

# SPORTS-EDUCATION DUAL CAREER: THE REALITY OF ELITE FANCY DIVING ATHLETES IN BRAZIL

DUPLA CARREIRA ESPORTE-EDUCAÇÃO: A REALIDADE DOS ATLETAS DA ELITE DOS SALTOS ORNAMENTAIS BRASILEIROS 🔗

DOBLE CARRERA DEPORTE-EDUCACIÓN: LA REALIDAD DE LOS DEPORTISTAS BRASILEÑOS DE ÉLITE EN SALTOS ORNAMENTALES 🖧

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Abstract: This study aims to present and analyze the sporting and educational profile of fancy diving athletes who participated in the 2018 Brazil Tournament (Troféu Brasil). It uses a questionnaire based on the holistic training model for a dual career. Exploratory analysis was conducted with a sample of 15 individuals, using descriptive statistics on the Statistical Package for the Social Sciences (SPSS) software according to general and specific frequency. The results suggest that sporting and educational training are compatible under a perspective called fluid transition pathways, with cases of higher education discontinuation. The study underscores the lack of legislation on dual careers in Brazil as well as institutional policies that promote access, continuation and completion of academic education for high-performance athletes. Moreover, it points out the need for new studies to expand the debate on dual careers in sports.

**Keywords:** High performance sport. Educational training. Sporting career. Conciliation.

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## **1 INTRODUCTION**

The sports training of high-performance athletes is a process that requires a great level of dedication to training and abdication of social interaction with friends and, often, with family members, and can accumulate 10,000 hours of sports practice until the improvement stage (DAMO, 2007; GLADWELL, 2008; MORENO *et al.*, 2017). Sports that require complex motor coordination — such as artistic gymnastics, rhythmic gymnastics and diving — generally adopt the process of premature sports development, consisting of sports specialization, which occurs on average between 5 and 7 years of age; the peak of performance, between 15 and 20 years; and the withdrawal of sports, when voluntary, from 20 to 25 years of age (STAMBULOVA *et al.*, 2009). This precocity in the athlete's training is implemented by the need to develop strength, speed, and flexibility, as well as coordination skills (rhythm, motor coordination, motor control and motor expression) to perform extremely complex technical gestures and achieve high performance as early as possible (GOULD, 2010; NUNOMURA; CARRARA; TSUKAMOTO, 2010).

Therefore, according to the American Orthopaedic Society for Sports Medicine , early sports specialization can be defined by three criteria, which are, a) participation in intensive training and/or organized competitions above eight months per year; b) exclusive dedication to a particular sport; and c) involvement of prepubescent children or children under 12 years of age (LAPRADE *et al.*, 2016; MALINA, 2010).

Concomitantly with this early process of sports development, the young Brazilian athlete faces educational commitments distributed in a mandatory manner from six to 17 years of age, totaling 9,600 hours between preschool and high school (BRASIL, 1996). The successful combination of reconciling the sports career for high performance with educational formation or work is called a dual career (EUROPEAN COMMISSION, 2012; HAKKERS, 2019).

Internationally, the dual career has been discussed considering several factors that directly and indirectly affect the dynamics of the conciliation between sports and studies (GUIROLA GÓMEZ *et al.*, 2018; LUPO *et al.*, 2012; PEREZ-RIVASES *et al.*, 2017; TEKAVC; WYLLEMAN; CECIĆ ERPIČ, 2015). In Brazil, the subject is approached by means of qualitative and quantitative analyses to identify sports and educational profiles, as well as their dynamic of conciliation (MIRANDA; SANTOS; COSTA, 2020).

The main barriers already identified were the difficulty in administrating sports and educational commitments, the financing policy for maintaining the athletic condition and for participation in training and competitions, the misunderstanding on the part of the actors involved in the dual career process, in addition to the absence of specific regulation on the subject (AZEVEDO *et al.*, 2017; ROCHA; SOARES, 2016).

In this sense, it is necessary to holistically understand the process of dual career, based on the dynamic, multifactorial and simultaneous perspective of sports, educational/vocational, financial, psychological, and psychosocial aspects

(WYLLEMAN; REINTS; DE KNOP, 2013). One of the theoretical models dedicated to understanding the various possibilities of dealing with these issues points to the possibility of the athlete dedicating himself exclusively to sports (linear trajectory), dedicating himself prioritizing the sport (convergent trajectory), or trying to balance the training routines with studies or work (parallel trajectory). In the convergent and parallel trajectories, athletes seek to make the most of sports and school/academic opportunities, planning in advance their sports withdrawal (PALLARÉS *et al.*, 2011).

Diving has been part of the Olympic Program since 1912. In Brazil, this sport is allocated in a wide sports group that are the target of a four-year media exhibition, corresponding to the periods of the Olympic Games. Compared to more popular and mediated sports — such as football, volleyball, and basketball — diving finds no potential for private investment that provides the professionalization of their athletes<sup>1</sup>. Thus, they are characterized as an essentially non-professional modality, in which the possibility of sports ascension to achieve high socioeconomic status is limited. making important for athletes, family members, sports leaders and educational managers a critical and conscious reflection of the opportunities provided by both sport and institutionalized education. This is essential so that it is not necessary to prioritize one career over the other and for there to be good educational use, allowing successful migration, at the appropriate time, to the employment world. Therefore, the construction of consistent analyses, integrating scientific evidence with the practice of intervention, is indispensable for the forwarding of sports training policies and programs (JORDANA et al., 2019; RAMIS et al., 2019), as well as for monitoring and support in the transition phase out of high-performance sport (RAMOS et al., 2017).

In view of the above, the aim of this study was to describe and analyze the sports and educational profile of athletes participating in the 49th *Troféu Brasil de Saltos Ornamentais*, held in Brasília, Distrito Federal, in 2019. These athletes constitute the elite of the Brazilian sport, which allows us to understand how this group has dealt with sports, educational/vocational and financial issues related to the double career. The results may provide subsidies for the implementation of programs and public policies for the young athletes of this sport. Among the questions to be clarified, we problematize: a) what is the elite diving athlete's sports and educational profile? b) would high performance sports training be a barrier to school or academic education?

# 2 METHODOLOGY

Considering the multifactorial, dynamic, and simultaneous context of the double career (WYLLEMAN; REINTS; DE KNOP, 2013), the present study is characterized as exploratory, contributing to the construction on the reality of Brazilian diving athletes. In this sense, the qualitative analysis presented below sought, through the sample's own perceptions, the deepening of hypotheses and the description of the dual career phenomenon in the universe of the elite diving in Brazil (SAMPIERI; COLLADO; LUCIO, 2006).

<sup>1</sup> CONTENT... **Market & Consumption**, 4 Dec. 2019. Available from: <u>https://www.mercadoeconsumo.com.</u> <u>br/2019/11/23/conteudo-digital-e-a-formula-para-esportes-menos-populares-conquistarem-patrocinadores-e-fas/</u>.

The population consisted of 33 athletes – 17 men and 16 women – enrolled in the 49th edition of the *Troféu Brasil de Saltos Ornamentais*, which took place from March 20th to 23rd, 2019 at the *Centro de Excelência em Saltos Ornamentais da Universidade de Brasília*, in Distrito Federal.

First, the invitation to participate in the study was made to the event's organization, who provided the participating teams' coaches' contacts. Then, the first author of the research contacted the trainers through the instant messaging application WhatsApp, explaining the study objectives and procedures for data collection, giving them the decision to participate or not. To confirm the acceptance, the older athletes signed a Free and Informed Consent Form (FICF) and, for minors, the signing of a Free and Informed Assent Form (FIAF) was requested, as well as the signature of the Informed Consent Agreement by their coaches or guardians.

Sampling was intentional, as it is directed to high-performance athletes, and recruitment through volunteering therefore has a self-selection bias. The study included 15 athletes from four clubs, with an average  $age^2$  of  $18.00 \pm 4.27$ . Measures were taken by the team of researchers so that data collection did not interfere in the concentration routines, commuting between hotel and competition, as well as rest and performance at the event, scheduling the interview at the competition venue and according to the availability and convenience of athletes and coaches.

The data collection instrument used was a structured, printed questionnaire, applied by authors 1, 2 and 4. The researchers asked and filled out the athletes' answers throughout the application, noting relevant information that was verbalized by the athletes, minimizing subsequent doubts in the analysis. The questions were based on five main axes: a) Sports trajectory; b) Educational trajectory; c) Conciliation between sports and studies; d) Family configuration; (e) financial requirements of dual career. The axes of the questionnaire were established based on the Holistic Model of Sports Career Development, proposed by Wylleman, Reinst, De Knop (2013), and on previously experienced structured questionnaires (COSTA, 2012).

The research has as common denominator the analysis of the sports and educational profile of athletes, with description and investigation of aspects such as age of sports federative bond, training routine, trips motivated by sports, level of schooling of the athlete and parents or guardians, time dedicated to studies, school repetition, expectations related to educational formation and financial aspects for maintaining the sports career. The athletes were instructed to respond as to report the contextual conditions that characterize their life routine: training, competitions, studies and leisure, in order to stimulate the sharing of experiences that can help explain the issues related to dual career.

After collection, all responses were transcribed and organized into spreadsheets in the Excel software and later exported to the Statistical Package for the Social Sciences software (SPSS). This tool enabled descriptive analysis of data through the general and specific frequency -- by groups -- of responses. The analysis of the content of the answers to the questionnaire contemplated the

<sup>2</sup> Sample (53.33% men and 46.66% women) and population (51.52% men and 48.48% women).

different perspectives of the participants in order not to force convergence in a single interpretation of reality (YIN, 2016).

The answers were, one by one, compiled to allow their encoding into smaller fragments. Then, the conceptual categories related to the financial, psychosocial (family), athletic and academic/vocational domains were recomposed to identify the existence of key interpretative patterns for the description and analysis of meanings that help the reflection on the questions arising from the preliminary analyses and the theoretical framework used (YIN, 2016).

All data collected in the present study were treated academically, following the protocol of the Research ethics committee of the College of Health Sciences of the University of Brasilia (FS-UnB), with Certificate of Presentation for Ethical Presentation (CPEP), number 06509018.4.0000.0030.

## **3 RESULTS**

## 3.1 GENERAL CHARACTERIZATION OF THE SAMPLE

The study brings together an intentional sample that can be considered as typical of the diving elite in Brazil, since it brought together 15 of the 33 main athletes of the sport who sought accreditation for international competitions, such as the *Grand Prix* organized by the International Swimming Federation (FINA).

The sociodemographic characterization data are shown in Table 1, showing, in relation to academic formation, that the group did not present school holdbacks<sup>3</sup> and that all had expected completion of higher education (nine of which were expected to attend post-graduation). Considering the national average, those responsible had a high level of schooling. Most athletes —13 out of 15 — reported residing with their parents or relatives; one athlete lives alone in a rented apartment and one athlete lives in the club's accommodations. While nine athletes reported that they did not perform extracurricular activities, the other six had some additional activity, in addition to training and school.

<sup>3</sup> Age indicated according to the Brazilian Lei de Diretrizes e Bases da Educação Nacional as a limit for compliance with compulsory basic schooling.

Education	Athlete (gender)	Age (age)	Extra Activity	Extra Place of Activity Residence		Father's Schooling
	(genaer)	("30)	, louing		level	level
10th year (Sophomore Year)	M2	16	No	Parents or relatives	GHS	GHE
10th year (Sophomore Year)	M8	15	No	Parents or relatives	GHE	GHE
11th year (Junior Year)	M3	15	Language course	Parents or relatives	GHE	GHE
11th year (Junior Year)	F1	16	No	Parents or relatives	GHS	GHS
12th year (Senior Year)	M1	16	University prep school	Parents or relatives	Technician	Master's Degree
12th year (Senior Year)	M4	16	Electronic technician	Parents or relatives	GHS	GHE
GHS*	F2	17	No	Parents or relatives	GHS	GHS
GHS*	F7	20	No	Parents or relatives	GHS	Doesn't know
1st Sem/HE	M6	24	No	Club Accommodation	GHE	Postdoctoral
1st Sem/HE	M7	19	Language course	Parents or relatives	GHE	GHE
2nd Sem/HE	M5	18	No	Parents or relatives	GHS	IES
4th Sem/HE	F3	22	No	Parents or relatives	GHE	GHS
4th Sem/HE	F6	21	No	Parents or relatives	Specialization	GHS
4th Sem/HE*	F5	28	Language Course Computer Course	Rented apartment	GHF	
GHE*	F4	27	Language course	Parents or relatives	Specialization	GHS

Table 1 - Sample characteristic.

Source: research data Key: M: male. F: Female. HS: High school. GHS Graduated High School Sem: Semester. HE: Higher education. GHE Graduated Higher Education IES Incomplete elementary school \*Person was not studying at the time of the research.

#### **3.2 EDUCATIONAL DATA**

In the female group (n = 7), three athletes were studying, one in high school and two in higher education. Four athletes interrupted their studies due to sporting need (F4, F5, F6 and F7). In the male group (n = 8), all were studying at the time of the research, four were enrolled in high school and four in higher education (Table 1). It is noteworthy that two said they had abandoned their studies at some point before to dedicate themselves to the sport (M6 and M7).

Regarding the time devoted to studies, the analysis was carried out by separating athletes who were in high school from those who were attending higher education, as these are demands that we understand are different for educational formation, both in the organizational scope and in terms of dedication itself. The athlete who was attending the 2nd year of high school (F1) dedicated 25 hours a week to school activities, followed by the two athletes with actively enrolled in higher education (F3 and F6), who maintained a weekly dedication of 11 and 12 hours, respectively. The only athlete inserted in the labor market (F4) had a weekly job dedication of 23 hours. In the male group, athletes who were attending high school (M1, M2, M3, M4, M8) devoted an average of  $26.00 \pm 5.02$  hours per week to studies, while those enrolled in higher education (M5, M6, M7) devoted an average of  $15.00 \pm 2.00$  hours per week.

Regarding expectations about educational background, of the seven female athletes, two wanted and believed in the possibility of completing higher education, while the others expressed a feeling of capacity to complete the postgraduate level. Of the eight men, half wanted and believed in the possibility of completing higher education, a fact reinforced by the athlete M1, who was taking a preparatory course to reach this goal (university prep course). The other four male athletes wanted to complete a post-graduate degree.

The 11 athletes who studied stated that they could get excuses for school absences; except for one, enrolled in higher education, who had no possibility of reassessment; and a high school student athlete, who claimed to have the possibility of replacement classes. Regarding absenteeism in educational banks, women were absent from classes for  $8.0 \pm 5.31$  days, while men for  $21.0 \pm 51.67$  days in a period of one year. It should be noted that two male athletes were absent from academic institutions for 120 days, one of which failed basic education due to the decision to spend this period in a large center specializing in the sport, enabling greater development.

## **3.3 FAMILY ASPECTS**

In an attempt to understand the value of studies during the sporting career of the elite of Brazilian diving, information was collected on the schooling of those responsible for the sample. Among those responsible for the female group, three mothers and six fathers had completed high school and three mothers completed higher education, one with a specialist title. In the male group, greater education of guardians was perceived, with one mother with technical education, three with complete high school and three with complete higher education. All parents had completed higher education, one with a master's degree and the other a doctorate (Table 1).

## 3.4 SPORTS DATA

The data regarding the type of dedication show that there is a tendency to concile sport and studies/work, given that seven out of 15 athletes try to balance their careers, while two prioritize studies, one athlete prioritizes work, and two athletes prioritize sport. Exclusive dedication takes place for three athletes, all of whom have completed high school (Table 2).

Education	Athlete	FINA Category	Type of dedication	Athlete Scholarship	Assistance	Training hours/week
10th year (Sophomore Year)	M2	A	Prioritizes study	Federal International	DNR	26
10th year (Sophomore Year)	M8	В	Tries to balance	State Student	DNR	26
11th year (Junior Year)	M3	А	Tries to balance	Does not receive	Family	20
11th year (Junior Year)	F1	А	Prioritizes study	State Student	DNR	26
12th year (Senior Year)	M1	A	Tries to balance	Federal National	EI	21
12th year (Senior Year)	M4	А	Prioritizes sport	Does not receive	Family	24
GHS*	F2	А	Exclusive to sport	Does not receive	Club	26
GHS*	F7	Adult	Exclusive to sport	Does not receive	Club/Prolim	34
1st Sem/HE	M6	Adult	Prioritizes sport	Olympic Federal	EI/Club/ Prolim	26
1st Sem/HE	M7	Adult	Exclusive to sport	Federal International	EI/COB/ Prolim	21
2nd Sem/HE	M5	Adult	Tries to balance	Does not receive	EI	24
4th Sem/HE	F3	Adult	Tries to balance	Federal National	El/Club	18
4th Sem/ HE*	F6	Adult	Tries to balance	Federal National	EI	36
4th Sem/ HE*	F5	Adult	Tries to balance	Olympic Federal	IOB-COB/ Prolim	41
GHE*	F4	Adult	Prioritizes work	Federal National	DNR	10

Table	2 - /	Aspects	of the	sports	career	in re	lation	to c	lual	career.	
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Source: research data Key: F: Female. M: male. A: from 16 to 18 years of age. B: from 14 to 15 years of age. Adult: 19 years of age and aboeve. DNR: Does not receive. IOB-COB: Olympic Solidarity Program – Brazilian Olympic Committee EI Educational Institution Prolim: Brazilian Navy Olympic Program. GHS\* Graduated High School/Not currently studying Leave of absence in Higher Education; GHE\*: Graduated Higher Education

When asked about the occurrence of any school repetition, three of the 15 athletes (F6, M2 and M7) reported having repeated a grade, which may indicate, for some adolescents, the possibility that their involvement in sport compromises academic performance. However, when grouped by types of dedication to dual careers, three different responses were found: one of the athletes said he prioritized the sport, the other said he tried to balance dedication to sport and studies, and the third began to dedicate himself exclusively to sport. Each athlete, therefore, deals with this situation in a particular way, which must be the target of a careful analysis, but, mainly, must be respected and supported by those around him. Only

one athlete, however, clearly reported that his failure was related to sport, in view of the opportunity to carry out an improvement internship abroad, when he was still attending elementary school.

Another fact that reinforces the point of view that involvement with highperformance sport can negatively interfere with the school/academic trajectory is the high rate of interruptions in studies for dedication to sport. This is the context of six of the 15 athletes - four women (F4, F5, F6 and F7) and two men (M7 and M6) - who stated that they had already interrupted their studies due to the sport before the data was collected. This highlights the difficulty of conciliating the two activities, a problem that grows given the absence of consistent public policies that apply to the dual career project from the holistic perspective of sports training for high performance (ROCHA *et al.*, 2020).

It is worth mentioning the fact that schools adapt in a limited way to the individual projects of student athletes, only rescheduling tests, or excusing absences. On the other hand, when the school does not favor the conciliation of routines, the athlete tends to change schools or assume the possibility of failure, precisely because there is no system that supports their sporting and educational demands (SOARES; CORREIA; MELO, 2016). This situation can be exemplified with the cases of the four female athletes who declared not to study, since two of them, upon graduating high school, suspended their academic trajectory, and the other two, already in higher education, also decided to suspend their educational formation — by means of a leave of absence — to dedicate themselves to high-performance sports.

The workload devoted to training is, on average,  $24.4 \pm 4.8$  hours per week, regardless of education level — high school or higher. This indicates that the dedication time required for adolescents ( $23.8 \pm 2.7$  hours) is approximately the same as that required for adults ( $25.0 \pm 6.9$  hours), and they are also subject to school transitions and changes in support networks, which must be managed with specialized monitoring (SORKKILA *et al.*, 2018; STAMBULOVA *et al.*, 2009).

Adult athletes reported becoming affiliated with a sports association—or "federated" in colloquial language—at around age ten. This age group remains the same for the new generation of athletes, who also join training and competitions representing a club around the age of ten. The federative bond is characterized as a requirement for participation in national-level competitions, that is, higher levels of performance, allocating these children and young people in a situation of expectation for results from early school years, a typical aspect of the early specialization process (LAPRADE *et al.*, 2016; STAMBULOVA *et al.*, 2009).

#### 3.5 ECONOMIC DATA

Another important analyzed point, which concerns the sustainability of the sports career, is the financial support received by athletes. In the studied sample's case, different types of financial support were detected, including state, educational, club and family spheres, and also situations where one athlete receives different types of assistance.

The main source of financial support comes from the State, mainly in the format of *Bolsa Atleta* at different levels, which was present in ten cases of the sample, followed, in a smaller amount, by the Navy's Olympic Program, which includes four athletes. Seven cases were also reported in which there was support from educational institutions in the form of scholarships, which ranged from 30% to 100% discount on tuition fees. In addition, four athletes received support from the clubs they were affiliated with, and two athletes received help from their families.

## **4 DISCUSSION**

The study aims to analyze how Brazilian athletes who make up the diving elite conciliate, during training and participation in competitions, dedication to sports issues and to school studies. To clarify whether high-performance sport creates barriers to school education or not, it is necessary to consider that the core of the dual career issue is, in the first place, linked to the choices that young athletes make during the sport-study conciliation and, secondly, to the factors that interfere in their decision making. Therefore, it is important to view dual career as a dynamic and multifactorial process, demarcated by periods of dedication which, in turn, are delimited by transitions in the athletic, academic/vocational, psychological, psychosocial, and financial domains, according to the holistic perspective of sports career development (WYLLEMAN; ALFERMAN; LAVALLE, 2004).

The potential for monetary investment of a sport is one of the determining factors for the student athlete to consider their dedication during their dual career (FOLLE; NASCIMENTO; GRAÇA, 2015; PALLARÉS *et al.*, 2011). In the present work, diving was classified as a non-professional sport, as athletes, in general, do not receive remuneration through a contractual agreement. In fact, the main characteristic of professional sport is the athlete's remuneration guaranteed in a formal employment contract (BRASIL, 1998). In this sense, the main source of funding for the sporting condition of the interviewed athletes comes from public policies, followed by scholarships from private educational institutions and, finally, financial assistance from clubs and families.

As for public policy, the *Bolsa Atleta Program* stands out for the number of beneficiaries, which serves ten young people in the sample, followed by the Brazilian Navy's Olympic Program (PROLIM), which supports four athletes. Both programs offer temporary financial incentives in order to promote the development and achievement of sports goals, but they do not guarantee job stability listed above, leaving aside factors related to psychological, psychosocial and educational development (WYLLEMAN; ROSIER, 2016). The *Bolsa Atleta* is a project to finance high-performance athletes that deserves a deeper evaluation, with the objective of expanding the reach of these scholarship holders, qualifying the selection criteria, the duration of the financing and its form of payment, avoiding delays and ensuring that the investment will benefit their sporting status. Martins (2019), in a research with a sample benefited by the *Bolsa Atleta*, a state program from Distrito Federal in the period of 2014/2015, found that only athletes who received scholarships at higher levels — international and Olympic

— managed to remain in the program in a three-year prospect, while beneficiaries with lower values — student and district — discontinued participation in the program.

In turn, PROLIM offers its recipients the rank of 3rd sergeant in the Brazilian Navy, which includes the perception of direct and indirect benefits for a period of up to eight years. Despite the fact that this term is equivalent to two Olympic cycles, the selected athletes can only continue their military career through common approval in a public tender<sup>4</sup>. Therefore, even though the temporality of the support ensures sufficient stability to maintain high performance, there is no guarantee regarding the transition process out of sport, so that athletes almost always seek to build alternative careers parallel to sporting commitments (BARKER *et al.*, 2014).

Another decisive pillar for the development of a sports career is the family's participation, both in financial support and in promoting a routine favorable to sports development and in building expectations around the schooling process of their children. In Brazil, the majority of the population above 25 years of age has completed primary education, while 17% of women and 13% of men complete higher education<sup>5</sup>. In the analyzed sample, 53% of mothers and 47% of fathers had completed higher education. Despite the challenges in conciliating commitments, all athletes participating in the present study stated that they wanted and would finish university studies, which can be explained, in part, by the greater education of the diving athletes' parents. In male and female futsal, the scenario presents itself in a similar way, with a high expectation of completion of higher education, combined with the high level of parents education (COSTA, 2012; KLEIN; BASSANI, 2016). For 57% of rowing athletes, completion of higher education is an aspiration and a possibility, while in men's football, higher education was an aspiration of 56% of athletes, but an educational possibility for only 22% (CORREIA; SOARES, 2016) – which can be explained, in part, both by the sport's economic market and "[...] by [...] the [athlete's] social origin and cultural heritage" (CORREIA; SOARES, 2016, p. 106).

Two variables draw attention to the educational aspect: a) the family context, projecting greater trust in the completion higher education; and b) the perspective of financial return provided by the modality. This relationship needs further deepening so that we can state more precisely both about family schooling and the sports market — whether private or state-owned — and about educational expectations and possibilities observed by athletes.

Vilanova and Puig (2016) detected, in a group of 23 Spanish Olympic athletes, the positive influence of the family's high level of education regarding preparation for sports discontinuation and insertion in a second career; while the lack of family attention contributed to the athletes' indifference to the importance of educational formation. This data, despite the differences between sociocultural contexts, highlight the influence that the family, along with the possibilities offered by the sport as a

<sup>4</sup> military CAREER is... Available at: <u>https://www.terra.com.br/esportes/lance/carreira-militar-e-trunfo-para-atletas-olimpicos-mas-ha-prazo-de-validity.696611347340951114e7656fd14bdeb88h7yhe0x.html</u>. Accessed on: Oct 6th. 2020.

<sup>5</sup> continuous PNAD 2016... Available at: <u>https://agenciadenoticias.ibge.gov.br/agencia-sala-de-imprensa/2013-agencia -of-news/releases/18992-pnad-continua-2016-51-of-the-population-with 25-years-or-more-from-brazil-had-at-the-most-full-fundamental-education.</u>

financial return and the school as training time/space for the labor market, constitute the basis for athletes' decision-making regarding their dedication to the sport and studies throughout their dual career (KNIGHT; HARWOOD; SELLARS, 2018).

The parents' level of education, the family's ability to invest in the sport and the organization of the sport as a market interfere in the type of dedication found in Brazil's diving elite. According to the results, the training routine associated with studies/work is structured, for most of the investigated athletes: either through the balance between careers (as is the case with seven athletes); or because of priority to studies (condition of two young people in the sample), or because of greater dedication to work (a situation experienced by one of the athletes). However, the exclusive dedication to sport — declared by three athletes — and the prioritization of athletic commitments in relation to studies — reported by two athletes — do not indicate, respectively, the abandonment or devaluation of educational formation in dual careers, but the prioritization of sports career in the period analyzed.

Therefore, more important than defining the types of dedication to the sports career and to studies or work is to understand that, based on the dynamic and multifactorial nature of dual careers, the choices made by the athlete may change during the process, due to the individual and personal characteristics present in the educational, sports and psychosocial domains of the athlete's life (WYLLEMAN; ALFERMAN; LAVALLEE, 2004).

This variation in importance between educational background or working life and sports development is named by Mateu *et al.* (2020) as fluid transition trajectories. In them, the situations experienced by athletes at different times influence decisions regarding the dedication required for both careers. Thus, because the possibilities of sporting ascent to achieve high socioeconomic *status* are small, it is imperative for athletes, families, clubs, and educational institutions to understand the importance of dual careers, as well as the development of strategies that enable the best use of both formations (EUROPEAN COMISSION, 2012).

One of the biggest challenges present in dual career concerns the time management between sporting and educational commitments. Athletes in the sample who attended high school claimed to fulfill the total workload required by law, and only one athlete, who was attending higher education, indicated arriving late or leaving classes earlier because of training. In both basic and higher education, students must be present in a mandatory 75% of the 200 school days provided for in the legislation, generally being allocated in a single shift in basic education.

In this sense, student athletes need flexibilization strategies that enable them to take advantage of educational demands, guaranteeing qualification to achieve higher levels of training and, therefore, better jobs after their sports career (BARRIOPEDRO; LÓPEZ DE SUBIJANA; MUNIESA, 2018). The school flexibility strategies found in the results of this study were mostly the absence excuse and the rescheduling of assessments. In view of this, other strategies, such as the replacement of classes, the availability of a tutor responsible for monitoring the management of the student athlete's dual career and the elaboration of awareness actions for academic and

school communities, would not only enable better educational performance but also develop the autonomy of athletes to face the adversities present in the dynamics of dual career (SANCHÉZ PATO; ISIDORI; CALDERÓN, 2017).

Besides that, in Brazil, the absence of legal support regarding the qualification of educational commitments, as well as assistance for better use of academic formation, illustrates a scenario in which the athlete seeks, on his own initiative, to negotiate with teachers the necessary conditions to conciliate studies and training (CARVALHO; HAAS, 2015; ROCHA *et al.*, 2020).

Likewise, the working athlete claims to make their work schedule more flexible to meet the demands required by training — even though they declared that work is a priority in the conciliation with high-performance sport. This information corroborates the understanding of Pallarés *et al.* (2011) on the importance of the employer understanding the athletic condition of its employee when the sport requires their absence from time to time.

We observed that the age of federation and eventual early entry into the sport starting in competitions is  $8.00 \pm 1.98$  years of age for women and  $10.00 \pm 2.26$  years of age for men. It is noteworthy that both female and male athletes declared self-perception as high performance athletes from 12 years of age onwards. Thus, specialization in the diving modality is still allocated to basic education, more precisely from the first cycle of elementary school. This period of education has mandatory completion of approximately 7,200 hours (BRASIL, 1996), prematurely requiring the conciliation between studies and sporting commitments.

In this sense, the sports demands to prepare for high performance and maintenance or peak in sports performance are present in different educational phases: in primary and higher education. The realization of new studies that contemplate a larger number of athletes from different sports and that include in-depth interviews will bring more information about the dual career, allowing for a deeper understanding of how the conciliation between sport and study/work occurs.

## **5 CONCLUSIONS**

The present study allowed tracing the educational and sporting profile of the Brazilian diving elite. The results suggest that the athletes are able to satisfactorily conciliate the educational and sporting trajectories (complying with mandatory basic education), despite dedicating approximately 40 hours a week, routines added. The results also reinforce the understanding that there are no standards on how to deal with dual careers. For those within the age group in which schooling is mandatory in Brazil, the conciliation between school and sports careers is an imposition. For those over 18 years of age, total dedication to sport can mean entering higher education in the final phase of a sporting career, or only after withdrawing from the sport.

We emphasize the existence of cases of interruption of studies in higher education, a space that needs to be adapted to receive and consolidate the academic formation of students who make up the sports elite, as is the case in countries such as Portugal, Spain, and Colombia. Therefore, the development of studies on dual careers is important to support the construction of legal provisions and institutional policies, both for clubs and educational institutions, to offer young athletes adequate conditions to invest in their human, sports, and professional formation.

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**Resumo:** O objetivo do presente estudo foi apresentar e analisar o perfil educacional e esportivo dos atletas de saltos ornamentais que participaram do Troféu Brasil de 2018, mediante utilização de um questionário estruturado com base na perspectiva de formação holística para a dupla carreira. Com amostra definida em 15 participantes, a análise exploratória foi conduzida por meio de estatística descritiva no SPSS mediante frequência geral e específica. Os resultados sugerem a compatibilidade entre as formações esportiva e educacional em uma perspectiva denominada trajetórias de transição fluidas, observando-se casos de descontinuação na formação superior. Ressalta-se a carência de uma legislação nacional sobre dupla carreira e de políticas institucionais que promovam o acesso, a permanência e a finalização da formação acadêmica dos atletas de alto rendimento, bem como aponta-se a necessidade de novos estudos com diferentes modalidades a fim de que se aprofunde o debate sobre a dupla carreira esportiva.

**Palavras chave:** Esporte de alto rendimento. Formação educacional. Carreira esportiva. Conciliação.

**Resumen:** El objetivo de este estudio fue presentar y analizar el perfil, educacional y deportivo, de los atletas de saltos ornamentales que participaron en el Trofeo Brasil de 2018, utilizando un cuestionario estructurado basado en la perspectiva de la formación holística para el doble grado universitario. Con una muestra definida en 15 participantes, el análisis exploratorio fue conducido a través de estadística descriptiva en el software Statistical Package for the Social Sciences (SPSS) mediante frecuencia general y específica. Los resultados sugieren la compatibilidad entre las formaciones deportiva y educativa en una perspectiva denominada trayectorias de transición fluidas y se observaron casos de discontinuidad en la educación superior. Se destaca la falta de una legislación nacional sobre el doble grado y de políticas institucionales que promuevan el acceso, permanencia y finalización de la formación académica de los atletas de alto rendimiento, así como la necesidad de que se realicen nuevos estudios con diferentes modalidades para que se profundice el debate sobre el doble grado deportivo.

**Palabras clave:** Deporte de alto rendimiento. Formación educacional. Carrera Deportiva. Conciliación.



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### **CONFLICT OF INTERESTS**

The authors have declared that this work involves no conflict of interest.

#### **AUTHORS' CONTRIBUTIONS**

**Felipe Rodrigues da Costa**: Responsible for the organization and execution of the project, conducting the research from its formulation, development of the methodological strategy for data collection and analysis and preparation of the final manuscript.

**luri Scremin de Miranda**: Participated in the project execution and development, the methodological strategy of data collection and analysis with the preparation and writing of the manuscript.

**Luciana Hagström:** Participated with the organization and analysis of the data, with the preparation and writing of the manuscript.

**Carolina Rodrigues Lourenço dos Santos**: Participated in the data collection and analysis phases, in addition to writing the manuscript.

**Alexandre Luiz Gonçalves de Rezende:** Participated in the project execution and development of the methodological strategy for data collection and analysis, of the preparation and writing of the manuscript.

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