledge process over information acquired over time and become learning skills.

Training as a perception of a change factor

In the WAG, systematic training begins before puberty. The study with sporting coaches, about the age they consider to be ideal for the beginning of the practice and the specialization and the respective arguments, revealed that the training practices begin at an early age (Nunomura, et al., 2010).

For the gymnasts of this study meant initially having the perception of simple, basic training and, over time, realized the exigency, training was increasing. Over time, the hard times were evident in the long hours of training each week, in the injuries that occurred, in the abdication of many personal factors, in the demands for success in the competitions, as the gymnasts described:

E2: Training takes a lot of effort, sacrifice and fighting every day. There are always difficult times in practice. After injuries then it is hard and reconcile

University with the training, for me it was very difficult.

E5: At first it seems easy. Over time, the difficult times were many. The gym goes a long way to being able to overcome our abilities, full of failures and obstacles that we have to learn to overcome. On the other hand, we trained many hours a week, which meant that we had to give up many things that would be trivial for teenagers of our age (going out with friends, parties, etc.) and sometimes the decision to give up was not easy.

The training at puberty did not represent a career end point, but a temporary phase of learning, which had important application for its motivation, and strength to continue as reported:

E3: I became a heavy teenager, sometimes technical evolution did not exist. He could see that he was not advancing in the technical field, and it was difficult to carry on. I had to have the patience to perform a physical job and have the strength to continue.

E4: At the age of 15 I realized that I was afraid to perform certain exercises. At 17, when I realized that I was older, I was already seeing everything else, including training.

Body perception, mainly from puberty, has shown that it does not have end-of-career characteristics (Barker-Ruchti, et al., 2015), but it is shown that the dispositions to learn can transform in a short period of time and that such transformations are often linked to complex ways to broader social, economic and cultural contexts.

The interviewees talked about how these older horizons made them learn different health care, their relationship with the coach and their perception of more effective and productive training (Barker-Ruchti et al., 2016).

CONCLUSIONS

Manuscript proposes to understand the perception of the factors that favor prolongation of the career in WAG.

The growing perception of the return of senior high-level gyms in the WAG international arena is evident, prompting us to reflect on how this new phase of the career could bring values, ideas and practices to new discussions about effective construction and environments friendly to gymnasts.

Interviewees pointed out that the acceptance of mature age makes them see the longer career in a combination of individual behavioral factors, bodily changes and social influences.

For such a demanding sport, it is recommended that further research foster discussions about the acceptance of age and bodily changes in WAG as natural for agents. And from that, think of the adjustment of planning and training to accommodate these changes, instead of excluding them from the system, if they still wish to continue.

At WAG, this implies changing coaches' view on gymnasts who have advanced from infancy to adulthood; their potential should not be discarded if they are still able to perform at the highest level.

The results achieved in this research are not intended to lead to linear understanding, but to provoke discussions about the experiences of "older" gymnasts, and to bring to the fore the concern with internal social relationships, procedures practiced, and coaching at WAG.

REFERENCES

Atiković, A., Delaš Kalinski S., Čuk, I. (2017). Age trends in artistic gymnastic across world championships and the olympic games from 2003 to 2016. *Science of Gymnastics Journal*, 9(3), 251-263.

Barker-Ruchti, N. (2009). Ballerinas and pixies: A genealogy of the changing gymnastics body. *International Journal of the History of Sport*, 26(1), 43-61.

Barker-Ruchti, N., Roslyn, K., Schubring, A., Cervin, G. & Nunomura, M. (2016). Gymnasts Are Like Wine They

Get Better With Age Becoming and Developing Adult Women s Artistic Gymnasts. *Quest*, Issn: 0033-6297 (Print) 1543-2750 (Online) Published online: 28 Oct. Barker-Ruchti, N., Dean B., Stephen R., Jessica Lee.(2015). Learning Cultures and Cultural Learning in High Performance Sport: Opportunities for Sport Pedagogues. *Physical Education and Sport Pedagogy*.

Baker, J., & Côté, J. (2006). Shifting training requirement during athlete development: Deliberate practice, deliberate play and other sport involvement in the acquisition of sport expertise. In D. Hackfort & G. Tenenbaum (Eds.), *Essential processes for attaining peak performance* (pp. 92-109). Toronto, ON: Meyer & Meyer Sport (UK) Ltd.

Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Côté, J., Emery, C. A., Engebretsen, L. (2015). International Olympic Committee consensus statement on youth athletic development. *British Journal of Sports Medicine*, 49, 843-851
doi:10.1136/bjsports-2015-094962.

Braun, V & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101.

Chagas, J. F. (2007). Conceptualization and individual, family and cultural factors related to high skills. In D. S. Fleith & E. M. L. S. Alencar (Orgs.), *Talent development and high skills*. Porto Alegre: Artmed, 15-24.

Denzin, N., & Lincoln, Y. (2005) *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage.

Federation Internationale de Gymnastique FIG. (2017). *Code of Points for Women's Artistic Gymnastics*.

Flick, U. (2012). *Qualitative sozialforschung: Eine einföhrung*. Reinbek, Germany: Rowohlt.

Hammersley Martyn & Atkinson, Paul (1995). *Ethnography: Principles in Practice*. Psychology Press, 323.

Hannaford, A. Béla Károlyi, (2012). *The somersault svengali*. The

Telegraph. Retrieved from <http://www.telegraph.co.uk>

Hodkinson, P., Biesta, G., & James, D. (2007). Understanding learning cultures. *Educational Review*, 59(4), 415-427.

Hodkinson, P., Biesta, G., & James, D. (2008). Understanding learning culturally: Overcoming the dualism between social and individual views of learning. *Vocations and Learning*, 1, 27-47.

Kerr, R. (2006). The impact of Nadia Comaneci on the sport of women's artistic gymnastics. *Sporting Traditions*, 23(1), 87-102.

Kerr, R., Barker-Ruchti, N., Schubring, A., Cervin, G., Nunomura, M. (2015). *LEaP Research Report No. 37*, Canterbury:Lincoln University, February.

Kerr, R., Barker-Ruchti, N., Nunomura, M., Cervin, G., & Schubring, A. (2016). The role of setting in the field: The positioning of older bodies in the field of elite women's gymnastics. *Sociology*.

Miethling, W.-D., & Krieger, C. (2004) *Schüler im Sportunterricht*. Schorndorf, Germany: Hofmann.

Moscovici, S. (2003). *Social representations: investigations in social psychology*. Translated Pedrinho A. Guareschi, Social representations: explorations in social psychology (Gerard Duveen (ed.), Nova York, Polity Press/Blackwell Publishers, 2000).

Moscovici, S. (2010). *Social Representations: Investigations in Social Psychology*. Editado em inglês por Gerard Duveen. Translated Pedrinho A. Guareschi. 7.ed. Petrópolis, RJ: Vozes. Mujika, I. (2012). *Too young to vote, old enough to be an Olympic Champion*. Journals. humankinetics.com

Nunomura, M., Pires, F. R., Carrara, P. D.S. (2009). Analysis of training in Brazilian artistic gymnastics, *Rev. Bras. Cienc. Esporte*, Campinas, 31(1), 25-40.

Nunomura, M.; Carrara, P.D.S.; Tsukamoto, M. (2010) Artistic gymnastics and early specialization: too early to specialize, too late to be champion! *Rev.*

bras. Educ. Fís. Esporte, São Paulo, 24 (3), 305-14.

Nunomura, M., Oliveira, M.S. (2013). Parents' support in the sports career of young gymnasts. *Science of Gymnastics Journal* 5(1), 5 – 17.

Ryan, G.W. And Bernard, H.R. (2000). *Data management and analysis methods*. In Denzin, N.K. and Lincoln, Y.S., editors, *Handbook of qualitative research*, second edition. Sage, 769- 802.

Salmela, J. H., & Moraes, L. C. (2003). Development of Expertise: The role of coaching, families and cultural contexts. In J. L. Starkes & K. A. Ericsson (Eds.), *Expert performance in sports*. (272-291), Champaign, Il: Human Kinetics.

Samulski, D. M. (2009). *Psychology of Sport: concepts and new perspectives*. Barueri: Manole, 167-192.

Sparkes, A., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health*. Milton Park, UK: Routledge.

Winner, E. (1998). *Gifted Children: Myths and Realities*. Porto Alegre: Artmed.

Winner, E. (2000). The origins and ends of giftedness. *American Psychologist*, 55, 159-169.

Corresponding author:

Ivan Montandon,
Ivana Rua Bolivia 357/ 701 Bairro São Pedro Belo Horizonte Minas Gerais
Brazil 31270-901
Phone: 55-31-999709051
e-mail: ivanamontandonaleixo@gmail.com



Photo above: Opening ceremony of XVI all Sokol Zlet in Prague, 100 years since Czechoslovakia as state have been recognized

Photo below: Ing. Vladimír Holčík, starosta Sokolskej únie Slovenska, Sokol union of Slovakia

