

Sports talents in judo and swimming

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Abstract

This paper purported to establish the existence of a system for the development of talented Brazilian athletes judo and swimmers, as well as to describe how coaches in both sports see this process occurring in practical terms. An exploratory and descriptive research was conducted by means of interviews with 18 high-performance coaches (11 swimming coaches and 7 judo coaches). The participating coaches answered to 10 semi-structured questions concerning the development of sports talents in Brazil. The polled results were analyzed through the "Discourse of the Collective Subject" (DCS) method. According to 77% of those coaches, there is no established national guidelines for the development of talents in either one of these sports categories, and 66% of the interviewed stated that the development of the athletes falls entirely to each sporting association they belong with. The opinions of the interviewed coaches indicate that the government offices in charge of sports administration produce no comprehensible national guidelines for judo and swimming in Brazil, which leaves to institutions such as Sports Clubs, Associations and Municipal Sports Authorities the full responsibility for the development of athletes in both categories.

KEY WORDS: Athletes; Sports clubs, High-performance; Talent identification.

Introduction

Winning medals in major world sports events such as the Olympic Games is the finest wish of many athletes, and in order to achieve the best results in these competitions the efficient interplay of a great number of factors is fundamental¹⁻². Accordingly, the last years have seen an increase in scientific research aimed at the understanding and highlighting of the factors responsible for the achievement of success in international sports³⁻⁸. One of the points these researches commonly recommend is the emphasis on the existence of a comprehensive system for the effective development of athletes from the initiation stages to the high-performance brackets.

In countries with high international sports profiles such as the U.S., China, Great Britain, Germany, Italy, Australia and Russia, it is possible to identify national structures that focus on the implementation and monitoring of sports categories through programs that seek to develop sports in their

many expressions⁹. In spite of their many economic, political, social and cultural differences these countries share a resemblance when it comes to the fostering of sports development to attain great results in major international competitions^{2-4, 10-11}. The existence of national programs that identify, select and promote sports talents favor the emergence and consolidation of high-performance athletes in each country, which ensues for them consistent, long-term sports achievements¹².

In the last 10 years Brazil has hosted a number of sports events, and right now the country receives the Summer Olympics of 2016¹³⁻¹⁴. At the same time, Brazilians wish to achieve better sports results not only to justify the honor of hosting the Olympics but also to foster an increased interest in high-performance sports in the country.

Brazil's reality shows two systems of organization of sports at national level: one is governmental, with the Ministry of Sports carrying out the actions

that concern high-performance sports through its National Department for High-Performance (SNEAR), and the other is non-governmental, where the main provisions that pertain to high-performance sports are made by the Brazilian Olympic Committee (COB) and the Olympic Federations⁸. Regardless of the system they belong to, these organizations may contribute to the establishment of guidelines and actions that concern high-performance sports in Brazil.

Although Brazil is not counted among the world sports powers, Brazilian athletes in different categories obtain expressive results, even when their country has not a structured and comprehensive system for the development of sports talents¹⁵.

Among the sports in which Brazil achieves significant international results, judo and swimming stand out. In total, both sports won 16 olympic medals from Sidney 2000 to the London Olympics in 2012, which accounts for 30% of the 54 medals Brazil obtained in that period¹⁶. Such a success qualified these sports to be included in a special support program dubbed Brazil Medals Plan 2016 (Plano Brasil Medalhas 2016)¹⁴, destined to the sports with the greatest probability of winning medals in the Rio Olympic Games. Notice that, in comparison with the collective sports categories, judo and swimming also show good results in other international events.

The Brazilian Judo Federation (CBJ) reports that up to 2012 Brazilian judo has won 19 olympic medals (3 gold, 3 silver and 13 bronze) and 28 medals in major world championships (4 gold, 7 silver and

17 bronze)¹⁷ - highlighting the State of São Paulo as home of the majority of judo clubs, where the greatest number of olympic medalists in the sport come from¹⁸. Among the participants of Brazil's National Judo Team in London 2012, about 65% of the athletes were affiliated with clubs and institutions from the State of São Paulo. In addition, along nine editions of the Grand Prix Interclubes (a national competition among Brazilian judo clubs) São Paulo has won seven male fighter titles and other three titles in the seven editions held for female athletes¹⁷.

In the swimming, the 6 last Olympic Games (from 1992 to 2012) and Pan-American Games (2010/2007/2003/1999/1995) saw strong performances by Brazilian swimming teams, especially as they compare to other sports. In this period, Brazilian swimmers won 13 olympic medals and 145 Pan-American medals¹⁶. When it comes to results obtained by sporting clubs with swimming teams, for example, 5 out of the 10 top-ranking clubs in 2013 were based in the State of São Paulo¹⁹.

Such results show how important São Paulo is for both sports in Brazil.

Considering the international achievements by Brazilian judo and swimming and how the programs to identify, select and promote sports talents are important for the development of athletes, this paper intends to establish the existence of a system to build up potentially accomplished Brazilian judo athletes and swimmers, as well as to describe how their development is handled in practice - according to the outlook of the coaches involved.

Method

This is a cross-sectional descriptive study of the survey type²⁰. The data submitted and analyzed were gathered through the research project "Analysis of the quality of programs to identify, select and promote sports talents within Brazilian reality", which had as one of its purposes to detect whether or not the most relevant aspects for the development of elite sports in an international context were present therein as recommended by the studies specific to the discipline^{3-4, 6-7} - one of those aspects being the analysis of the system for the development of talents.

Although the above mentioned research project was developed in three stages, this paper focuses on the results relating to one of the 10 questions that were proposed in its second stage. The choice of

this specific question refers to a nationwide system for the development of talents in both judo and swimming being in place, already showing good international results and with encouraging prospects for medals in the 2016 Rio Olympic Games.

Sampling

Since many of the technically top-ranking clubs in both judo and swimming are in São Paulo, the present research was circumscribed to this State. Coaches of São Paulo's sports institutions (Clubs and Municipal Sports Associations) with the best results in 2010's national adult judo and swimming competitions were invited to participate.

The participation of these coaches in the research is explained by their fundamental role in the development of the athletes, from sports initiation to high-performance level²¹. The coach performs a vital part in the preparation of the athlete, as well as in the communication with the family and the sports administrators.

The sampling numbered 18 coaches in full (11 swimming coaches and 7 judo coaches). Some of the clubs/associations were represented by more than one of their coaches. Among the coaches interviewed,

60% worked in clubs with the best results in 2010's national competitions such as judo's Grand Prix Interclubes and swimming's Maria Lenk Brazil Cup.

The details about the interviewed coaches are presented on TABLE 1.

This research project was approved by The Committee for Research Ethics of The School of Physical Education and Sports of The São Paulo University under the n. 2010/12, and all of those participating have signed a Term of Informed Consent, with assured anonymity granted.

TABLE 1 - Characterization of sampling: interviewed coaches' age, length of professional career and time period spent in formal education.

	Minimum	Maximum	Average
Age	26	55	35.50
Length of professional career as a coach	5	31	15.90
Time period spent in formal education	13	30	18.36

Procedures

The research contributors were reached by telephone and/or e-mail for the scheduling of interviews. Semi-structured interviews were conducted with the coaches, audio-recorded and later transcribed in full. The proposed questions were based on the 10 most relevant aspects for the development of elite sports in an international context as recommended by the studies specific to the discipline^{3-4, 6-7}, to wit:

1) A clear understanding of the roles of the different agents involved and an effective communication within the network upholding the sports system;

2) Simplicity administration through sports initiatives and common policies;

3) An effective system for the statistical identification and monitoring of the progress of talented elite athletes;

4) The provision of services in the field of sports that help foster a culture of excellence in which all those involved (athletes, coaches, administrators, sports scientists) may interact with one another both formally and informally;

5) Well-structured competition programs, favoring international exchange;

6) Well-developed and specific facilities, prioritizing the access for elite athletes;

7) Focused allocation of the available resources for a relatively restricted group of sports categories, favoring those more likely to actually succeed on international level;

8) Clear and appropriate planning for the needs of each sports category;

9) Recognition of the costs involved in sports excellence, with proper and fitting funding being destined to infrastructure and personnel;

10) Support for the athlete's life and professional qualification after his/her sports career is over.

The present paper introduces results for the judo and swimming that refer to the third item in the research's second stage, namely "Effective system for the statistical identification and monitoring of the progress of talented elite athletes" which were analyzed through the twofold question: *"Is there a system for the development of sports talents in Brazil from initiation to high-performance? If the answer is affirmative, how does it function?"*

Analysis of data

The answers obtained to the theme question that were analyzed through the "Discourse of the Collective Subject" method, as proposed by LEFÈVRE and LEFÈVRE²². This method of analysis has three phases in which are detected:

a) Keywords: words or full phrases in the discourse that are highlighted by the researchers and that reveal the gist of the statement;

b) Central ideas: language expression which describes precisely, concisely and accurately the meaning of each of the discourses analyzed and that will subsequently originate the Discourse of the Collective Subject;

c) Discourse of the Collective Subject: the synthesis of the discourse, expressed in the first person singular and which is composed by the keywords that share the same central idea.

Results

TABLE 2 presents the results obtained through the Discourse of the Collective Subject method.

Considering both sports together a total of 34 central ideas were detected, from which four collective

discourses could be drawn up. Described below are the Discourses of the Collective Subject (DCSs) produced for each Central Idea (CI) with basis on the joint answers of the coaches in both categories.

TABLE 2 - Characterization of central ideas (CIs), number of CIs, absolute and relative recurrence in relation to the total number of CIs and to the number of responses of swimming (11) and judo (7) coaches to the question: *“Is there a system for the development of sports talents in Brazil from initiation to high-performance? If the answer is affirmative, how does it function?”*

	Central Ideas Judo	Central Ideas Swimming	Central Ideas Judo and Swimming	Percentage of Central Ideas in relation to the number of coaches
Central Ideas	Absolute recurrence (relative)	Absolute recurrence (relative)	Absolute recurrence (relative)	Absolute recurrence (relative)
There is no system	4 (40.0%)	10 (41.6%)	14 (38.8%)	14 (77.7%)
There exists in each sports association	4 (40%)	8 (33.3%)	12 (35.2%)	12 (66.6%)
Through the results in competitions	1 (10%)	1 (4.1%)	2 (5.5%)	2 (11.1%)
In sparse cases by the regulating authority of the category		5 (20.8%)	5 (13.8%)	5 (27.7%)
I don't know	1 (10%)		1 (2.7%)	1 (5.5%)
Total Central Ideas	10 (100%)	24 (100%)	34 (100%)	34 (100%)

DSC 1 - (77% of coaches' answers and 38% of the total central ideas) - Central Idea: “There is no system”

My opinion is that no, there is no organized effort, no specifically designed work for the end. In what concerns public entities, the Government, the Olympic Committee, the Federations and Leagues, there is nothing. As for a national policy, there is no such thing, I never saw anything of the kind. Unfortunately, it doesn't exist. There should be, but there is none for swimming. There is no comprehensive, defined or research-backed policy to help us detect any sizeable amount of talents. Even with the Brazil 2016 Olympics only 6 years away, one can't see anything being done, at least not for the time being.

DSC 2 - (66.6% of coaches' answers and 35.2% of the total central ideas) - Central Idea: “There exists in each sports association”

In what concerns the preparation of children and youngsters, each association develops their own programs, aiming at the future. Today I believe this work falls almost entirely to the clubs and to some gyms. In our association we adopt a methodology that considers each grade in relation to the age-group, the physiology and a whole number of things. You'll notice that some of the existing projects manage to take toddlers and eventually develop them to high-performance level, but considering the sheer overall number of judo athletes in Brazil, I think this is just too little. In what the respects

the thinking of the Brazilian Confederation and the Paulista (São Paulo's) Federation, they expect the clubs to do the scouting that will lead to talent breakthroughs.

DSC 3 - (11.1% of coaches' answers and 5.5% of the total central ideas) - Central idea: "Through the results in competitions"

What prevails is this process of natural selection among the athletes. The finest individuals are gleaned that way, but there is no organization, no system in place. You have calendars from junior grade on where youngsters participate and I think this is how the natural selection of talents takes place. Those athletes that remain and carry on in the category gain way to the competitions in which they are more proficient, and if they display any particular talent their results should qualify them to move on to the more important

contests. In case the athlete doesn't particularly stand out there are still other competitions in which whatever talent he or she has can be expressed.

DSC 4 - (27.76% of coaches' answers and 13.8% of the total central ideas) - Central idea: "In sparse cases by the regulating authority of the category" - verified only for swimming coaches

I'm aware of the Confederation's many incentive clinics, its many incentive efforts, but none of that is officialized or consistently cyclic. The Paulista (São Paulo's) Aquatic Sports Federation also carries this kind of work for junior teams, to introduce them to the statewide contests scene. In the case of competitive swimming the Brazilian Confederation has talent-scouting and talent-developing projects, but these are altogether too sparse, too localized and hardly likely to lead to a widespread, mass practice of swimming.

Discussion

Although both sports have athletes with relevant international results, the judo and swimming coaches' opinion is that the development of talents in either field doesn't happen through a comprehensively structured system. According to these professionals, the emergence of nationally outstanding athletes depends on isolated initiatives by sports associations and on those athlete's achievements in competitions.

77% of the coaches' views indicate that there is not a Brazilian system for the development of athletes of judo or swimmers, as it reads in the DCS 1's phrase "...As for a national policy, there is no such thing, I never saw anything of the kind...". This supports the audit report issued by the Union's Court of Auditors (TCU)²³, which identified an absence of effective action by government sports entities in charge of the development of athletes from initiation to post-career period.

The non-existence of a nationwide system for the development of athletes, as quoted by the interviewed coaches, may be linked to the scant number of public policies and programs to promote sports and leisures in Brazil. A few initiatives are devised especially to attend to the interests of clubs and high-performance athletes already in the adult stage, after they have achieved significant sports

results²⁴. Consequentially, the country lacks in effective actions aimed at the sports initiation stages, particularly in what concerns the identification and development of new young Brazilian athletes²⁵⁻²⁷.

In some of the countries that are recognized as international sports powers there is a whole organized sports structure in place, which is based on a nationwide system for the development of sports talents^{3-4, 6, 10, 12, 28-30}. Such a nationwide system for the development of talents may contribute to establish the guidelines and actions which shall drive the process of detection, selection and promotion of athletes, fostering a consistent structure with capacity for long-term objectives⁹.

In this scope we may highlight the national programs of detection and selection of sports talents that exist in China and Australia³¹. In the case of China, that country has a national program for the selection and promotion of sports talents through which children initiate practice around 6 years old, getting worked through a controlled and comprehensive selective system that will eventually lead them to the high-performance stages.

Australia proposes a system of sports preparation ranging from initiation to high-performance upkeep that is dubbed Foundations, Talent, Elite

and Mastery (FTEM). Specifically in what respects the detection and selection of talents such system is composed of four stages: in stage one are detected individuals with any physical, motor or psychological “talents” that usually rate above 90% of their peers, which remain to be verified in the next stage. In stage two the youngsters are immersed in a trial period of observation within the specificities of an environment of practicing and competition so as to determine their capacities and abilities, allowing for the checking out of the initially observed potentials. In stage three the athletes must commit to training and investing on a high volume of specific practice, striving for continued performance improvement and keeping their focus on achieving the references for the next stage. In stage four the athletes get professional support for continued development (such as scholarships at universities, institutes or sports colleges) or join a professional team or elite preparation group. Thus embedded the athletes are much more likely to be noticed and supported by their sports field and/or the high-performance scene they belong in³².

According to 66.6% of the coaches interviewed, the most usual form of development of Brazilian judo athletes and swimmers is through isolated efforts by each institution of sports practice, as it is read in DCS 2 “...Today I believe this work falls almost entirely to the clubs and to some gyms...”. In Brazil, high-performance sports are traditionally practiced in clubs, most of them privately-owned and situated in the south and southeastern parts of the country, which restricts the access to sports initiation to a relatively small portion of the national population²³. In addition to that, many of these are social clubs, and their institutional purposes and physical facilities attend to the general membership rather than prioritize the development of sports³³.

So, given the absence of a national set of structured guidelines, each sports institution establishes its own system for the development of sports talents. This is in accordance with article 217 of the Federal Constitution, which states that sports clubs, sports associations and sports organizations are granted full autonomy in their pursuits and criteria for the preparation and development of athletes³⁴. Notwithstanding that, the consolidation of national sports guidelines is something that could greatly favor the communication, exchange and interplay among all the entities involved, and consequently contribute to the development and fixation of high-performance athletes in the country^{4, 12}.

Further in accordance with article 217 of the Brazilian Constitution, public financing's priority should be directed to educational sports and - in specific cases - to high-performance sports³⁴. Investments on school grade could favor a wide number of children and adolescents - noting that the dedicated literature states that childhood and adolescence are the best stages for the development of specific skills and motor and psychological capacities for the prospective high-performance athletes³⁵⁻³⁸. However, what is noticed is the inexistence of actions to approach the identification and promotion of potential sports talents in Brazilian schools²³. Meanwhile, in some of the countries with the best sports achievements there is a close and effective relationship between educational and high-performance sports^{28, 33}.

It is possible to observe some localized actions aimed at bringing together sports development and school in Brazil, such as the “Second Half Program” (Programa Segundo Tempo), the “Athletes at School Program” (Programa Atleta na Escola) and the “School Games” (Jogos Escolares), which are examples of efforts promoted by the Ministry of Sports, the Ministry of Education and the Brazilian Olympic Committee (COB)¹⁴. The effective contribution of such programs for the development of high-performance athletes remains to be determined, though.

Some federal laws were recently passed that intended to advance the development of high-performance sports in Brazil, such as the Sports Incentive Act (Lei do Incentivo ao Esporte) and the Athletes' Endowment Program (Programa Bolsa Atleta), as well as the Brazil Medals Plan (Plano Brasil Medalhas) - specifically devised with sights on the Rio 2016 Olympics¹⁴. Notwithstanding these initiatives, there is no consistent communication among the sports entities that could favor the joint drafting and execution of actions to forward the development of sports and athletes in the country, given the fact that many of these projects overlap without the benefit of any actual coordination that might bring together these efforts by the promoting agencies⁸. Yet another evidence that indicates how fragile Brazilian formative sports are is the number of projects approved through the Sports Incentive Act in the period from 2007 to 2010, from which only a scant 19% were intended for sports formation²⁶.

Another way to develop judo athletes and swimmers in Brazil is through their competitive results, as mentioned by 11% of the coaches and which can be read in DCS 3: “...Those athletes that remain and carry on in the category gain

way to the competitions in which they are more proficient, and if they display any particular talent their results should qualify them to move on to the more important contests...". So the coaches state that the competition system makes it possible for the better athletes to stand out and to move on into the more advanced levels of preparation. In this way, local, regional and interschool competitions, among others, can also be regarded as a means to detect and select new talents in both categories.

This characteristic of using competitions for the selection of athletes has also been observed in the study by PARRA³⁹, whose interviews with Brazilian swimming club coaches revealed that the criteria for the selection of swimmers in different levels is based on their competitive performances. Still according to this author, 89% of the interviewed coaches mentioned the lack of a nationwide system of guidelines for the identification and promotion of talents.

The existence of an organized national competitive system is one of the key points in a country's organized sports structure. In such a context nationwide competition allows athletes to gauge their individual or collective performances, helping their prospects for success in international sports^{4,10}.

United States and China are examples of countries whose respective competition systems stimulate international sports success in many categories. In these countries, periodical regional and national tournaments and championships are venues for the detection of talents for their national teams, constituting necessary steps within their system for the development of athletes^{2-3, 28, 33, 40}. In Brazil the scattered tournaments are the principal stages to select the individuals that will proceed in the process of promotion of athletes⁴¹⁻⁴². Granted the importance of competition along the athlete's development, this shouldn't be the only way to select young athletes, unless if it is accompanied by a comprehensive approach and management of many factors, like for instance the physical and psychological aspects of the preparation.

Anotherway for the development of young athletes was mentioned in DCS 4, in which 27.7% of the swimming coaches cited that the CBDA (Brazilian Confederation of Aquatic Sports) sporadically promotes programs aimed at developing talents in the category. Besides swimming, CBDA is in charge of water-polo, synchronized swimming, marathon swimming and diving. Just as the coaches were being interviewed a project dubbed Brazil Swimming Program (Programa Brasil Natação) was going on, with the objective of identifying potential swimming

talents through anthropometric measurement, monitoring of biological data and scouting of results on national and international levels, although as of since nothing could be heard about the continuity of the program⁴³. In what concerns this kind of CBDA's projects the coaches state in their DCS that: "... (they) are altogether too sparse, too localized and hardly likely to lead to a widespread, mass practice of swimming...".

Although none of the judo coaches interviewed mentioned the existence of some program or project developed by the CBJ (Brazilian Judo Confederation), the institution's website lists a social project jointly promoted with Infraero (Brazil's Airports Authority) dubbed Forward Judo (Avança Judô), which seeks to help underprivileged children who live in the vicinity of the airports overlooked by Infraero through the practice of judo¹⁷. It is a worthy effort, but as a social project it carries no priority of identifying and developing potential high-performance athletes.

The results this study yields show that as far as the outlook of the interviewed swimming and judo coaches is concerned, there is no structured nationwide system that aims at the development of talented athletes in either category in Brazil, possibly due to the absence of any effective governmental policy for sports.

The main initiatives for the development of athletes are carried out through sporadic actions by sports clubs and gyms. Also key to the achievement of success in either category are the better results obtained at major competitions.

Thus, it remains clearly indicated that, as the principal entities in charge of the country's sports organization and structure, it is up to the Ministry of Sports, the Brazilian Olympic Committee and the Sports Confederations the establishment of effective communications that would favor the integration of local, statewide and nationwide programs, as well as the drafting of comprehensive public policies, especially in what respects sports in the formative stages.

Another initiative that can contribute to the development of sports and athletes in the country is a constant and consistent exchange between the sports organized entities and higher learning institutions, which would bring closer scientific research and sports. Yet another proposition for the identification and development of young athletes is to promote a further integration between the actions of educational and high-performance sports, which could help expand the number of young individuals practicing in all categories and

consequently contribute to the improvement of the country's sports achievements.

In this manner, we suggest that a probe should be conducted to evaluate the effect of sports laws

and programs deployed in the period between the gathering of these data and the present moment, in order to investigate how these initiatives contributed to sports development in the country.

Resumo

Talentos esportivos no judô e na natação

Este artigo teve por objetivo verificar a existência de um sistema de desenvolvimento de judocas e nadadores brasileiros talentosos, assim como descrever como ocorre o mesmo na prática, segundo a opinião dos técnicos dessas modalidades. Foi realizada uma pesquisa exploratória e descritiva, por meio da realização de entrevistas com 18 técnicos de alto rendimento, sendo 11 de natação e sete de judô. Os técnicos participantes responderam a 10 perguntas semiestruturadas, relacionadas com o desenvolvimento de talento esportivo no Brasil. Os resultados foram analisados por meio do método do "Discurso do Sujeito Coletivo" DSC. Segundo 77% dos técnicos, não existe uma diretriz nacional para o desenvolvimento de talentos para as duas modalidades estudadas, e 66% dos entrevistados afirmaram que o desenvolvimento dos atletas ocorre por meio de cada entidade esportiva. De acordo com a opinião dos técnicos, conclui-se que as entidades nacionais de administração do esporte não elaboram diretrizes nacionais para o judô e a natação no Brasil, sendo as entidades de prática esportiva - tais como Clubes, Associações e Entidades Municipais de Prática Esportiva - as responsáveis pelo desenvolvimento dos atletas em ambas as modalidades.

PALAVRAS-CHAVE: Atletas; Clubes; Alto rendimento; Identificação de talento.

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