

MARTIAL ARTS AND COMBAT SPORTS IN PHYSICAL EDUCATION AND SPORT SCIENCES DEGREES

A COMPARATIVE STUDY OF BRAZIL, FRANCE,
PORTUGAL, AND SPAIN

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Abstract

This paper examines the Martial Arts and Combat Sports (MA&CS) pedagogy in the Physical Education and Sports Science (PESS) degrees offered in Brazil, France, Spain, and Portugal. Document analysis was used to observe the study plans of the universities. In the European countries, we tried to analyze every university with a PESS degree while in Brazil we examined at least one public university per state. The existence of MA&CS, the name of the subjects, the combat sport emphasized and the type (required or elective) were the main variables observed. An overview of each country appears in the accompanying tables. These tables show the percentage of universities that have MA&CS in their curriculum, as well as the disciplines and if courses are required or elective. French universities presented MA&CS in all the analyzed degrees, but Judo, “General Approach” (a term we define below), and Boxing/French Boxing were the styles most frequently offered. Most Spanish universities offered MA&CS in PESS degree and in these programs Judo has supremacy over other practices. Less than half of the Portuguese universities offered MA&CS, and the ones who did usually offered either Judo or a “General Approach.” In Brazil there was a high incidence of MA&CS in the PESS degrees, and the “General Approach,” known as “Luta,” was typical. The Brazilian MA&CS of Capoeira is also popular in Brazilian universities. It is possible to state with confidence that MA&CS are frequently included in PESS degrees in these four countries. It is also possible to confidently conclude that Judo is the most influential sport in these countries’ PESS programs. However, further studies are required to determine if what the course catalogues describe accurately describes what is being taught by the professors.

INTRODUCTION

After studying pedagogical procedures for the teaching of Martial Arts and Combat Sports (MA&CS) in different environments such as schools, clubs, and gyms (Gomes, 2008; Gomes et al., 2010), we observed through conversation and observation that a degree in Physical Education and Sport Sciences (PESS) did not provide graduates with the tools they needed to enable them to effectively teach MA&CS. There are assorted earlier studies that confirm this lack of practical knowledge in MA&CS pedagogy (Figueiredo, 1998; Brousse et al., 1999; Espartero et al., 2001; Villamón et al., 2001; Gutiérrez et al., 2003; Espartero & Gutiérrez, 2004; Vasconcelos, 2006; Camacho, 2007; Ramon, 2007; Nascimento & Almeida, 2007; Robles, 2008; Santos et al., 2010; Silva & Souza, 2010; Vieira et al., 2011; Passos-Santos et al., 2011; Estevan et al., 2011; Ruiz et al., 2011).

Outside university settings, training with masters and habilitated instructors is the usual method of receiving instruction in MA&CS, and also in learning how to be an MA&CS instructor. This learning style is often independent of academic formation (Villamón et al., 2005).

Earlier studies such as Theebom & Knop (1999) analyzed the presence of MA&CS in Physical Education programs and classes according to the knowledge and competences of the responsible teachers, but the authors of those earlier studies did not observe their academic formation itself.

These observations caused the authors of the current paper to examine how the MA&CS are taught in the university. Are they really part of the curricula? Which are the disciplines? What are the combat sports they consider? Are classes required or elective, generic or specific? Such questions led us to prepare an overview of MA&CS in Higher Education degrees.

Due to the exchange of experience that occurs during international contests and congresses, the authors had the opportunity to compare the programs of four different countries: Brazil, France, Spain and Portugal. The purpose of this article is to analyze comparatively the MA&CS teaching in the PESS degrees in these four countries.

METHOD

We used document analysis as our methodological tool. We sought to identify information in published documents in order to discover new aspects of a subject, thereby contributing to its comprehension (Lüdke & André, 1986).

The information was collected from universities' websites and further information was requested by email contact when data not available online.

On the university websites, we looked first for the PESS pages, then to the offered subjects along with the whole degree study plans and finally to the schedules. If any of this information was not found, we emailed the professors listed for the individual MA&CS courses, the course coordinator or someone in charge of these types of issues. We attached a simplified table with the desired

data and asked the respondent to fill it in, completing everything or just the information not available on the website.

The data used in this article refer to the institutions that responded. Universities with missing information or that did not give us feedback on the unavailable data were excluded from the study.

STUDY OBJECT

We analyzed the PESS degree subjects dedicated to MA&CS. To recognize these particular subjects, we observed the discussion made by Svinth (2011) and assumed the definition of Green & Svinth (2010:331) which describes MA&CS as “systematic bodies of knowledge, belief and practice that are associated with methods of attack and defense against human adversaries and their extrahuman allies.” In this way Figueiredo (2009) describes MA&CS as those activities where the body of the other is the object and the purpose of playing through the application of intentional fighting actions.¹ In this sense, we looked for specific MA&CS subjects (i.e., “Judo,” “Fencing,” “Boxing,” or “Wrestling”), and also general curricular subjects that describe this group of practices (i.e., “Martial Arts,” “Combat Sports,” “Fighting Activities,” or “Dual Opposition Activities.”)² Both perspectives (specific and general approach subjects) were observed in academic situations and organization included practical applications, training methodology and/or pedagogical fundamentals.

SAMPLE AND DATA COLLECTING PROCEDURES

We analyzed the presence of MA&CS subjects in Higher Education institutes with PESS degree offered in four countries: Brazil, France, Portugal and Spain.

For France, Portugal, and Spain, we tried to analyze the existence of MA&CS listed in the study plans of every university that offered a PESS degree during the school year of 2011/2012. The degree program corresponded to the first cycle of the Bologna Process (i.e., a Bachelor level degree). For Brazil, we used a different approach. The country is very large and there are hundreds (about 1,200) of PESS degrees offered. Therefore, we compromised, and decided to analyze at least one public university in each of the 27 Brazilian states.

The PESS degree organization in each country is presented below.

- **Brazil:** PESS degrees in Brazil are divided into “*Bacharelado*” (professionals that can work in all fields except in formal education) and “*Licenciatura*” (professionals that will work as school teachers, mainly in regular PE classes) or “*General*” (the degree is not specific). Many

¹ In this way we included subjects such as “Taijiquan” but excluded others such as “Yoga.” Our criterion was fighting intentionality.

² We decided to combine all the subjects found with these general characteristics in a hypothetical category which we designate as “General Approach.” We present the name of the subjects considered inside this group and its number in each country.

universities offer degrees. Students usually start with a common branch (what North Americans would call general studies) and after two or three years they choose a specialized branch to follow (what North Americans would call a major). There is also the possibility of attending one or more branches at the same time, or after finishing the first choice, coming back and attending the rest of the classes to obtain an additional degree or major. Because our sample was very broad in Brazil, we opted for observing only the “General” or “Licenciatura” branches as these correspond to European professional degrees.

- **France:** The PESS degree in France is called “Licence” in Sciences and Techniques of Physical Activities and Sport (“*Sciences et Techniques des Activités Physiques et Sportives*” – generally known by the acronym STAPS). The general curricular organization is common throughout the country, and the degree can be obtained in three years. Individual institutions may present different programs. A standard program consists of taking core curriculum during the first year and specialized curriculum during the second and third years. Specializations include Physical Education (“*Education et Motricité*”), Sports Training (“*Entraînement Sportif*”), Sport Management (“*Management du Sport*”), and Adapted Physical Activity and Health (“*Activité Physique Adaptée et Santé*”).
- **Portugal:** Portuguese universities have autonomy to organize their own curricular studies. In this way, we can find different designations for the PESS degree. Examples include “Sport Science,” “Physical Education and Sport Science,” “Sport and Leisure,” “Sport and Physical Activity,” “Human Kinetics,” and just “Sport.” Each institution also presents its own organization of branches, which normally relate to Sports Training, School Sports, Exercise and Health, and Sport Management. Anyway, according to Bologna Process, the PESS degree in Portugal, called “*Licenciatura*,” is a three-year degree.
- **Spain:** The PESS degree in Spain is called a Degree in Physical Activity and Sport Sciences (“*Grado en Ciencias de la Actividad Física y de Deporte*”). The main curricular offering is common between the different institutions and is a four-year degree. There are also some institutions with related offerings such as “Sports Training,” “School Sport,” “Nature Activities,” and “Sport Management.”

TABLE 1: RELATIONSHIP BETWEEN THE TOTAL AND OBSERVED INSTITUTIONS OF HIGHER EDUCATION OFFERING PESS DEGREES IN THE FOUR ANALYZED COUNTRIES

	Brazil ¹	France	Portugal	Spain
Total institutions	(27 States)	46	31	33 ²
Observed institutions	24	37	31	33
Total %	-	80.43	100	100

The analysis fairly represents the Portuguese and Spanish programs offered nowadays and represents about 80 percent of what is offered in France. In Brazil, there are five states where public universities do not offer PESS degrees, but the other 22 states do offer PESS degree programs. Two additional Brazilian universities were included in our count to reflect that some public universities have multiple campuses offering PESS degrees. These were in São Paulo and Rio de Janeiro.

We opted to consider only the taught combat sports and not the whole name of the subject which may appear in the study plans. For example, in a subject called “Individual Sports II – Judo,” we only considered “Judo” as the observed subject. In this way, we did not observe the curricular contents of the analyzed subjects, only their name or designation.

MEASURES AND COVARIATE

The considered variables in this study are presented in the following items.

Institutions with MA&CS Courses

- Number and relation of institutions with MA&CS offerings
- Average number of MA&CS subjects in each institution with course offerings

Country Results Analysis

- Name and presence of the subjects or combat sports
- Type of observed subjects (required or elective)

Total Results Analysis

- Name and presence of the subjects or combat sports
- Type of observed subjects (required or elective)

To analyze the obtained results, we used descriptive and comparative statistics using the observation of frequency, percentage of subjects, average and standard deviation.

¹ Only 22 of the 27 Brazilian states offer PESS degree in their main public universities.

² Actually, in Spain there are references to 35 institutions. We did not consider two of them. One is associated with the University of Wales, which is a British institution, and the other will only start its PESS studies programs during the 2012/2013 academic year.

RESULTS

We used descriptive and comparative statistics to analyze the obtained results.

1. Institutions with MA&CS Offerings

Observing the presence of MA&CS in the four analyzed countries we have obtained the information presented in Table 2.

TABLE 2: RELATIONSHIP BETWEEN TOTAL INSTITUTIONS AND INSTITUTIONS OFFERING MA&CS SUBJECTS

	Brazil	France	Portugal	Spain	Total
Institutions with offerings in MA&CS (%)	22 of 24 (91.67%)	37 of 37 (100%)	14 of 31 (45.16%)	27 of 33 (81.82%)	100 of 128 (78.13%)
Existing MA&CS subjects ($\mu \pm \sigma$ subjects per institution offering MA&CS)	49 (2.23±1.51) Max=6, Min=1	203 (5.49±4.05) Max=17, Min=1	28 (2.00±1.52) Max=5, Min=1	61 (2.22±2.16) Max=10, Min= 1	341 (3.41±3.21) Max=17, Min=1

All four observed countries have universities that include MA&CS in their PESS curriculum. Overall, about 80 percent of the observed institutions have such course offerings.

In France, every analyzed institution has this kind of academic offering. In Brazil, only two of the analyzed institutions do not offer MA&CS courses, while in Spain, about 80 percent of the public universities offer MA&CS courses. The lowest results are obtained by the Portuguese institutions, where less than half of the universities offer degrees with specialization in MA&CS (14 of 31, 45%).

There is significant similarity between the programs in Brazil, Portugal and Spain. Each of these countries has an average of about two related subjects per institution that offers MA&CS. Spain has more standard deviation – 2.16 while Portugal and Brazil have about 1.5. In France we find about 5.5 subjects per institution with course offerings (a standard deviation of 4.05). In France, universities present the highest numbers of MA&CS courses (17) found in our study.

2. Country Results Analysis

In this part, each country is analyzed in four areas: subject, number of offerings, and whether those offerings are required or elective.

Brazil

TABLE 3: – MA&CS SUBJECTS IN OBSERVED BRAZILIAN UNIVERSITIES OFFERING PESS DEGREES

Subject	n (%)	Type	
		Required (%)	Elective (%)
“General Approach” ¹	21 (42.86)	15 (71.43)	6 (28.57)
Capoeira	10 (20.41)	2 (20)	8 (80)
Judo	8 (16.33)	4 (50)	4 (50)
Karate	6 (12.24)	0 (0)	6 (100)
Fencing	2 (4.08)	0 (0)	2 (100)
Kung Fu	1 (2.04)	0 (0)	1 (100)
Jiu-Jitsu	1 (2.04)	0 (0)	1 (100)
Total	49 (100)	21 (42.86)	28 (57.14)

Just under half of the Brazilian courses (about 40 percent) present a “General Approach.”² This “General Approach” requires students to take many (about 71 percent) required courses. “Capoeira,” a Brazilian MA&CS which mixes fight actions with dance skills, is the second most presented subject, with about 20 percent of the offerings. This is noteworthy, even considering that 80 percent of the “Capoeira” classes are elective. “Judo” is the third most common offering in Brazil (about 15 percent). In Brazil, “Judo” presents more required subjects (four) than “Capoeira” (two).

Karate exists in six Brazilian institutions but in no cases is it a required subject. With lower appearance, and also only as elective we observed the existence of “Fencing,” “Kung Fu,” and “Jiu-Jitsu.” Brazilian curricular organization shows balanced results between required and elective subjects, but there are more required subjects in Brazil (about 55 percent) than elective (about 45 percent).

¹ “General Approach” subject (n=21) includes “Fighting Activities” (n=16), “Fighting Activities and Martial Arts” (n=3), “Martial Arts” (n=1,) and “Combat, Fighting Activities and Combat” (n=1).

² In Brazil there is discussion around the general term that should be used to describe this group of martial practices or sports. The most popular terms are “Luta” and “Lutas.” Translating into English we opted for the term “Fighting Activities” each time we found this general concept.

France

TABLE 4: MA&CS SUBJECTS IN OBSERVED FRENCH UNIVERSITIES OFFERING PESS DEGREES

Subject	n (%)	Type	
		Required (%)	Elective (%)
Judo	82 (40.39)	20 (24.39)	62 (75.61)
“General Approach” ¹	36 (17.73)	12 (33.33)	24 (66.67)
Boxing	21 (10.34)	4 (19.05)	17 (80.95)
French Boxing	18 (8.87)	9 (50)	9 (50)
Wrestling	10 (4.93)	4 (40)	6 (60)
French Boxing and English Boxing	7 (3.45)	0 (0)	7 (100)
Grappling Combat Sports	6 (2.96)	2 (33.33)	4 (66.67)
Judo, Wrestling and Boxing	6 (2.96)	0 (0)	6 (100)
Striking Combat Sports	4 (1.97)	0 (0)	4 (100)
Judo, French Boxing and Fencing	2 (0.99)	2 (100)	0 (0)
Judo and Boxing	2 (0.99)	1 (50)	1 (50)
Karate	2 (0.99)	0 (0)	2 (100)
French Boxing and Capoeira	1 (0.49)	1 (100)	0 (0)
“Handi-Judo” ²	1 (0.49)	1 (100)	0 (0)
Kendo	1 (0.49)	1 (100)	0 (0)
Wrestling and Judo	1 (0.49)	1 (100)	0 (0)
Capoeira	1 (0.49)	0 (0)	1 (100)
French Boxing and Wrestling	1 (0.49)	0 (0)	1 (100)
Judo and Pied-Poing ³	1 (0.49)	0 (0)	1 (100)
Total	203 (100)	58 (28.57)	145 (71.43)

Just under half of the French universities offering MA&CS courses (about 40 percent) offer “Judo.” About 25 percent of these courses are required, which means that in France, we can find as many as twenty required courses dedicated to “Judo.” The “General Approach” is the second most common program. About 40 percent of the courses in French “General Approach” programs are required subjects.

¹ “General Approach” subject (n=40) includes “Combat” (n=22), “Combat Sports” (n=12), “Duel Opposition Activities” (n=3), “Opposition Sports Duel Practices” (n=2), “Combat Activities” (n=1), “Duel Activities” (n=1), “Duel Sports” (n=1), and “Duel Combat Practices” (n=1).

² “Handi-Judo” is a specialized subject referring to “Judo” for handicapped people.

³ Pied-Poing is a MA&CS that includes striking techniques from “French Boxing,” “Kickboxing,” and “Muay Thai.”

We observed significant results in “Boxing” (about 10 percent) and “French Boxing” (about 8 percent). “French Boxing” presents a balance between required and elective courses, with 50 percent of the subjects in each category.

We also find several subjects dedicated to more than one specific modality. There were ten different cases involving 31 integrated subjects (15.27 percent of the total). This means a combination of modalities is the fifth most common method of presentation in France.

In non-standard offerings, we observed the presence of the Brazilian MA&CS “Capoeira” in one specific elective course, and in another course, “Capoeira” was combined with “French Boxing.” There was also one course dedicated to “Kendo” (a required course) and two offerings of “Karate” (both elective). “Fencing” appeared twice, but both times as a subject integrated with “Judo” and “French Boxing.” We also observed an elective course combining “Pied-Poing” with “Judo,” and a required course dedicated to ways of teaching “Judo” to people with physical disabilities.

French curricular organization shows more elective subjects (about 70 percent) than required subjects (about 30 percent).

Portugal

TABLE 5: MA&CS SUBJECTS IN OBSERVED PORTUGUESE UNIVERSITIES OFFERING PESS DEGREES

Subject	n (%)	Type	
		Required (%)	Elective (%)
Judo	14 (50)	6 (42.86)	8 (57.14)
“General Approach” ¹	8 (28.57)	7 (87.5)	1 (12.5)
Judo, Wrestling, and Lusitanian Fencing	3 (10.71)	3 (100)	0 (0)
Wrestling	2 (7.14)	1 (50)	1 (50)
Capoeira	1 (3.57)	1 (100)	0 (0)
Total	28 (100)	18 (64.29)	10 (35.71)

In Portuguese universities, “Judo” is taught in half of the total (14 of 28), but only six of these courses are required courses. In second place is the “General Approach,” with eight offerings. Interestingly, the “General Approach,” with seven required subjects, requires students to take more required courses than does the “Judo” specialization.

Some Portuguese universities provide training in a traditional Portuguese method of stick fencing that we call “Lusitanian Fencing.”² This instruction is

¹ “General Approach” subject (n=8) includes “Combat Sports” (n=5), “Fighting Sports” (n=1); “Martial Arts and Combat Sports” (n=1) and “Martial Arts and Reflexive-Postural Kinetics” (n=1).

² “Lusitanian Fencing” is our translation of the activity known in Portugal as “Jogo do Pau.” In English, the name means something like “Stick Game.”

integrated with required courses in “Judo” and “Wrestling.” “Wrestling” also exists as a specific subject in two other programs, once as a required course and once as an elective. The Brazilian MA&CS “Capoeira” also appears in one program as an elective.

Portuguese curriculum has more required courses (about 65 percent) than elective (about 35 percent).

Spain

TABLE 6: MA&CS SUBJECTS IN OBSERVED SPANISH UNIVERSITIES OFFERING PESS DEGREES

Subject	n (%)	Type	
		Required (%)	Elective (%)
Judo	35 (57.38)	13 (37.14)	22 (62.86)
“General Approach” ¹	13 (21.31)	8 (61.54)	5 (36.46)
Fencing	9 (14.75)	2 (22.22)	7 (77.78)
Judo and Jiu-Jitsu	1 (1.64)	1 (100)	0 (0)
Canary Islands Wrestling and Judo	1 (1.64)	0 (0)	1 (100)
Taijiquan	1 (1.64)	0 (0)	1 (100)
Wrestling	1 (1.64)	0 (0)	1 (100)
Total	61 (100)	25 (40.98)	36 (59.02)

More than half (about 60 percent) of the Spanish universities offering MA&CS offer “Judo,” but less than half of the classes are required (about 35 percent). The second most common curriculum in Spain is the “General Approach” (about 65 percent required subjects). There is also a concentration in “Fencing” (12 subjects, but only two are required).

There was one appearance of “Judo and Jiu-Jitsu” integrated in the same course, along with “Wrestling” (presumably International Freestyle) and “Taijiquan” as elective subjects.

As autochthonous sports, Spanish programs consider “Canary Islands Wrestling” but integrate this modality with “Judo.”

Spanish curricular organization shows more elective (about 60 percent) than required subjects (about 40 percent).

¹“General Approach” subject (n=13) includes “Combat Sports” (n=4), “Fighting Sports” (n=4), “Fighting Activities” (n=4), and “Opponent and Fighting Sports” (n=1).

Total Results Analysis

Here, all four countries are evaluated together.

TABLE 7: MA&CS SUBJECTS IN FOUR OBSERVED COUNTRIES OFFERING PESS DEGREES

Subject	n (%)	Type	
		Required (%)	Elective (%)
Judo	139 (40.76)	43 (30.94)	96 (69.06)
“General Approach”	78 (22.87)	42 (53.85)	36 (46.15)
Boxing	21 (6.16)	4 (19.04)	17 (80.95)
French Boxing	18 (5.28)	9 (50)	9 (50)
Wrestling	13 (3.81)	5 (38.46)	8 (61.54)
Capoeira	12 (3.52)	3 (25)	9 (75)
Fencing	11 (3.23)	2 (18.18)	9 (81.82)
Karate	8 (2.35)	0 (0)	8 (100)
French Boxing and English Boxing	7 (2.05)	0 (0)	7 (100)
Judo, Wrestling, and Boxing	6 (1.76)	0 (0)	6 (100)
Grappling Combat Sports	6 (1.76)	2 (33.33)	4 (66.67)
Striking Combat Sports	4 (1.17)	0 (0)	4 (100)
Judo, Wrestling, and Lusitanian Fencing	3 (0.88)	3 (100)	0 (0)
Judo, French Boxing, and Fencing	2 (0.59)	2 (100)	0 (0)
Judo and Boxing	2 (0.59)	1 (50)	1 (50)
French Boxing and Capoeira	1 (0.29)	1 (100)	0 (0)
Handi-Judo	1 (0.29)	1 (100)	0 (0)
Judo and Jiu-Jitsu	1 (0.29)	1 (100)	0 (0)
Kendo	1 (0.29)	1 (100)	0 (0)
Wrestling and Judo	1 (0.29)	1 (100)	0 (0)
Canary Islands Wrestling and Judo	1 (0.29)	0 (0)	1 (100)
French Boxing and Wrestling	1 (0.29)	0 (0)	1 (100)
Jiu-Jitsu	1 (0.29)	0 (0)	1 (100)
Judo and Pied-Poing	1 (0.29)	0 (0)	1 (100)
Kung Fu	1 (0.29)	0 (0)	1 (100)
Taijiquan	1 (0.29)	0 (0)	1 (100)
Total	341 (100)	121 (35.48)	220 (64.52)

Collectively, “Judo” is the most taught combat sport, representing about 40 percent of all available courses (139 subjects). Second is “General Approach.” “General Approach” subjects (n=78) include “Fighting Activities” (n=23), “Combat Sports” (n=21), “Combat” (n=22), “Fighting Sports” (n=5), “Duel Opposition Activities” (n=3), “Fighting Activities and Martial Arts” (n=3), “Opposition Sports Duel Practices” (n=2), “Martial Arts” (n=1), “Combat, Fighting Activities and Combat” (n=1), “Combat Activities” (n=1), “Duel Activities” (n=1), “Duel Sports” (n=1), “Duel Combat Practices” (n=1), “Martial Arts and Combat Sports” (n=1), “Martial Arts and Reflexive-Postural Kinetics” (n=1), and “Opponent and Fighting Sports” (n=1). “General Approach” group presents more required subjects (45) than does “Judo” itself (43).

These two subjects – “Judo” and “General Approach” – represent about 65 percent of the total course offerings. “Judo” is also integrated with 21 other subjects (about 6 percent). Sometimes the combination is straightforward, as when “Judo” is combined with “Wrestling” (presumably International Freestyle) or “Jiu-Jitsu.” Other times it is conceptually quite different, as when it is combined with “Pied-Poing,” “English Boxing,” (presumably International style), “Canary Islands Wrestling,” and “Lusitanian Fencing.” We also see “Judo” inside the “Grappling Combat Sports” and in the special practice for handicapped people. In any event, in these four countries, we can observe the direct influence of “Judo” in most academic offerings related to MA&CS (40 percent directly to “Judo” plus another 25 percent via the “General Approach”).

The group “Boxing” and “French Boxing” appears in third place, with a total of about 10 percent of the offerings. France is the only one of these four countries where there are offerings in “Boxing.” “Wrestling,” “Capoeira,” and “Fencing” individually represent about 3 percent of the offerings, but “Wrestling” is the one with the most required subjects; five for “Wrestling” against three for “Capoeira” and two for “Fencing.” “Karate” and “French Boxing and English Boxing” are around 2 percent of the offerings in France but both have required courses. “Judo, Wrestling, and Boxing,” “Grappling Combat Sports,” and “Striking Combat Sports” are the last major grouping, but only “Grappling Combat Sports” appears as a required subject in two cases. “Judo, Wrestling, and Lusitanian Fencing” comprises just 1 percent of the total classes, but 100 percent (n=3) of its classes are required courses.

About 10 percent of the time, we observed classes combining two or more separate modalities. The most common (about 20 percent) was the one that presented “French Boxing and English Boxing” together. Looking at the recognized Olympic sports, we recognize “Judo’s” position as first in these four countries, with “Boxing” (i.e., International style) in third place, “Wrestling” in fifth (presumably the International Freestyle or Greco-Roman styles), and “Fencing” in seventh.

Observing the curricular organization of these four countries, we see more elective subjects (about 65 percent) than required subjects (35 percent). The only country where this pattern is reversed is Portugal, where there are 65 percent required subjects against 35 percent elective subjects.

DISCUSSION AND CONCLUSION

This study provides an overview of the Physical Education and Sport Science (PESS) degrees offered by Brazilian, French, Portuguese, and Spanish public universities that offer degree-granting courses in Martial Arts and Combat Sports (MA&CS). The results demonstrate the existence of MA&CS formation in about 80 percent of the university PESS degrees.

There are of course differences between the countries. France is the only country examined where MA&CS are part of every analyzed university. Since France has imprinted in its history a culture of practice in MA&CS, and also has a strong national commitment to success in the International Olympics, this finding is not surprising.

There are national differences concerning which combat sport is taught most frequently. In Spain, "Judo" is supreme. Some Spanish studies (such as Villamón & Brousse, 2002; Morales et al., 2005, and Morales & Gibert, 2007) represent "Judo" as the safest and educational MA&CS to be taught to children and this result may reflect this belief. In any case, we observe in Gutiérrez-García & Pérez-Gutiérrez (2009) that "Judo" is the MA&CS topic most commonly described in Spanish-language journals. "Judo" was also the first MA&CS to appear in the study plans of Spanish PESS degree-granting institutions, and the first MA&CS to be investigated in Spain according to scientific research methods.

Brazilian universities usually teach MA&CS in a broader context, often as an element of the Corporal Culture of Movement (V. A., 1992). In the Brazilian context, Physical Education provides the experience of sports, game, gymnastics, dance, and "Luta." Brazilians understand "Luta" as a complex knowledge of combat activities.

In Portugal, universities do not have MA&CS as a common and widespread practice in their PESS degrees. Therefore, it is harder to make any meaningful generalizations about the Portuguese programs.

We have some speculations about the reasons why some MA&CS subjects are included in some programs and not others. Inclusions may reflect cultural aspects of each country. For instance, we see "Capoeira" in Brazil (but only one subject of "Jiu-Jitsu," which is a very popular practice in Brazil, even known as "Brazilian Jiu-Jitsu" - BJJ) and "French Boxing" in France. We also observe that Olympic sports tend to have significant space in the curricula (except for "Taekwondo," which did not appear at all). Thus, it is not surprising to find courses in "Judo," "Boxing," "Wrestling," and "Fencing." Non-Olympic MA&CS of Asian origin also appear. Examples include "Karate," "Kendo," and "Kung fu." The latter probably reflects the way that people in Europe and the Americas tend to view and understand MA&CS.

To conclude, this study analyzed the MA&CS teaching in the PESS degrees in four countries, and the results facilitated the development of a general framework describing how MA&CS are currently treated in the universities of those four countries. Further studies are required to confirm if course

catalogues accurately describe what is actually being taught in the universities, and what approaches professors use to teach these courses.

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