

# Effect of the intervention 'Deportigualízate' on the attitudes towards equality of physical education professionals in training

## Efecto de la intervención "Deportigualízate" en las actitudes hacia la igualdad de profesionales de la educación física en formación

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### Abstract

Recent studies show the need to include the gender perspective in the training of pre-service professionals in physical education and physical activity, as well as the scarcity of existing interventions in this field, specifically, in the Spanish context. The purpose of this article is, on the one hand, to present the intervention 'Deportigualízate,' an intervention based on the principles of critical feminist pedagogy in the context of Physical Activity and Sport Science (PASS) undergraduate program. On the other hand, to study its effect on the attitudes towards gender equality of pre-service professionals in physical education and physical activity. To this end, a sample of 39 students from the PASS degree of the University of A Coruña participated in the study. A quasi-experimental design of two groups with pre-test and post-test was followed. Data was collected through the *School Doing Gender/Teachers* scale (Piedra, 2010). The results found show an improvement in the attitudes towards gender equality of the students participating in the intervention, concluding that 'Deportigualízate' has a positive effect on the professional profile towards gender-sensitive teaching of PASS students.

**Keywords:** Gender-sensitive teaching, Pre-service training, Physical education, Higher education, Critical feminist pedagogy.

### Resumen

Investigaciones recientes demuestran la necesidad de incluir la perspectiva de género en la formación de profesionales de la actividad física y la educación física, así como la existencia de un escaso número de intervenciones existentes en dicho campo, específicamente, en el contexto español. La finalidad de este artículo es, por un lado, presentar la intervención "Deportigualízate", una intervención basada en los principios de la pedagogía crítica feminista en el contexto del Grado de Ciencias de la Actividad Física y el Deporte (CAFYD). Por otro, estudiar su efecto en las actitudes hacia la igualdad de género de los y las futuras profesionales de la actividad física y la educación física. Para ello, se contó con una muestra de 39 estudiantes del grado de CAFYD de la Universidade da Coruña. Se siguió un diseño cuasiexperimental de dos grupos con pre-test y post-test, utilizando la escala *School Doing Gender/Teachers* (Piedra, 2010) para la recogida de datos. Los resultados encontrados muestran una mejora en las actitudes hacia la igualdad de género del alumnado participante en la intervención, pudiendo concluir que "Deportigualízate" tiene un efecto positivo en el perfil profesional hacia la coeducación de estudiantes de CAFYD.

**Palabras clave:** Coeducación, Formación inicial, Educación física, Enseñanza universitaria, Pedagogía crítica feminista.

## Introduction

Despite great advances in terms of equality, recent research shows that some issues related to gender and physical education (PE) are still present (Scraton, 2018; Stride et al., 2022). Thus, for example, Kirk (2000b) already pointed out (more than twenty years ago) that the low participation of girls in sport and PE was worrying and, as recent global statistics reflect, this reality continues to be maintained (for example, see Emmonds et al., 2021). However, the problem lies not only in the amount of practice, but in the type, the existing barriers or the implications of the fact that the physical sports context continues to be an androcentric and heteronormative construction (Bevan et al., 2021; Devís-Devís, Pereira-García, López-Cañada, et al., 2018).

In this sense, despite the fact that educational contexts have been considered for decades fundamental agents of change in favor of more democratic societies (hooks, 1994; Postman & Weingartner, 1971), the reality of PE is that it is a space in which discourses that marginalize certain identities and corporalities predominate, (re)producing the *status quo* of gender (Fitzpatrick, 2019; Kirk, 2020; Landi et al., 2016; Martos-García et al., 2020). Thus, both national and international research indicates that PE teachers, through hidden curricula, continue to perpetuate gender relations and stereotypes based on inequality (Alvariñas-Villaverde & Pazos-González, 2018; Gerdin, 2017; Walseth et al., 2017).

Therefore, numerous studies focus on the importance of initial training received by physical education professionals (Cameron & Humbert, 2020; Flintoff & Scraton, 2006; González-Calvo et al., 2021; Ovens et al., 2018). Likewise, in the case of Spain, the current legislation also calls for the creation of initiatives that allow changes to be made in the university system in favor of gender equality. For example, we could highlight Organic Law 3/2007, of March 22, for the effective equality of women and men; or the State Pact against gender violence (Ministry of the Presidency, 2019), among others.

This is why numerous authors have demonstrated how critical theory and pedagogy can be put into practice in the classroom, both in the international (Fitzpatrick, 2013; Kirk, 2000a; Luguetti et al., 2019; Oliver & Oesterreich, 2013), and national context (Devís-Devís, Pereira-García, Fuentes-Miguel, et al., 2018; Lleixà Arribas et al., 2020), recognizing that "it is the ability of students to reflect and criticize dominant discourses and practices that makes transformation possible" (Varea & Tinning, 2016, 1013).

However, recent studies carried out in our context show that despite this regulatory framework, the incorporation of the gender perspective in the degrees of Physical Activity and Sports Sciences (PASS) in Spain is anecdotal (Serra, Soler, et al., 2018), determining that 74.6% modules do not make any reference to issues related to gender. In this context, it is necessary to add that the social representation of these studies acts as a form of symbolic violence towards people who want to study this career, an aspect that results in an enormous masculinization of these studies (Serra et al., 2019, 2021).

However, when studying the curricular matrices of the degrees in PASS, the authors also highlight that the subjects have a great transformative potential in favor of equity and social justice (Serra et al., 2016). In this sense, there are very complete and accessible works that provide some of the fundamental bases for the incorporation of the gender perspective in PASS studies, such as the Decalogue for university professors and research staff, published by the Association of Professionals of Physical Education and Sport of Catalonia (Serra, Soler, & Vilanova, 2018).

Even so, despite initiatives like this, recent studies affirm that there is no research on transformative proposals in the context of PASS, based on feminist principles and perspectives (Lynch & Curtner-Smith, 2018). Likewise, the research points out the importance of understanding the reality of students and practices in relation to them, at specific times and contexts (Neto et al., 2020). Therefore, detecting the need to continue building knowledge in relation to how sexist discourses can be challenged in the context tertiary education, the following study is proposed.

The purpose of this article is to present an intervention designed and carried out under the principles of feminist critical pedagogy (Crabtree et al., 2009; Dewar, 1991; hooks, 1994) in the specific context of the PASS degree at the University of A Coruña, and to study its effect on the participants. For this, both the design of the intervention proposal, as well as the collection and analysis of data, is based on the theory Doing Gender (West & Zimmerman, 1987) later developed by Crawford and Chaffin (1997). Thus, it is understood that gender is the result of a social construction that is created through individual, interpersonal and sociocultural relationships.

In this article, first, the methodological aspects of the study will be detailed and the intervention 'Deportigualízate' will be briefly presented. Next, the results of the study in relation to the attitudes and profile towards gender equality of the participants will be shown. Finally, the results will be discussed by providing conclusions in relation to them, as well as presenting the limitations of the study, in order to continue contributing to future research.

## Method

### Design

The data presented in this paper are part of a larger project, framed within a transformative research paradigm (Chilisa & Kawulich, 2012; Sweetman et al., 2010), for which a mini-ethnographic case study was carried out (Fusch et al., 2017) with a critical approach (Creswell & Poth, 2018; Madison, 2012; Suárez, 2012), using mixed methods, and adopting the parallel convergent design proposed by Creswell and Plano-Clark (2017).

It should be noted that, due to a matter of space limitation, the study data generated qualitatively through written reflections, research journals, workbooks, or discussion groups (among other methods), will be presented in another article that is in preparation.

Therefore, this article will only present the results obtained quantitatively, after collecting the data through a quasi-experimental design of two groups with pre-test and post-test. Thus, one of the groups participated in the intervention 'Deportigualízate' (experimental group), while the other group did not receive the intervention and, therefore, was the control group.

### Participants

For the selection of the sample, an intentional and convenience sampling was followed. Specifically, the sample of the study is made up of third- and fourth-year students of the Degree in PASS of the University of A Coruña during the 2020-2021 academic year. Specifically, the experimental group was studying an elective subject (offered to both third and fourth grade students) called 'Women and Sport,' while the students of the control group were not taking the indicated optional subject.

The intervention was framed in the optional subject 'Women and Sport' due to the interest and support of

the teachers responsible for the subject, as well as the alignment of 'Deportigualizate' with the objectives and contents of the subject. In this regard, it should be noted that while attendance at the 'Deportigualizate' sessions was not optional because such intervention was included in the teaching guide of the subject; participation in data collection was voluntary.

It should also be noted that, before the intervention, all students (both in the control group and the experimental group) indicated that they had not received specific training in gender issues, although they did indicate that, during the degree at PASS, they had taken three subjects that included contents related to the gender perspective.

Prior to the intervention, a total of 43 students participated in the data collection, aged between 19 and 31 years (age  $21.98 \pm 2.74$ ; 30.2% women and 69.8% men). A total of 39 students aged between 20 and 32 years participated in the data collection after the intervention (age  $22.01 \pm 2.81$ ; 38.5% women and 61.5% men).

The experimental group that participated in the intervention is made up of a total of 24 students (11 women and 13 men), aged between 20 and 29 years (age  $22.08 \pm 2.302$ ). The unusual number of women in the group may be due to the optional nature of the subject. For this same reason, the profile of the students in the group may not be representative of the reality of the degree.

On the other hand, in the control group participated a total of 22 students in the pre-test aged between 19 and 31 years (age  $21.86 \pm 3.12$ ; 18.2% women and 81.8% men), and 15 students in the post-test aged between 20 and 32 years (age  $22 \pm 3.82$ ; 26.7% women and 73.3% men). The reduction of participants in data collection may be related to the voluntary nature of participation in the study, the fact that they were at examination period, and all the difficulties arising from the COVID19.

### Instrument

For the collection of the data presented in this article, the scale School Doing Gender/Teachers was used (Piedra, 2010; Rebollo et al., 2011), with the dual objective of characterizing the sample, and evaluating the effect of the intervention on the attitudes towards gender-sensitive teaching of the sample. It should be noted that the modified version was used for future and future professionals (Fernández & Piedra, 2010; Piedra, 2010), which presents certain language adaptations in some items in order to adapt to the circumstances of professionals who are in training.

This scale is made up of 30 items with closed response Likert type of 5 points, where 1 corresponds to 'totally disagree' and 5 with 'totally agree.' All items are organized around the three dimensions involved in the construction of gender according to the Doing Gender theory of West and Zimmerman (1987) and later developed by Crawford and Chaffin (1997): sociocultural (items 1 to 10), relational (items 11 to 20) and personal (items 21 to 30).

Following Rebollo et al. (2011), the global sum of the items allows to obtain a score to determine the profile of the subjects towards gender-sensitive teaching. Thus, if a sum of less than 89 points is obtained, a blocking profile is determined, understood as one that expresses rejection of gender-sensitive proposals and makes negative assessments of them; if between 90 and 119 points are obtained, the profile is adaptive, being one that recognizes the signs of inequality present in the social discourse and showing a politically correct position; finally, if more than 120 points are obtained, a gender-sensitive profile is considered, being the one that recognizes inequality,

positively and publicly values the proposals and initiatives aimed at eradicating them, and shows a clear attitude of collaboration in the promotion of equality values.

### Procedure

The scale Doing Gender/Teachers was completed in a pre-test, both by the experimental and the control group, without any explanation being made about the contents or objectives of the intervention in question. Subsequently, the modules were developed normally for a month, implementing the intervention 'Deportigualizate' with the experimental group. After the intervention (which will be explained below) a post-test was performed, using the same scale again in both groups.

All participants gave their informed consent to obtain personal data in the two moments of data collection, after having been informed of the objective of the study, as well as the processing of the data and their rights. All data has been treated confidentially and anonymously in accordance with current regulations on the protection of personal data.

In this regard, Regulation (EU) 2016/697 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC has been followed; as well as Organic Law 3/2018 of December 5, on the protection of personal data and guarantee of digital rights.

### Description of the intervention

The intervention 'Deportigualizate' is based on the principles of feminist critical pedagogy (Crabtree et al., 2009; hooks, 1994; Shrewsbury, 1997), with special emphasis on the challenge of power relations. For this, both the design of the intervention and its own implementation were based on democratic and dialogic principles, understanding education as a practice for freedom (Freire, 1970). In this way, the intervention was designed in several phases, after holding meetings with PASS students, as well as with recently graduated professionals, or experts in equality.

All these meetings served to define, together with the existing scientific evidence, the concrete form that the intervention would take. In this way, in addition to bearing in mind the importance of establishing non-hierarchical relationships, it was also determined the need to implement participatory activities that would allow the critical analysis of the environment, the incorporation of intersectionality and the promotion of action and social transformation; being all key aspects of feminist pedagogy (Crabtree et al., 2009).

To this end, four 90-minute sessions were designed based on a task-based approach (Kirk, 2000a), which were complemented by an individual workbook outside the classroom hours. The entire intervention was built around four main thematic axes, following the theory Doing Gender proposed by West and Zimmerman (1987):

1. The problem of inequalities.
2. The social construction of gender.
3. The social construction of gender in sport.
4. Students as agents of change.

With the aim to comply with the established principles, all tasks were oriented to the self-discovery and self-learning of students (McKay & Pearson, 1984), facing what Freire (1970) calls the 'banking' conception of education as a form of oppression. Likewise, in order to promote a safe space in which all people had a voice and could be heard,

different strategies were used, such as working in small groups, watching videos, or debating with the whole class, following the feminist proposal of Dewar (1991).

Finally, it should be noted that an Instagram profile was created as a strategy to promote dialogue between peers, as well as to have a platform in which to share the reflections and artifacts created by the students. In addition, a questionnaire developed in Microsoft Forms was shared so that, anonymously and voluntarily, students could leave their comments after each session (what they liked most and what they liked the least, on what topics they would like to have more information, etc.), an element that facilitated the fact of being able to adapt the intervention to the reality of the students and, thus, to allow it to take a truly student-centered approach.

Although it is true that, due to the short duration of the intervention, the adaptations were minimal, the fact of having constant feedback from the students allowed to include certain topics in the classroom debates that had not been taken into account in the previous design (such as, for example, the use of social networks as a form of social activism). In addition, this feedback allowed to elaborate and disseminate works and complementary literature so that the students could expand their knowledge based on their interests.

#### Data analysis

Both the items of the scale School Doing Gender/Teachers, as well as the indices of the general scale (sum of all items) and the sociocultural, relational and personal subscales (sum of the corresponding items), have been treated as quantitative variables, so they will be described by the corresponding measures of central tendency and dispersion.

For the comparison between the control and experimental group, the following analyses have been performed for both the pre-test and the post-test: the t test has been used for two independent samples to verify if there are differences between the means, and as prerequisites the Shapiro-Wilk test has been used (since the sample size is less than 30) for both the subjects of the

control group and those of the experimental. In addition, the Levene test has been used to contrast the equality of variances. If any of these prerequisites are not met, the non-parametric route has been used with the Mann-Whitney test. Specifically, the non-parametric route has been used when comparing the control group with the experimental in the personal sum variable; both in the pre-test and in the post-test.

For the comparison of the pre-test with the post-test, both in the control group and in the experimental group the following analyzes have been carried out: the t test has been used for two related samples to verify if there are differences between the means, and as prerequisites the Shapiro-Wilk test has been used (since the sample size is less than 30) for both the subjects of each group in the pre-test and in the post-test. If any of these prerequisites are not met, the non-parametric route has been used with the Wilcoxon test and the Signs test. Specifically, the non-parametric route has been used when comparing the pre-test of the experimental group with the post-test of the same group, in the personal sum variable.

In the case of variables in nominal scale, crosstabs, and association measures (Cramér's V) have been used to assess the association between them.

## Results

### Preliminary analysis

First, as shown in Table 1, when comparing the means of both groups in the pre-test, no statistically significant differences were found in the sociocultural and relational subscale between the control and experimental groups ( $p > .05$ ), although statistically significant differences were found between both groups in the general sum of the scale ( $p = .03$ ) and the personal subscale ( $p = .012$ ). Therefore, although it cannot be said that both groups are statistically equal as a starting point, there is similarity in terms of the sociocultural dimension, that is, in relation to conceptions about equality policies and center organization; as well as in terms of the relational dimension, which measures issues related to future professional practice, as well as gender expectations and relations.

**Table 1. Description and comparison of the control and experimental group in the pre-test**

Variable	Group	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	Sig. Levene	Sig. Comparison
Total sum	Control	22	121.41±10.6	0.074	0.195	<b>.030<sup>1</sup></b>
	Experimental	21	127.86±8.01	0.738		
Sociocultural sum	Control	22	40.41±3.9	0.384	0.627	.915 <sup>1</sup>
	Experimental	21	40.29±3.64	0.076		
Relational sum	Control	22	39.73±4.24	0.284	0.804	.072 <sup>1</sup>
	Experimental	21	42.1±4.17	0.668		
Personal sum	Control	22	41.27±6.2	0.17	0.054	<b>.012<sup>2</sup></b>
	Experimental	21	45.48±3.94	<b>0.006</b>		

<sup>1</sup> Significance of the t-test for two independent samples.

<sup>2</sup> Significance of the Mann-Whitney test.

### Effect of the intervention

#### Analysis of the groups: post-test

When comparing the means of the control and experimental group in the post-test (Table 2), statistically significant differences were found both in the scale at

the general level ( $p = .000$ ), and in the sociocultural ( $p = .000$ ) and relational ( $p = .000$ ) subscales. Therefore, it can be determined that the increase in the means of the experimental group with respect to the control is statistically significant, which means a more favorable profile towards gender-sensitive teaching and gender equality. However, even though in the personal dimension

there is also an increase in scores, this difference cannot be considered statistically significant ( $p > .05$ ).

**Table 2. Description and comparison of the control and experimental group in the post-test**

Variable	Group	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	Sig. Levene	Sig. Comparison
Total sum	Control	15	113.41±5.85	0.078	0.009	.000 <sup>1</sup>
	Experimental	24	132.54±7.89	0.197		
Sociocultural sum	Control	15	36.2±2.65	0.28	0.95	.000 <sup>1</sup>
	Experimental	24	43±2.52	0.05		
Relational sum	Control	15	31.2±2.68	0.706	0.007	.000 <sup>1</sup>
	Experimental	24	41.71±5.4	0.46		
Personal sum	Control	15	46.2±2.7	0.221	0.72	.062 <sup>2</sup>
	Experimental	24	47.83±2.66	<b>0.000</b>		

<sup>1</sup> Significance of the t-test for two independent samples.

<sup>2</sup> Significance of the Mann-Whitney test.

*Analysis of the control group: pre-test and post-test*

After comparing the means of the control group of the pre-test with the post-test, statistically significant differences were found both at the general level ( $p = .000$ ), and in each of the subdimensions of the scale: sociocultural ( $p = .000$ ),

relational ( $p = .000$ ) and personal ( $p = .001$ ). Therefore, the results indicate that the students of the control group significantly decreased their score in relation to favorable attitudes towards gender-sensitive teaching both in the total summation, as in the sociocultural and relational summation, but not in the personal summation (Table 3).

**Table 3. Description and comparison of the control group pre-test and post-test**

Variable	Pre-test			Post-test			Sig. Comparison
	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	
Total sum	22	121.41±10.6	0.074	15	113.6±4.49	0.078	.000 <sup>1</sup>
Suma sociocultural	22	40.41±3.9	0.384	15	36.2±2.65	0.28	.000 <sup>1</sup>
Sociocultural sum	22	39.73±4.24	0.284	15	31.2±2.68	0.706	.000 <sup>1</sup>
Suma personal	22	41.27±6.2	0.17	15	46.2±2.7	0.221	.001 <sup>1</sup>

<sup>1</sup> Significance of the t-test for two related samples.

However, when studying the association between the profile of the professionals in training of the control group towards gender-sensitive teaching and the moment of data collection, it is found that there is a strong dependence between both variables (Table 4). Thus, it is interesting to note that while in the pre-test there were statistically more

people than expected with a gender-sensitive profile; in the post-test, the entire sample showed an adaptive profile towards gender-sensitive teaching, while, statistically, it was expected that there would be six students with a gender-sensitive profile.

**Table 4. Crosstab and measures of association between the profile towards gender-sensitive teaching of the control group according to the moment**

			Profile towards gender-sensitive teaching		Total
			Adaptive	Gender sensitive	
Moment	Pre	Count	7	15	22
		Expected count	13.1	8.9	22.0
		Residue	-6.1	6.1	
		Typified residue	-1.7	2	
	Post	Count	15	0	15
		Expected count	8.9	6.1	15.0
		Residue	6.1	-6.1	
		Typified residue	2	-2.5	
Total		Count	22	15	37
		Expected count	22.0	15.0	37.0

Sig.: 0.000; Valor V de Cramer: 0.682

Therefore, even though the aforementioned results indicate an improvement in the beliefs of the personal dimension, at a general level, the results suggest the possibility that the fact of not participating in the intervention 'Deportigualizate' has a negative effect on the attitudes towards equality of the people of the control group, since they statistically worsen their profile towards gender-sensitive teaching.

*Analysis of the experimental group: pre-test and post-test*

When studying the impact of the intervention in the specific case of the experimental group, comparing the pre-test and post-test means, statistically significant differences were found both at the general level ( $p = .000$ ) and in all the dimensions studied: sociocultural ( $p = .000$ ), relational ( $p = .005$ ) and personal ( $p = .000$ ; table 5). Thus, it can be assured that the increase in scores both in the total sum, as well as in the sociocultural and personal summations, are significant.

**Table 5. Description and comparison of the experimental group pre-test and post-test**

Variable	Pre-test			Post-test			Sig. Comparison
	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	N	$\bar{x} \pm \sigma$	Sig. Shapiro-Wilk	
Total sum	21	127.86±8.01	0.738	24	132.54±7.89	0.197	.000 <sup>1</sup>
Suma sociocultural	21	40.29±3.64	0.076	24	43±2.52	0.05	.000 <sup>1</sup>
Sociocultural sum	21	42.1±4.17	0.668	24	41.71±5.4	0.46	.005 <sup>1</sup>
Suma personal	21	45.48±3.94	<b>0.006</b>	24	47.83±2.66	<b>0.000</b>	.000 <sup>2</sup>

<sup>1</sup> Significance of the t-test for two related samples.

<sup>2</sup> Significance of Wilcoxon test and Sign test.

It is also interesting to note that when studying the association between the profile towards gender-sensitive teaching of the experimental group and the moment (i.e., pre-test and post-test), no dependence is found between both variables ( $p > .05$ ). Therefore, unlike what happened

in the control group, the results found indicate that the intervention has eliminated the dependence between the moment and the profile towards gender-sensitive teaching (Table 6).

**Table 6. Crosstab and measures of association between the profile towards gender-sensitive teaching of the experimental group according to the moment**

			Profile towards gender-sensitive teaching		Total
			Adaptive	Gender sensitive	
Moment	Pre	Count	2	19	21
		Expected count	1.4	19.6	21.0
		Residue	0.6	-0.6	
		Typified residue	0.5	-0.1	
	Post	Count	1	23	24
		Expected count	1.6	22.4	24.0
		Residue	-0.6	0.6	
		Typified residue	-0.5	0.1	
Total		Count	3	42	45
		Expected count	3.0	42.0	45.0

Sig.: 0.472

### Discussion and conclusions

The results obtained after this research, corroborate that an intervention designed and implemented under the principles of feminist critical pedagogy has a positive effect on attitudes towards gender equality among PASS students. Thus, on the one hand, it has been proven that not only the professionals in training of the experimental group increased their attitudes towards gender-sensitive teaching and gender equality significantly; but, in addition, the professionals in training of the control group decreased them both in the general scale, as well as in the sociocultural and relational scale. Moreover, the control group went from presenting a mostly gender-sensitive profile to a completely adaptive profile.

However, despite the fact that the increase in the score of the personal subscale of the experimental group, compared to the control group, was not significant, in the post-test, all the students of the control group presented an adaptive profile towards gender-sensitive teaching (compared to a gender-sensitive profile of the experimental group), which indicates the need to continue investigating which aspects of the social construction of gender have an impact on PASS students at the individual level.

However, returning to the overview of the effect of the intervention, the positive results reinforce the importance of the initial training that these professionals receive, as indicated in different studies (Cameron & Humbert, 2020; Flintoff & Scraton, 2006; González-Calvo et al., 2021; Ovens et al., 2018).

In addition, these results are consistent with other studies carried out in the Spanish context implementing interventions with a gender perspective in the context of the PASS Degree. In this sense, Camacho-Miñano and Girela-Rejón (2017) demonstrated that, after the implementation of a seminar that aimed to offer basic training in relation to the introduction of the gender perspective, the intervention promoted consciousness and reflection, an aspect that allowed students to learn strategies about how to intervene and increase their commitment to gender equality.

In this sense, the results of the intervention 'Deportigualízate' coincide with the previously mentioned findings since, on the one hand, the students of the

experimental group increased their scores with respect to the relational subscale, which is related to how to relate and act with the rest of the educational community. On the other hand, the increase in students in the experimental group with a gender-sensitive profile seems to indicate, in turn, a greater commitment to equitable practices.

Likewise, the results presented also coincide, to some extent, with the findings of Fernández and Piedra (2010). In this case, although their intervention did not have a significant effect when comparing the results of the pre-test and post-test of the experimental group, nor of the control group; their research does show, in line with the results obtained in the present work, that students who participate in an intervention of these characteristics significantly increase their scores towards coeducation.

Therefore, as also demonstrated by Devis-Devis, Pereira-García, Fuentes-Miguel, et al. (2018), this type of intervention can promote the consciousness of PASS students towards inequalities and other realities, being able to allow them to transform their future professional practice, an aspect related to the profile towards gender-sensitive teaching. However, it is necessary to interpret these conclusions cautiously since, although feminist critical pedagogies may provide "the knowledge and perspective necessary to kick their own [students'] habitus" (Philpot, Smith, et al., 2021, 456. See Bourdieu (1990) for more detail on the term), it would be naïve to think that a single intervention or action can change the practices, values, and thoughts of all participating students.

However, it is also interesting to take these results constructively and positively, understanding that the change towards a more democratic and fairer society starts from small changes (Luguetti et al., 2019), what Weick (1984) calls 'small wins.' These findings also contribute to covering, little by little, the research gap of transformative proposals in the context of the PASS Degree with a feminist perspective, pointed out by Lynch and Curtner-Smith (2018).

Likewise, it is necessary to take into account that these 'small wins' in terms of critical practices that seek social transformation in relation to equality and equity, are usually led, in the Spanish context and according to some research, by individual actions of teachers involved (Serra, Soler, et al., 2018), thus falling the weight on their individual

commitment. This aspect coincides with what happened in this research, in which the researcher had the support of professors involved that allowed the development of this study.

In addition, recent research shows that, despite the fact that in the specific case of Spain current legislation points out the need for the gender perspective to be present in curricular discourses and university teaching practices, this is not a reality (Garay et al., 2018; Serra, Soler, et al., 2018). However, university programs equivalent to PASS in other contexts, such as Australia, where there is a clear curricular alignment between national laws, faculty philosophies, and teachers' activism, have proven to be a powerful generator of change (Ovens et al., 2018).

Thus, following Devís-Devís, Pereira-García, Fuentes-Miguel, et al. (2018), we are aware that a deeper change in the thoughts, attitudes, and profiles towards gender equality of future professionals in education and physical activity, requires greater commitment on behalf everybody involved. Therefore, in order to foster the much-needed critical vision in future professionals (Lynch & Curtner-Smith, 2018; Philpot, Gerdin, et al., 2021), new research and curricular proposals are needed to address and challenge social inequalities, specifically in the context of the initial training of professionals in physical education and physical activity.

### Limitations and future lines

As mentioned in the previous section, one of the greatest limitations of this study is related to the short duration of the curricular intervention. In this sense, it is necessary to understand the results cautiously. Moreover, the fact that the study was carried out in a specific context and with a small sample size, entails methodological limitations that do not allow the results to be generalized.

In the same sense, as already indicated, the experimental group and the control group, despite having had the same training in the degree, at the time of the study were studying different optional modules. This aspect may have conditioned the profile of the students and, therefore, is considered a limitation.

Taking into account these considerations, it would be interesting to implement 'Deportigualízate' in other contexts, with a larger sample, and including diverse students, in order to study in greater depth the effect of feminist critical pedagogy on attitudes towards equality.

Finally, as it is a transformative and critical experience, the qualitatively generated results will help to better understand the dimension of the addressed problem. Therefore, presenting only quantitative study data can be considered a limitation.

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