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The gendered social representation of Physical Education and Sport Science Higher Education in Spain

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Abstract

Background: In recent decades, Spain has seen a decline in girls' interest in pursuing the Physical Activity and Sport Science (PASS) degree. For example, in Catalonia (Spain) the number of women enrolled has decreased from 39.3% in the 2000-2001 academic year to 17.3% in the 2014-2015 academic year (Serra et al. 2019), which is in line with technological and scientific degrees. This fact is striking because more women than men are enrolling in university studies in Spain overall.

Purpose: Drawing on Bourdieu's theoretical tools and the concept of social representation, the purpose of this study is to analyse how young people perceive the PASS degree, in order to understand why fewer women than men choose this degree.

Method: A total of 4,146 students (50.2% girls; mean age=16.82 years; SD=0.837) from 39 school centres were purposefully selected in three regions of Spain. Students were enrolled in the final course of Compulsory Secondary Education (4th ESO, 16 years old) and the first of 2 years of the pre-university course (1st year of Bachillerato, 16–17 years old). An *ad hoc* instrument was designed to measure the Social Representation (SR) of the degree *habitus* and students' interest in studying for the PASS degree. Statistical analyses were carried out using SPSS Statistics (v.23). Data were tested for normality. The statistical tests used were: Chi-square (X²) and Mann Whitney U analysis.

Findings: The results show that the SR of the degree *habitus* has a masculine characterisation, which favours the number of men who study this degree. This SR could explain why the number of women in this field has been very low (around 18%) in Spain in recent years. Likewise, this SR would be a form of symbolic violence on girls who may wish to pursue these studies, but do not feel entitled to do so because it is considered a masculine field. The students are not able to identify this social construction, which eventually naturalizes the difference and makes the prevalence of men in these studies more socially acceptable.

Conclusion: The SR of the degree *habitus* could be exercising a symbolic violence that would contribute to discrepancy in the number of men and

women who choose a PASS degree. To change the SR of the degree, it is necessary to substantially modify how it is constructed. Some of the options would involve a profound change in curriculum, built around a conception of body culture that is based on feminist political, philosophical, and ontological assumptions. This new construction would invoke a configuration of body culture not centred on the modern sport phenomenon and post-modern physical activity. The information that students receive to construct this masculine and instrumentalised SR of the degree should also be intentionally modified.

Keywords: physical education; gender; habitus; higher education; career choice.

Introduction

In recent decades, Spain has seen a decline in girls' interest in pursuing the Physical Activity and Sport Science (PASS) degree (Serra, Soler, Vilanova et al. 2019). For example, in Catalonia (Spain) the number of women enrolled has decreased from 39.3% in the 2000-2001 academic year to 17.3% in the 2014-2015 academic year (Serra, Soler, Vilanova et al. 2019), which is in line with technological and scientific degrees. This fact is striking because more women than men are enrolling in university studies in Spain overall (Ministry of Education, Culture and Sport 2019).

PASS studies in Spain are the main institutional path to access Physical Education (PE), Physical Activity (PA) and Sport professional fields. Within these fields, various studies have noted the shortage of women as teachers (Webb and Macdonald 2007), coaches (Hinojosa-Alcalde et al. 2017), and sport managers or directors (Burton 2015), yet we know little about the under-representation of women in university studies themselves (Serra et al. 2020).

To analyse this gendered career choice in the PASS field, we propose combining Bourdieu's theoretical tools with the concept of social representation (SR) by Abric (1993). Pierre Bourdieu's disciplinary field notion (2003) allows us to identify specific capital associated with PASS degree. The SR theory is used to analyse how adolescents perceive these particular forms of capital. This psychosocial theoretical combination allows an analysis of both the role played by the structural reality of the PASS field and the active role played by students (Piñero 2008). Both elements influence the formation of 'practical knowledge' that determines a student's choice to pursue the degree or not (Bourdieu and Wacquant 2005). By drawing on these theoretical lenses, the purpose of this study is to analyse how young people perceive the PASS degree in the years prior to choosing university studies, in order to understand why fewer women than men choose this degree.

Theoretical Framework

The Gendered Field of Physical Activity and Sport Science

Bourdieu's concepts of field, capital, *habitus* and symbolic capital are particularly useful because they allow us to comprehend the gendered cultural economy of PE, sport and PASS (Brown 2005). According to Hay and MacDonald (2010), a field is 'a social arena of relationships and practices through which certain values and beliefs (about ability, for example) are situated, consolidated and imposed on people' (4). As Kerner, Haerens, and Kirk (2017, 1) suggest 'in physical education, the body is judged for physical ability but is also situated in a space that provides the potential for social comparisons and body judgements'. Therefore, the disciplinary field of the PASS degree is broadly presented as a space of relations in which a series of specific capitals are shared, generating a *habitus* for perceiving and interacting with the world (Bourdieu 2003, 2008). It is a complex

disciplinary field because it brings together the fields of sport, PE, health and university (Macdonald, Kirk, and Braiuka 1999).

Bourdieu (1991, 1999, 2000) establishes three types of capital: economic, social and cultural. Cultural capital is subdivided into embodied and physical capital. However, Shilling (2012) argues that the body is so important that it should be considered its own specific type of capital rather than a subdivision of cultural capital. In this study, we consider the notion of 'physical capital' as a form of capital in its own right, which refers not only to the embodied capacity to use the body but also to the appearance of the body, the body as evidence of particular work on the body (Wright and Burrows 2006). The concept of the *habitus* is an intermediate step between the structure and the agent, which establishes mediations to go beyond explanatory reductionism that only considers one of these aspects (Martínez García and Saturnino 2017). The habitus includes dispositions, often unconscious, that people internalize in the course of their socialization. It is a lasting way of being or doing that is manifested in our bodies, which leads us to perceive things, think and act in a certain way. This capital appears to be innate, as it is incorporated beyond consciousness (Bourdieu 1991). Therefore, physical capital includes movement as well as the physical appearance or aesthetic of the biological body. And both aspects are intensely gendered, as bodies are not only biological, bodies are also social constructed (Kirk 2003). The social dimension of the body is crucial to understand how the body is used in the construction of femininity and masculinity (Kirk 2003). Thus, masculine capital includes, for example, a 'muscular' appearance or being 'very good at sports', while feminine capital refers to symbolic body language (e.g. body expression) or a sense of rhythm. And all these gendered constructions and practices can be reproduced in PE through the hidden curriculum (Kirk 2003; Vázquez and Álvarez 1990).

Traditions in the PASS field determine that the discourse of sport is hegemonic (Brown 2005; Dowling 2013; Svendsen and Svendsen 2016; Wright 2002). And sport,

from the beginnings, has remained a key site for the celebration of hegemonic masculinity and for the subordination of femininities and other masculinities (Kirk 2003, 80). In Spain, the name of the degree itself, advertising for the degree and the curriculum of the degrees all explicitly identify it with the sport field (Serra et al. 2018). It could be also identified in the forms of capitals that are 'privileged, marginalised, traded and acquired (Hay and Macdonald 2009, 5)

within related fields such as PE. Furthermore, despite legislative changes in the educational field in favour of including the gender perspective in Primary and Secondary schools from the LOGSE in 1990 (Gobierno de España 1990), several critical analyses of PE in schools have observed that the male-centred PE curriculum is widespread in Spain (Subirats and Tomé 2007; Serra et al. 2018). There are even certain 'admission fees' (Bourdieu and Wacquant 2005) that define students' eligibility for the PASS degree. These entrance examinations have a high physical-conditioning component and competitive logic, with different scale for boys and girls. Still, even though the study of Serra, Soler, Vilanova et al. 2019 notes there is gender balance in the percentage of males and females who pass these entrance examinations, the exams initiate a normative process that reproduces the cultural practices characterized by hegemonic masculinity (Brown 2005; Wright 2002).

Various studies have shown a predominance of hegemonic masculinity in the capitals of the PASS field (Brown 2005; Dowling 2013; Macdonald et al. 1999; Svendsen and Svendsen 2016; Wright 2002). This masculinity is manifested in the centrality of sport -and performance- oriented body practices in which male-defined standards of excellence prevail; in the importance of the biological and behavioural sciences; and in the technocratic approach to teaching (Brown 2005; Flintoff 1993; Wright 2002).

This ideology of hegemonic masculinity in the PASS degree has been defined based on physical capitals such as having a strong, muscular and fit body, and being physically active and skilled in sports; along with instrumental dispositions for sporting success such as being competitive, aggressive, independent and having confidence and initiative (Brown 2005; Wright 2002). This dominant form of masculinity embodies the ideal PASS student, who in turn is constructed in relation to other subordinate forms of masculinities and all the femininities (Connell and Messerschmidt 2005).

According to this principle of otherness, emphasized femininity is defined with characteristics of physical weakness, passivity, dependence, kindness, cooperation, understanding and concern for physical appearance. Initially formulated as hegemonic femininity, it was renamed 'emphasized femininity' to recognize the asymmetrical position of masculine and feminine traits in the patriarchal gender order (Connell and Messerschmidt 2005). Similarly, the forms of physical capital considered feminine (such as being expressive or having a sense of rhythm) pertain to physical-sports practices that are considered appropriate for women (Klomsten, Marsh, and Skaalvik 2005). These feminine dispositions justify girls' passivity, disinterest and lack of involvement in contexts of physical-sports practice that value and reinforce masculine dispositions, like PE in schools (Larsson, Fagrell, and Redelius 2009; Marttinen et al. 2020). Nevertheless, some studies indicates that the girls' lack of involvement in PE can also be a mechanism to not accepting the predominance of hegemonic masculinity in PE (Chepyator-Thomson and Ennis, 1997; Soler, 2009).

Several studies have noted that these are forms of symbolic violence (Hay and Iisahunter 2006; Hunter 2004). Bourdieu defines symbolic violence as that form of 'violence against a social agent with their complicity' (Bourdieu and Wacquant 2005, 240). It is a violence that does not operate through coercion or explicit violence, but

through a legitimizing power in which the dominated accept their own condition of domination as legitimate. It is a form of 'hidden persuasion' by which the people who occupy the dominated positions reproduce the categories of perception and valuation that are the very condition for their domination, becoming accomplices in their own domination (Bourdieu and Wacquant 2005). This symbolic power functions through the *misrecognition* of its fundamentally arbitrary character, which is exercised by what is considered the 'order of things', that is, 'common sense'. Its functioning, with the support of the *habitus*, leads people to perceive things, think and behave in a certain way in the social space (Bourdieu and Wacquant 2005).

Social Representation of the PASS Degree

The *habitus* plays an essential role in the configuration of the SR and in the position of the agents that participate in each social space (Bourdieu 1999). SRs are constructed through information collected via different interpersonal and media communication channels (Moscovici 1979). SRs can be mediators of symbolic violence (Bourdieu 2000) when they contribute to the legitimization of domination, 'to give all the force of reason to the reason (the interest, the capital) of the strongest' (Gutiérrez 2004, 292).

The content of the SR is manifested in three dimensions: attitude, information and field of representation (Piñero 2008). The attitude would imply potential students' positive or negative evaluation of the degree; the information would refer to way students explain the degree; and the field of representation would be the way in which the various elements that structure it are organized: figurative core and peripheral elements. It is relevant to indicate that the attitude is primary in SR since, in general, it exists even when there is reduced information and a weakly organized field of representation. The figurative core is the content that gives it specificity and permanence, while the peripheral elements integrate individual experiences and stories. Therefore, the peripheral elements

provide the representations with a flexible and heterogeneous character within each social group and among different social groups (Abric 1993).

Students build the SR for university degrees, which consist of the ideas, images, evaluations, practices and collective perceptions that they have about the different careers, in this case the *habitus* of the PASS Degree (Moscovici 1979). So far, we do not know of any work that has specifically studied the SR of the PASS degree habitus. On the contrary, there are numerous studies that point to the media diffusion of an SR that normalizes a masculine habitus in fields linked to the degree, such as sport (Connell and Messerschmidt 2005; Messner 2012), PE (McCullick et al. 2003; Walton-Fisette, Walton-Fisette, and Chase 2017) and the professional field (Hills and Kennedy 2013; LaVoi and Calhoun 2016). The successful athlete, the PE teacher and the coach are all represented as men and with dispositions characteristic of hegemonic masculinity (Connell and Messerschmidt 2005). Meanwhile, women become invisible (Cooky, Messner, and Hextrum 2013) and, when they do appear, they are attributed stereotypes that reinforce their femininity through sexualised representation (Walton-Fisette, Walton-Fisette, and Chase 2017), the allocation of maternal roles or through the questioning of their sexuality (McCullick et al. 2003; Walton-Fisette, Walton-Fisette, and Chase 2017). This delegitimizes the presence and performance of women in these fields, which therefore remain male dominated.

Specifically, this work aims to analyse the social representation that adolescent girls and boys have on the PASS degree *habitus*.

Method

Sample

Within a broad mixed-method research study, we analysed a representative sample of students from 39 randomly selected secondary schools in three regions of Spain: Catalonia, Galicia, and Madrid (95% confidence interval; ±3). To do so, a multistage stratified probability sampling was performed (Heinemann 2008). The schools were representative of a wide range of socioeconomic conditions (different social classes and urban and rural settings) and school types (public and private schools with and without vocational PE courses) (Table 1).

The number of schools needed to design a representative sample was calculated based on the total number of students enrolled in the final course of Compulsory Secondary Education (4th ESO, 16 years old) and the first course of the two-year studies prior to beginning university (1st year of Bachillerato). The response rate for all targeted participants was approximately 95%. Therefore, 4146 students took part in this study. The mean age of the sample was 16.82 (SD=.84) years. Female participants represented 50.3% (*N*=2084). All results reported in this article are based on data collected in June 2014.

Table 1. Sample

Region	Sample gathered Total		Typo I (without PE vocational training)					Type II (with PE vocational training)				
			Public		Private			Public		Private		
			4° ESO	1° Bach	4° ESO	1° Bach	Subtotal	4° ESO	1° Bach	4° ESO	1° Bach	Subtotal
Catalonia	Students	1515	228	238	164	123	753	250	171	177	164	762
	Centres	13		4		3	7		4		2	6
Galicia	Students	1267	187	210	150	102	649	254	239	67	58	618
	Centres	13		4		4	8		4		1	5
Madrid	Students	1364	238	249	135	160	782	225	187	78	92	582
	Centres	13		4		3	7		4		2	6
Total	Students	4146	652	697	449	385	2184	729	597	322	314	1962
	Centres	39		12		10	22		12		5	17

Procedure

The recruitment procedure was helped in part by school directors who agreed to participate in the study and the teachers who gave their lesson time to administer the survey.

In order to ensure that ethical considerations were observed, consent for the study was granted by the Head director and the families or guardians of the participants. All the students were informed that their participation was completely voluntary and that all information was anonymous. The students answered the questionnaire in their classes, under the supervision of a research assistant who presented the study and the procedure to be followed and answered questions.

Instrument

An *ad hoc* instrument was developed to collect information on basic demographic characteristics (e.g., gender, age, academic year) and the following variables:

Intention to pursue a PASS degree. A single item (Do you intend to study PASS when you finish high school?), with a single response format with four possible and exclusive categories: Yes/Maybe/No/Idon't know yet. In the analysis, positive response

options (Yes and Maybe) and negative or undecided response options (No and I don't know yet) have been grouped together.

Social representation of the PASS degree habitus. A total of 17 items aimed at identifying the gender attributions in SR of the degree habitus. The participants indicated the degree to which each item represented a person who wants to study PASS, according to a 5-point response scale from the negative (none, little) to positive (very, much).

The 17 items are structured in the following 6 dimensions: (1) masculine physical capitals and (2) feminine physical capitals, devised from the proposed attributes of the *Personal Attributes Questionnaire*, PAQ (Spence, Helmreich and Stapp 1975) and the forms of socialization present in each cultural group according to the social desirability typified for each gender (Fernández et al. 2007); (3) instrumental attributes and (4) expressive attributes, which are socially desirable and characteristic of both genders, but more accentuated in men in the former case and in women in the latter; (5) cultural capital, which takes students' study skills into account, as proposed by (Sirkovská 2014); and finally (6) explicit gender attribution to people who study the PASS degree.

The questionnaire validation was carried out with a group of experts (n=6). Subsequently, a pilot test was performed with 155 students from one school. The assessment of the results of these two procedures allowed the research team to make the appropriate adaptations to the instrument.

Statistical Analysis

Statistical analyses were carried out using SPSS Statistics (v.23). Results are expressed as absolute numbers (N) and percentages (%) and mean values with their SD. Descriptive and inferential statistics have been calculated using the SPSS® statistics program (v.23). Data were tested for normality. The statistical tests used are: Chi-square (X²) and Mann Whitney U analysis. The significance level used in all contrasts was 0.05.

Results

Table 2 shows the descriptive statistics (Mean and SD) obtained by boys and girls in each of the items that make up the SR of the PASS degree *habitus*. All items score above the central value, which indicates that these are characteristics that constitute the figurative core of the SR of the degree. Therefore, in the presentation of results, the items are considered by their positive orientation within the response range established in each case (e.g., *little/very little, not much/very much, good/bad*).

Table 2. Social representation of the PASS degree *habitus* for the total sample, for boys and girls.

	TOTAL (N=4146)		BOYS (N=206	52)	GIRLS (N=2084)			
	Mean	SD	Mean	SD	Mean	SD	Z	p
Masculine Physical Capitals	4.20	0.56	4.15	0.58	4.25	0.55		<.0001
not very good/very good at sports	4.43	0.85	4.34	0.86	4.52	0.82	-8,583	<.0001
bad/good coordination	4.39	0.72	4.31	0.75	4.47	0.68	-6,798	<.0001
bad/good physical fit	4.45	0.75	4.39	0.79	4.51	0.70	-5,261	<.0001
not at all/very muscular	3.51	0.82	3.53	0.81	3.49	0.83	-0,860	.390
Instrumental attributes	4.06	0.52	4.04	0.54	4.07	0.50		NS
not at all/very competitive	3.81	0.93	3.92	0.91	3.71	0.93	-7.210	<.0001
not at all/very active	4.50	0.75	4.38	0.80	4.61	0.68	-10.144	<.0001
low/high self-confidence	4.29	0.79	4.24	0.81	4.34	0.77	-3.632	<.0001
Feminine Physical Capitals	3.99	0.65	3.92	0.66	4.05	0.64		<.0001
bad/good sense of rhythm	4.10	0.82	4.02	0.84	4.18	0.80	-6.040	<.0001
not at all/very expressive	3.87	0.88	3.82	0.89	3.93	0.87	-3.927	<.0001
Expressive Attributes	4.03	0.67	3.96	0.65	4.10	0.67		<.0001
not at all/very friendly	3.98	0.85	3.90	0.85	4.06	0.85	-6.425	<.0001
not at all/very understanding of others	4.07	0.89	4.00	0.89	4.14	0.89	-5.848	<.0001
low/high ability to engage with others	4.03	0.85	3.98	0.86	4.09	0.84	-3.921	<.0001
Cultural capitals	3.59	0.78	3.56	0.82	3.62	0.74		NS

	TOTAL (N=4146)		BOYS (N=2062)		GIRLS (N=2084)			
	Mean	SD	Mean	SD	Mean	SD	Z	p
not/very critical	3.63	0.85	3.62	0.86	3.64	0.84	816	0.414
bad/good student	3.60	0.89	3.56	0.94	3.65	0.84	-2.389	0,017
bad/good grades	3.57	0.86	3.56	0.90	3.58	0.81	137	0.891
Explicit gender attribution								
not at all/very feminine	2.99	0.67	2.90	0.67	3.07	0.66	-8.123	<.0001
not at all/very masculine	3.07	0.70	3.16	0.69	2.97	0.69	-8.465	<.0001

The results obtained show that the characteristic dispositions of masculinity are more intense than the feminine dispositions in the SR of the *habitus* of a person suitable for the PASS degree. In the dimensional analysis, it is observed that the masculine physical capitals (M=4.20, SD=0.56) and the instrumental attributes (M=4.06, SD=0.52) scored higher in the overall sample. On the other hand, the expressive attributes (M=4.03, SD=0.67) and feminine physical capitals (M=3.99, SD=0.65) typical of the feminine dispositions of the degree's SR, scored lower values.

The analysis reveals that the five attributes that boys and girls consider most relevant to pursuing the PASS degree were those linked to hegemonic masculinity: 'very active' (M=4.50, SD=0.75), 'physically fit' (M=4.45, SD=0.75), 'very good at sports' (M=4.43, SD=0.85), 'good coordination' (M=4.39, SD=0.72) and 'very confident' (M=4.29, SD=0.79).

The first characteristic attribute of femininity appears in sixth place for intensity in the assessment: a person 'with a good sense of rhythm' (M=4.10, SD=0.82). The rest of the attributes linked to femininity occupied seventh, eighth, ninth and tenth place for intensity in the SR of the degree *habitus*: 'understanding of others' (M=4.07, SD=0.89), 'ability to engage with others' (M=4.03, SD=0.85), 'friendly' (M=3.98, SD=0.85) and

'expressive' (M=3.87, SD=0.88). However, the characteristic attributes of hegemonic masculinity, being 'competitive' (M=3.81, SD=0.93) and 'muscular' (M=3.51, 0.82), although they obtain a high average score, are also among the least relevant in the SR for the degree (they occupied, respectively, the 11th and 15th place in the list of 17 attributes evaluated).

The students consider 'having a critical sense' (M=3.63, SD=0.85), 'being a good student' (M=3.60; SD=0.89) or 'obtaining good grades' (M=3.57; SD=0.86), attributes that configure the socalled cultural capitals (M=3.59; SD= 0.78), as those less relevant to the SR of the degree *habitus*.

Finally, it was precisely the two attributes of the questionnaire that made explicit mention of gender— 'not at all/very masculine' and 'not at all/very feminine'—that were the least intense in the SR of the degree *habitus* (M=3.07 and 2.99, respectively).

The analysis of gender differences in the score of each attribute through Mann Whitney's U-test reveals that significant differences between boys and girls can be established in 14 of the 17 items considered, indicating that the SR set of the degree *habitus* differs according to gender (Table 3). Girls score significantly higher than boys on 13 of these attributes, illustrating that girls' SR of the degree habitus is configured around significantly higher expectations than boys on 13 of these attributes, illustrating that girls' SR of the degree *habitus* is configured around significantly higher expectations than boys. In contrast, boys are more demanding in the instrumental attribute of being a 'competitive' person (boys=3.92, SD=0.91; girls=3.71, SD=0.93; p<0.001) and in the explicit attribute of being a 'masculine' person (boys=3.16; SD=0.69; girls=2.97; SD=0.69; p= p<0.001). The scores of both genders are similar (p>0.05) in the masculine attribute of 'being muscular', and the cultural dispositions of 'getting good grades' and 'being critical'.

Table 3 shows that the intention to study for a PASS degree in the near future differs significantly according to gender (X²=111,141, p=.000). 19% of the boys state that they intended to pursue these university studies, while the proportion of girls stand at 7.8%. This different intention of boys and girls of wanting to study a PASS degree in the near future or not is in line with the masculine SR of the degree *habitus* as it has been previously described.

Table 3. *Intention to study PASS according to gender (N and %)*.

	Do intend		Do not intend			
	N	%	N	%		
Boys	387	19	1653	81		
Girls	161	7.8	1908	92.2		
Total	548	13.3	3562	86.7		

Chi= 111.141a; P= .000

Discussion

The results of this work confirm that Secondary Education students have an SR of the PASS degree *habitus* in which dispositions linked to hegemonic masculinity are more relevant than those linked to femininity. Specifically, the students in this study ranked 'physically fit' second most important in the SR of the degree *habitus* and 'having a lot of self-confidence' was ranked fifth. The attributes 'very good at sports' and 'good coordination' ranked third and fourth respectively in the SR of the degree *habitus*.

This SR was consistent with the representations of the field of PE and sport that various investigations have described in the mass media. The mass media are not the only answer, as family, friends and PE teachers all have a direct influence in PASS career

choice (Kirk and Oliver 2014; Serra, Soler, Camacho-Miñano, et al. 2019). Nevertheless, it is relevant to observe, for example, as the representation of PE teachers in films or fiction series aimed at teenagers is also characterized by hypermasculinity, with confident characters, a powerful physique, authoritarianism, aggressive- ness and certain emotional limitations in attributes linked to femininity (Pérez López, García, and Cervantes 2014; Walton-Fisette, Walton-Fisette, and Chase 2017).

On the other hand, although competitiveness and a muscular body type are two characteristic attributes of hegemonic masculinity that previous research has attributed to the SRs of sport and PE (Gorely, Holroyd, and Kirk 2003; McCullick et al. 2003; Pérez López, García, and Cervantes 2014; Walton-Fisette, Walton-Fisette, and Chase 2017), the students participating in this study did not rank these attributes among the most important.

In parallel, the expressive attributes linked to emotional competence occupied less relevant positions in the SR of the degree *habitus*. This lesser consideration of feminine attributes would be consistent with the lesser presence of women athletes in the media (Cooky, Messner, and Hextrum 2013). In addition, the representation of women's sport and PE professions in the media is similar to the attributes of the questionnaire that the students ranked eighth and ninth in the intensity of the *habitus* suitable for the degree: 'understanding of others' and 'ability to engage with others'. Studies by Hills and Kennedy (2013) and LaVoi and Calhoun (2016) showed that female coaches are depicted in movies less often than male coaches, and their competence is questioned while their role as mothers and understanding attributes are reinforced. When female PE teachers are represented, they are linked to polarized stereotypes such as the link between sport and lesbianism associated with the hypermasculinization of females teachers (McCullick et al. 2003; Walton- Fisette, Walton-Fisette, and Chase 2017), the

feminization in roles requiring greater sensitivity and empathy than men (Pérez López, García, and Cervantes 2014), or the sexualization of the body for the male gaze (Walton-Fisette, Walton-Fisette, and Chase 2017). Likewise, women are less represented in PE textbooks, and more linked to non-sports physical-motor practices, like interiorization, rhythmic-expressive character, or aesthetics, and are outside of the elite (Táboas-Pais and Rey-Cao 2012). This connection of women with rhythmic-expressive practices (Klomsten, Marsh, and Skaalvik 2005) and simultaneously disregarding them as subjects of sporting success, would explain how the most valued feminine attribute was 'sense of rhythm', the sixth in intensity.

The provisions linked to the physical capitals and instrumental attributes were more relevant than the dispositions linked to the cultural capitals and expressive attributes in the SR of the degree *habitus*. The students think that 'having a critical sense', 'being a good student' or 'getting good grades' are among the least relevant attributes in the degree *habitus*, although a high grade in the pre-university is required to to study PASS in most of the estate universities in Spain¹ (Garay et al. 2017).

These cultural capitals were ranked lower on average, while the attributes linked to masculine physical capitals were ranked higher. This polarity is consistent with information students receive from the media. The representation of PE teachers in fiction series aimed at teenagers in Spain embodies the stereotype of a strong and beautiful body being incompatible with intelligence (Pérez López et al. 2014). Their intellectual ineptitude is a cliché in the movies (McCullick et al. 2003; Walton-Fisette and Chase

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¹ An exam called "Selectividad" is required to enrol in a university in Spain. Since the beginning of the 1990s, it has been necessary to obtain a passing mark in physical examinations and obtain the Selectividad mark required for each university in order to enrol in a PASS degree programme (Garay et al. 2017). There is a larger number of students who hope to undertake the studies than there are spaces offered, meaning that the cut-off mark to enrol in the most prestigious universities is very high. For example, in 2020, the cut-off mark to enrol in a PASS degree at the University of Barcelona was one of the highest in the university system (Departament d'Universitats de la Generalitat de Catalunya 2020).

2017). Their professional competencies are characterized by their physical dispositions, within a teaching logic centred on the performance of the biological body (McCullick et al. 2003; Pérez López, García, and Cervantes 2014).

This predominance of physical capital and instrumental attributes is also consistent with the PE tradition, in which physical-motor and sports contents are predominant over expressive ones, a tendency which has been noted both in the analysis of textbook (Táboas-Pais and Rey-Cao 2012) and in teaching practices (Hunter 2004; Larsson, Fagrel, and Redelius 2009).

The rating of expressive attributes was also less intense than that of physical capitals. These data are consistent with the SR of the profession in fiction films and series, in which emotional ineptitude is recounted through continuous episodes of intimidation and aggression (McCullick et al. 2003; Pérez López, García, and Cervantes 2014; Walton-Fisette, Walton-Fisette, and Chase 2017). This is somewhat similar to the representation of sports coaches, who are shown as subjects with few expressive attributes (Hills and Kennedy 2013; LaVoi and Calhoun 2016).

The average rating of almost all the attributes set out in the questionnaire was high (with the exception of the explicit gender attribution: 'not at all/very masculine' and 'not at all/very feminine'). Therefore, all the attributes of the questionnaire would be part of the figurative core of the SR. However, the peripheral elements of this SR, insofar as they provide the SR with a flexible and heterogeneous character in social groups (Abric 1993), allow us to identify gendered differences in the SR of the PASS degree *habitus*.

Girls attribute greater intensity than boys to thirteen of the seventeen attributes that a person suitable for the PASS degree should possess. They perceive stronger requirements for the degree *habitus*. Boys and girls' differing involvement in the fields of sport and PE, in which boys have a more successful participation than girls (Larsson,

Fagrell, and Redelius 2009), is responsible for the development of a 'gendered *habitus*' (Thorpe 2010). This would explain why more boys identify with the SR of the degree *habitus* than girls. They perceive the SR as more demanding because their own feminine dispositions are not precisely those that are valued as the ideal *habitus* in the disciplinary field of the degree.

This masculinized characterization of the SR of *habitus* would exercise a symbolic violence on girls who could potentially access these studies, but who do not feel qualified for them because of the naturalization of that *habitus* pertaining to men. The majority of capitals that form the core of the SR of the degree privilege men's access, because they correspond with the social construction of the masculine identity (physically fit, very good at sports, good coordination, a lot of self-confidence). Nevertheless, students give less intensity to the explicit attribute of masculinity, which is an indication of the *misrecognition* (Bourdieu and Wacquant 2005) characteristic of symbolic violence. This violence is exercised because the adolescent students carry out their evaluations of the degree with the cognitive schemes established from the hegemonic masculinity that sustains the patriarchy, but they are not capable of identifying the influence of this social construction in their attributions. This process results in them naturalizing the difference and making it socially acceptable that more men pursue the degree.

The SR of the degree *habitus* revealed by this study corresponds to the reproduction of a gendered policy that excludes women in the institutional field of the degree (Dowling 2013). Previous studies have indicated that the professional identity of teachers in the PASS field is characterized by a technical rationality closely linked to performance, a passionate love for sport and physical activity, and a mastery of patriarchal discourses and practices (Dowling 2013; Wright 2002). This androcentric approach is evident in curricula that lack a gender perspective, in both content and

language (Serra et al. 2018). These curricula have a clear sports orientation focused on excellent male performance (Svendsen and Svendsen 2016; Wright 2002). The learning environment in these degrees is characterized by dominant, competitive and aggressive behaviours in boys, the sexualization of female students, and sexist jokes and pranks, which are even shared by the faculty themselves (Dowling 2013; Flintoff 1993). Indifference and a lack of interest and training in gender issues lead teachers to explicitly disregard and mock any perspective other than the traditional gender construct. This discriminates against many girls and boys with non-hegemonic gender identities (Fitzpatrick and McGlashan 2016). These resistances can be considered a deliberate social strategy to maintain the status quo of androcentric physicality and perpetuate the role of sports as a social technology for 'doing gender'. This reinforces the vicious circle of 'programmed powerlessness': women's renunciation of the physical power of the body that is at stake in the fields of sport, PE (Dowling 2008) and PASS university studies.

Conclusions

If we consider that the perception of having skills and interest in a field is among the main reasons for choosing a certain university degree (Mau and Li 2018; Mosteiro and Porto 2000) and that different empirical studies have shown that gender can be a discriminatory factor used to differentiate between boys and girls who choose a 'typically' feminine or masculine field (Cross and Bagilhole 2002; López-Sáez, Puertas, and Sáinz 2011), the SR of the degree *habitus* could be exercising a symbolic violence that would contribute to the discrepancy in the number of men and women who choose a PASS degree. As Bourdieu and Wacquant (2005) point out, people 'know how to 'read' the future that fits them, which is made for them and for which they are made (by opposition to everything that the expression 'this is not for the likes of us' designates), through

practical anticipations that grasp, at the very surface of the present, what unquestionably imposes itself as that which 'has' to be done or said' (191). Therefore, the lack of girls choosing a PASS degree can be a way to not submitting to something that they are not comfortable with.

In light of this, it seems that the degree transformation should be approached from a principle of equity, such that women do not need to replicate male metrics and can feel more comfortable. To change the SR of the degree, it is necessary to substantially modify how it is defined. The PASS degree is and has been configured through sport and modern instrumentalized corporeity, present in higher education in the predominance of natural sciences, technical knowledge and competitive sports. This definition would go through different alternatives, some of which would perhaps be impossible to sustain because they would entail breaking the field's doxa by centrally incorporating the peripheral capitals. Some of the options would involve a profound change in curriculum, built around a conception of body culture that is based on feminist political, philosophical, and ontological assumptions. This new construction would invoke a configuration of body culture not centred on the modern sport phenomenon and post-modern physical activity, as biotechnologies for the construction of bodies under androcentric logics. The information that students receive to construct this masculine and instrumentalized SR of the degree should be intentionally modified. An active definition from the institution, so that the information they disseminate (institutional image, communications and advertisements) should be exquisite with respect to the transmission of gender stereotypes and outlines a degree that is more diverse in terms of the phenomenon of body culture. It would be a matter of breaking with the instrumentalized and competitive body-machine model that transmits the degree's sporty and performative image, and diversifying its image, moving toward an expressive and supportive experiential body.

In this regard, the continuity of the *habitus* in sport, PE and PASS (and in the SR of these studies) should also be questioned through transformative actions explicitly oriented to interrupt this *habitus* (Gorely, Holroyd, and Kirk 2003). To do so, it is urgent and necessary to incorporate the gender knowledge in the PASS degree. This should take the form of specific learning opportunities aimed at challenging the masculine *habitus* of these academic fields through sustained and critical learning opportunities. Recruiting students who embody non-normative gender expressions has also been suggested (Fitzpatrick and McGlashan 2016). Furthermore, this transformation would be in line with the educational policy in Spain, as the new Education Law in Spain known as LOMLOE (Gobierno de España 2020) specifically promotes the presence of more women in those studies traditionally male dominated.

This study's limitations are revealed in the need to go deeper into this issue using qualitative data and theoretical approaches that take into account the multiplicity of discourses, as well as an intersectional approach that shows the hidden forms of exclusion that emerge at the embodied intersection of gender and other identity positions (e.g. sexuality, ability). A closer analysis of the power relations exerted by different social agents (e.g. parents, coaches, PE teachers) will also provide important insights into the position of these agents in the social space and their influence upon young women's decision to choose a PASS career or not. The development and evaluation of specific interventions that put these strategies into practice is a promising area of research that deserves our efforts as feminist teachers and researchers in these university institutions.

Declaration of interest statement

No potential conflict of interest was reported by the authors.

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