



Current situation of Physical Activity in the Natural Environment in Physical Education in Spain

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Cite this article

González-Melero, E., Baena-Extremera, A. & Baños, R. (2023). Current situation of Physical Activity in the Natural Environment in Physical Education in Spain. *Apunts Educación Física y Deportes*, 153, 9-26. [https://doi.org/10.5672/apunts.2014-0983.es.\(2023/3\).153.02](https://doi.org/10.5672/apunts.2014-0983.es.(2023/3).153.02)

Editor:

© Generalitat de Catalunya
Departament de la Presidència
Institut Nacional d'Educació
Física de Catalunya (INEFC)

ISSN: 2014-0983

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Section:

Physical Education

Original language:

Spanish

Received:

August 1, 2022

Accepted:

December 12, 2022

Published:

July 1, 2023

Front cover:

Two surfers practicing
freestyle kitesurfing.
Adobestock ©MandicJovan.
Mediterraneo

Abstract

The aim of this study was to analyse the teachers' treatment, in Spain, of the Physical Activity in the Natural Environment content block as part of Physical Education in Secondary Education. The study developed for this research conforms to a non-experimental, sectional, descriptive and correlational design, resulting in a nationally representative study. A total of 453 teachers participated (294 male and 159 female teachers) and a questionnaire created and validated by a committee of experts for the occasion was used, which was applied at national level. The results showed a high percentage of teachers who plan activities in the natural environment (91.4%); arguments about a lack of training in the field when not planning these activities and the activities most worked on were found (orienteering, hiking, first aid and games in nature). Progress was noted in the incorporation of Physical Activities in the Natural Environment as part of the classroom programme in Physical Education in Secondary Education, but not in the content worked on in these sessions. This study leads us to know the existing deficiencies in the teaching staff in Spain and the needs required for a better implementation of the Physical Activity in the Natural Environment block as part of Physical Education.

Keywords: natural environment, physical activity, secondary school teacher.

Introduction

In 2020, the emergence of COVID-19 and social constraints had considerable impact on human lifestyles (Ocaña et al., 2022). Action protocols and limitations were imposed on people's daily lives to prevent the spread of the virus. Measures such as social distancing and house and perimeter lockdown resulted in a large part of the population suffering on a psychological level, with pathologies such as depression, stress, anxiety, among others (Ballester-Martínez et al., 2022). Lockdown led to a decrease in physical activity levels and contact with the outdoors, as demonstrated by some studies (Camacho-Cardenosa et al., 2020). In these moments, people realised how important both physical activity and the environment could be in their lives. Following the removal of these restrictions, a large part of the population took to nature to perform different types of physical activities in the natural environment (PANE) without the proper training, leading to all the serious consequences that this can have for the natural environment and for the person him/herself. It is therefore necessary to reflect on the importance of raising awareness and training people in the practice of PANE in educational centres.

Teachers have perceived an opportunity to innovate and introduce these "more fashionable" sports into their teaching programmes (Baena-Extremera et al., 2012; García-Merino & Lizandra, 2021).

Much of the interest among physical education (PE) teachers in implementing these activities as part of their programme is due to the educational potential of PANE (Dalmau-Torres et al., 2020). In addition to being part of the subject of PE in the curriculum, the different benefits they bring to student development have been demonstrated (Gibbons et al., 2018; Kyle et al., 2016).

In this sense, in order to investigate the introduction of PANE as part of PE classroom programmes, various investigations have been carried out over the years (Granero-Gallegos & Baena-Extremera, 2014; Hurtado-Barroso et al., 2019; Sáez Padilla, 2008). Thanks to these studies, the increase in recent decades regarding the inclusion of PANE in PE sessions can be observed (Sáez-Padilla et al., 2017; Sáez Padilla, 2008).

However, even though PANE is part of the PE curriculum as a block of content, there are still teachers who do not incorporate these activities into their classroom programmes

(Dalmau-Torres et al., 2020; Sáez-Padilla et al., 2017). Peñarrubia Lozano et al. (2011), among others, studied the reasons that lead teachers not to carry out these activities in the natural environment, concluding that the most relevant reasons were teaching responsibility, safety, teacher training and time flexibility. In this regard, teacher training has been one of the most prominent in the research carried out in relation to PANE in schools (Dalmau-Torres et al., 2020; Hurtado-Barroso et al., 2019; Macías Sierra, 2014). However, none of the aforementioned research has studied the inclusion of PANE as a function of the socio-demographic variables of the teacher and the school, so it would be interesting to ascertain whether these variables influence the inclusion of PANE.

In addition, a clear interest was expressed in identifying the type of activities carried out in the educational centres in relation to PANE. In this respect, the literature shows that the main contents worked on are orienteering, hiking and games in nature (Granero-Gallegos et al., 2010; Peñarrubia Lozano et al., 2011; Torres et al., 2016). To justify not including other activities such as climbing or caving, among others, teachers allege, in addition to the disadvantages mentioned above, the complexity of combining the modification of the school timetable with outings to the natural environment or the lack of specific material for carrying out other activities (Hurtado-Barroso et al., 2019).

Based on the importance of these activities as educational content in physical, psychological, emotional and value development (Granero-Gallegos & Baena-Extremera, 2007) and in relation to the lack of current research at national level in this field, the aim of this work was to analyse the implementation of PANE within PE in Compulsory Secondary Education (CSE) and to update the scientific literature on this subject. The following hypotheses are thus established:

H1 A high percentage of teachers include PANE in their annual classroom programme.

H2 Those teachers who consider that they do not have adequate or sufficient training in PANE do not include these activities as part of their annual CSE PE programme.

H3 The inclusion of PANE in classroom programmes will vary according to socio-demographic variables.

H4 The contents most worked on as part of the block of contents comprising activities in the natural environment in CSE continue to be those of orienteering, hiking and games in nature.

Method

Design

The study developed for this research conforms to a non-experimental, sectional, descriptive and correlational design (Sierra, 2001). It is a non-experimental research as there is no intervention work with an experimental group pre and post. It is sectional as it is carried out with a group at a specific time. It is correlational in relation to the pattern of tests that are carried out at a precise moment in time.

Sample

The questionnaire was sent to all active secondary school PE teachers. Out of the total number of secondary school PE teachers at national level, 453 teachers (294 male and 159 female teachers) participated. This entailed obtaining a nationally representative sample, given that the data obtained on the number of people teaching secondary education in Spain in 2021 (the date on which the survey was carried out) was 16,064 teachers, of which 453 teachers from the 1st to 4th years of CSE, from all parts of Spain (North, South, East, West, Central and islands) in both rural and urban areas, took part. To this end, according to Gil (2015), a confidence level of 97% with a margin of error of 3% in the representative sample has been calculated.

Validation instrument and procedure

The construction of the ad hoc questionnaire followed the guidelines of Gutiérrez Dávila and Oña Sicilia (2005). Firstly, a literature review was carried out on questionnaires analysing the inclusion of PANE in classroom programmes. From this review, pre-existing questionnaires emerged, such as that of Granero-Gallegos and Baena-Extremera (2014) and Sáez Padilla (2008), which served as a basis for the creation of the questionnaire of the present study. This questionnaire is composed of three dimensions: teaching experience, knowledge/training in the area of PANE and educational models. In addition, a section dedicated to general socio-demographic data is also considered. The questionnaire consisted of a total of 25 items with responses collected through a Likert-type, multiple-choice and dichotomous scale.

This questionnaire was pre-validated by consulting five experts, doctors and graduates in Physical Education Sciences, with extensive experience in PANE, and experts in the design and validation of educational questionnaires.

Together with the questionnaire, they were provided with an answer sheet on which they could indicate on a scale of 1-4 univocity, relevance, importance and appropriate comments. A statistical analysis with the responses of all the experts was carried out using SPSS v.26. For this purpose, the Intraclass Correlation Coefficient (ICC) was calculated, calculating the experts' agreement in terms of univocity, relevance and importance for each item. The values obtained are presented in Table 1.

Table 1
Results of the ICC among 5 experts.

	PANE Teacher Questionnaire
UNIVOCITY	.837
RELEVANCE	.633
IMPORTANCE	.55

The variation in the judges' scores was resolved using the interquartile range. Finally, those items that required it were corrected and reformulated, according to the suggestions of the experts. Subsequently, the reliability analysis was calculated with a Cronbach's alpha, obtaining a value of .831.

Procedure

The sampling procedure consisted of two steps. First, a questionnaire was designed and validated by expert judges. Subsequently, the questionnaires were sent by e-mail to all schools nationwide, with a request that they be disseminated to the school's PE teachers. In the description of the questionnaire, the objective of the study, the voluntary nature of participation and, of course, the confidential treatment of the answers were stated. At the same time, maximum honesty was requested and the anonymity of the questionnaire was communicated, following the recommendations of compliance with the rights of participants in accordance with the Declaration of Helsinki (2013).

After much reflection, taking into account the difficulty posed by the school year, it was decided that the questionnaire should be administered between the months of March and June 2021, taking advantage of the fact that teachers would be more free in terms of COVID protocols and would have the time and inclination to dedicate the necessary time to filling in the survey.

Statistical Analysis

First, a descriptive statistical analysis was carried out using frequency analysis. Subsequently, an analysis of the relationship between variables was carried out using Fisher's test.

Results

The most significant data collected in the questionnaire are shown below, organised according to the statistical analyses carried out.

According to the results, it can be asserted that the observed profile of PE teachers is a person between 35-42 years of age, with a degree in Physical Activity and Sport Sciences (PASS) (65.1%) and Master's and/or Doctorate studies (25.8%). These teachers have been teaching for more

than five years (73.1%) and are permanent staff (41.7%). The most popular outdoor activities are trekking, MTB, orienteering and sailing/surfing/kitesurfing.

Most of the participants surveyed were from public schools (73.7%) in urban areas (75.7%).

With regard to the question "Is the teaching of PANE part of your classroom programme?", of the total number of responses obtained, 91.4% of the teachers stated that they included PANE in their classroom programme, while only 8.6% stated that this type of activity was not part of their classroom programme.

Next, those teachers who include PANE in their classroom programmes were asked about the contents included in this type of activity in the different courses of the stage in which they teach. The results are shown in table 2 below.

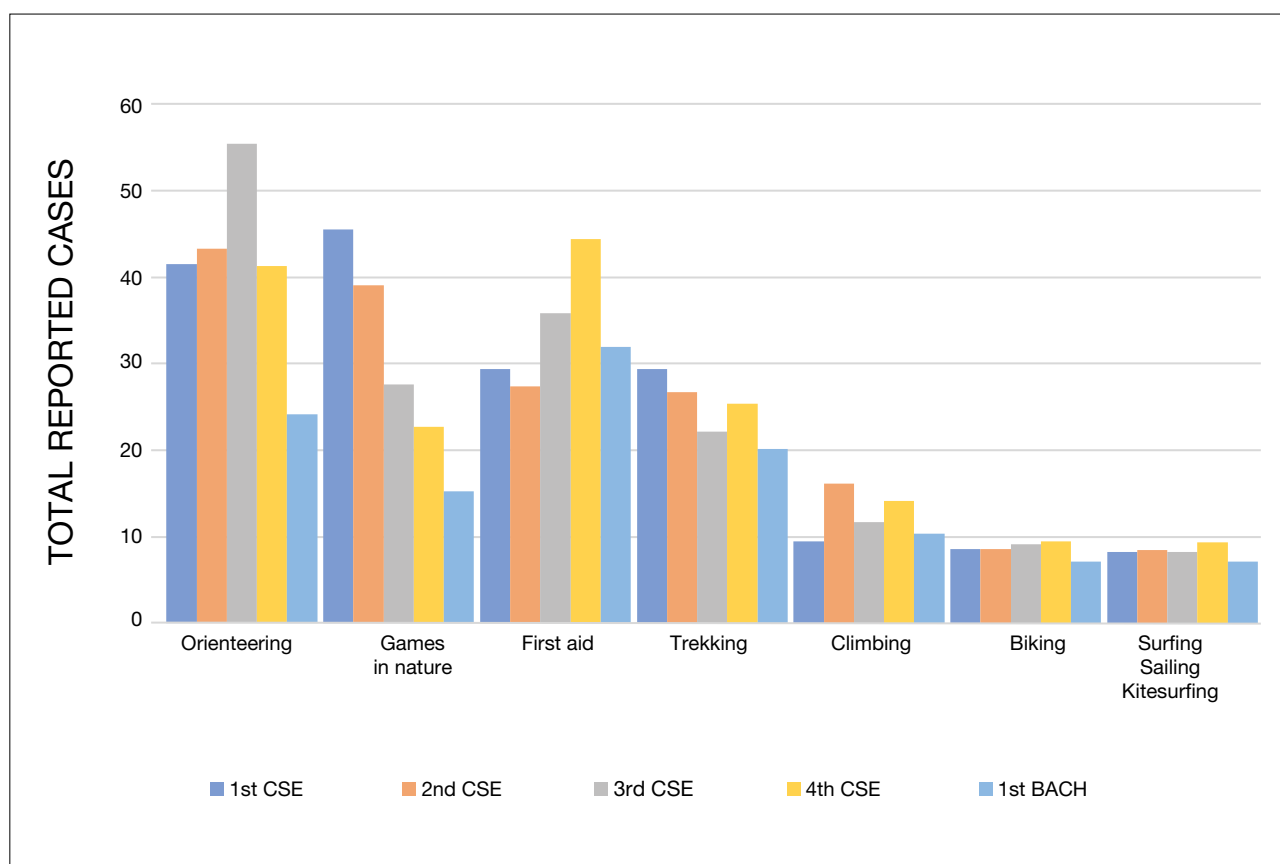
Table 2

Percentage of work on PANE content in CSE.

Activities	1st CSE %	2nd CSE %	3rd CSE %	4th CSE %
Orienteering	41.5	43.3	55.4	41.3
First aid	29.4	27.4	35.8	44.4
Games in nature	45.5	39.1	27.6	22.7
Trekking	29.4	26.7	22.1	25.4
Climbing	9.5	16.1	11.7	14.1
Knotting	15.7	16.6	6.4	8.6
Biking	8.6	8.6	9.1	9.5
Surfing/sailing/kitesurfing	8.2	8.4	8.2	9.3
Rucksack packing	13.7	7.3	3.5	4.4
Camping	4	4.6	5.7	8.4
Rafting/kayaking	3.5	4.2	4.4	7.3
Raids	5.5	4.9	4.9	4.2
Abseiling	2.6	3.3	4.2	6.2
Tent pitching	3.3	5.1	4	4.4
Zipline	3.5	4.9	4.2	3.8
CXM	2.2	2.2	4.2	5.1
Survival	2.2	2.2	2.6	3.1
Rope constructions	2.2	1.5	1.5	1.3
Canyoning	0.4	0.7	1.3	2.4
Via ferrata	0.4	1.1	0.9	1.8
Caving	0.9	1.1	0.2	1.3
Mountaineering	0.4	0.9	1.1	1.1

Note. This table shows the percentage of teachers who carry out each of the activities in the different CSE courses, according to the total number of responses obtained in the questionnaire.

Figure 1
Activities per school year.



As the results show, the contents most present in the PANE block are orienteering, first aid, nature games and trekking, while at the other extreme are canyoning, via ferrata, caving and mountaineering.

If the percentage of contents worked on according to year of educational stage is observed, it can be perceived that the orientation where most work is done is in 3rd year CSE where it is worked on by more than half of the teachers (55.4%); first aid stands out in 4th year CSE and games in nature in 1st year CSE. The rest of the contents, within the percentage of work, are carried out in a similar way in all courses.

The Fisher test carried out on the relationship between the inclusion of PANE content in the classroom programme and the different socio-demographic variables surveyed only yielded significant results with respect to the presence or absence of content according to the ownership of the school (table 3).

Table 3 shows that, regardless of the ownership of the school, the percentage of teachers who carry out PANE within their classroom programme is much higher than that of teachers who do not include these activities in their

programme. The most notable difference is found in public schools, where 94.6% confirm PANE in their programmes, compared to 5.4% who do not implement PANE at this stage. Thus, when the Fisher test was carried out, it was found that there is a significant relationship (.000) with regard to the ownership of the centre and the inclusion of PANE in the classroom programme, such that the more the centre tends towards privatisation, the less likely it is to include this type of activity.

Table 3
Ownership of the school.

	Yes	No	Total	Exact significance (bilateral)
Public	94.6 %	5.4 %	100 %	.000
State-funded	83.2 %	16.8 %	100 %	
Private	77.8 %	22.2 %	100 %	
Total	91.4 %	8.6 %	100 %	

Table 4
Employment status.

	Yes	No	Total	Signif. exact (bilateral)
Temporary replacement	84.0 %	16.0 %	100.0 %	
	5.1 %	10.3 %	5.5 %	
	91.9 %	8.1 %	100.0 %	
Temporary with vacancy	24.6 %	23.1 %	24.5 %	
	22.5 %	2.0 %	24.5 %	
Temporary staff	100.0 %	0.0 %	100.0 %	
	2.9 %	0.0 %	2.6 %	
Permanent staff	96.3 %	3.7 %	100.0 %	.003
	44.0 %	17.9 %	41.7 %	
Indefinite (state-funded/private)	83.8 %	16.2 %	100.0 %	
	20.0 %	41.0 %	21.9 %	
Substitution (state-funded/private)	75.0 %	25.0 %	100.0 %	
	0.7 %	2.6 %	0.9 %	
Temporary employment (state-funded/private)	84.6 %	15.4 %	100.0 %	
	2.7 %	5.1 %	2.9 %	
Total	91.4 %	8.6 %	100.0 %	
	100.0 %	100.0 %	100.0 %	

On the other hand, employment status also showed significant differences through Fisher's test (table 4).

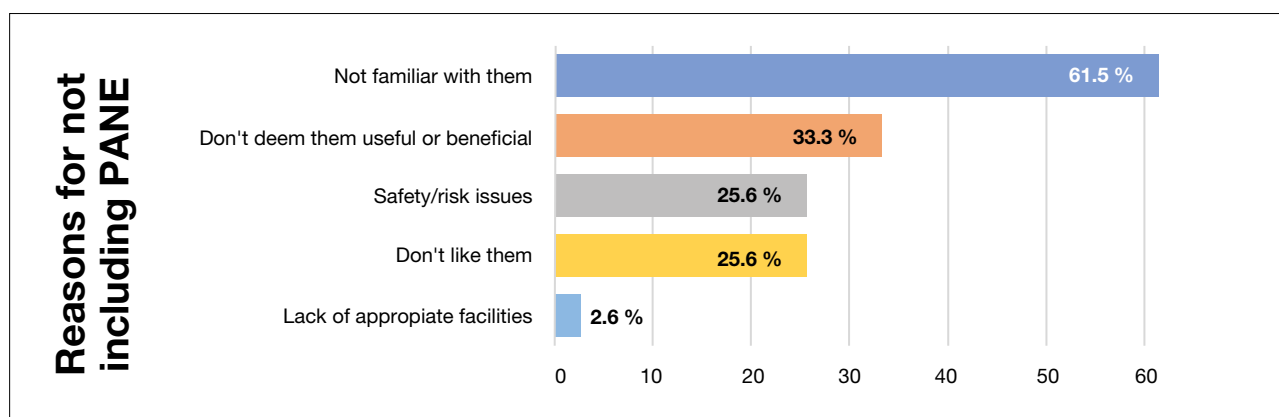
With regard to employment status, Table 4 shows that in general there is a wide difference between teachers who carry out PANE at secondary level and those who do not. Staff with a temporary posting stand out, with 100% of the responses indicating that they include PANE in their classroom programme. Similarly, if the percentage of teachers who include PANE as part of their sessions is observed, a wide difference among permanent staff is observed, with 44%; at the other extreme are substitutes in private/state-funded schools, with 0.7% of teachers including these activities in their sessions. Fisher's test

yielded significant results regarding the relationship between employment status and PANE programming, with a significance of .003, with those teachers with permanent or stable positions being those who programme these activities the most, and this decreases as their employment situation becomes more unstable.

Finally, teachers were asked about the reasons why they do not include PANE content in PE (figure 2).

As can be seen, the main reason for the exclusion of PANE is the lack of knowledge and/or training on how to carry them out (61.5%). Nonetheless, it is worth noting the response "I don't see any use or benefits", with 33.3%, as well as "I don't like them", with 25.6%.

Figure 2
Reasons for not including PANE in PE.



Discussion

The aim of this research was to analyse the implementation of PANE in secondary school PE by updating the scientific literature.

In this study, the high percentage of teachers who carry out activities in the natural environment as part of their PE sessions has been demonstrated, although a proportion of teachers who do not include them in their classroom programme continues to be seen, with their main explanation being a lack of training in these activities. Of the hypotheses put forward in relation to this point, H1 is confirmed, given that 91.1% of the teachers include PANE as part of their classroom programme, with a low percentage refusing to include these activities as part of their sessions. There are several reasons given by teachers for not carrying out activities in the natural environment in their PE sessions, among others, 61.5% of the total number of teachers who do not include PANE as part of their sessions (8.9%) state that they do not feel properly trained to be able to take responsibility for carrying out this type of activity; consequently, H2 is also partially confirmed.

The results show that the majority of PE teachers programme PANE, this result being higher than 90%. These results, at the national level, differ from those obtained by Peñarrubia Lozano et al. (2011) in the Community of Aragon, in which 77.86% reported carrying out some kind of activities in the natural environment, or those of Sáez-Padilla et al. (2017), in Andalusia, which produced results of around 70%. However, although a percentage of teachers who do not implement these activities in their PE sessions (8.6%) continues to be found, it can be observed that these data have improved considerably with respect to those reported by Peñarrubia Lozano et al. (2011) in their research, with results of 22.14% in Aragon. These results should be 100%, not least because legislation is prescriptive at national level.

With regard to the results obtained in relation to Hypothesis 2, the lack of training in PANE is the main reason why teachers do not include PANE in classroom programmes. On this point, this work coincides with the results of previous research which highlights the lack of training or knowledge, safety or risk problems, lack of installation or materials, among others (Dalmau-Torres et al., 2020; Sáez-Padilla et al., 2017). With regard to teacher training, it is worth highlighting its persistence in the studies that have been carried out on PANE, this lack of training being corroborated through the research carried out by Hurtado-Barroso et al. (2019) who, through their analysis of degrees in Physical Activity and

Sport Sciences taught in Andalusian universities, concluded that only 9.9% of subjects related to PANE, a percentage that does not necessarily have to be the total number of subjects taken during the degree course, as it will depend on the choice of the student in the optional subjects, thus leaving only 3.8% of subjects taken from this block as an average in Andalusian universities. This confirms the need for broader training that balances the training of all the content blocks of PE that teachers have to teach throughout CSE.

In addition, one of the reasons given by some of the teachers for keeping PANE out of their programmes requires special attention. This is the response "I don't see any use or benefits" (33.3%), given that there is research that exposes the physical and mental benefits of contact with nature and its results at the academic level in students, therefore in recent years different research has been carried out by taking PANE to schools in search of answers to the resulting benefits. These studies have concluded benefits in terms of satisfaction (Baena-Extremera & Granero-Gallegos, 2015), learning orientation (Baena-Extremera & Granero-Gallegos, 2013), motivation (Hortigüela et al., 2017), among other variables that affect students' psychological and academic development, etc. This leads to the need for more technical training together with a bibliographical approach in the field of activities in the natural environment.

In relation to those teachers who put them into practice in their sessions, it can be seen that there are two variables that are related to greater programming of PANE on the part of the teachers. On the one hand, the ownership of the centre, as public centres have a higher rate of teachers who programme activities in the natural environment, and, on the other hand, the type of employment contract held by the teachers, with permanent staff being the ones who most incorporate these contents as part of their programme. It follows that H3 is fully confirmed. In relation to this, it has been observed that more and more teachers are incorporating these activities as part of their classroom programme. These data are consistent with those obtained by Dalmau-Torres et al. (2020), whose research confirmed that teachers in public schools were more likely to include PANE as part of their PE sessions. The reasons that may explain these results are diverse, ranging from greater ease of transferring pupils to natural areas to a greater commitment to educational law as they are dependent on the Regional Ministry of Education. In this respect, it would be interesting to carry out a study that could respond to this situation and help to ensure that this commitment is the same in all schools.

In relation to H4, it has been observed that, in spite of the progress made in the incorporation of PANE, the activities to which most sessions are devoted in this block of contents are first aid, hiking, orienteering and games in nature, data that are in line with previous research carried out by Granero-Gallegos et al. (2010), Hurtado-Barroso et al. (2019), among others. This gives an insight into how little progress has been made in this area and how much remains to be done. The reasons why these results may be produced could be due to the extensive didactic bibliography on these contents or the ease of practice within the school. However, it should be noted that in recent years there have been numerous publications in books and articles on the less frequently taught content in PANE PE, so it will be necessary to observe whether these publications have changed the trend in a few years' time. An example where teachers can be trained for free would be the www.outdoorpeactivities.com, database, where everything published on these contents in Spanish journals is collected, including the contents less addressed by teachers. For these reasons, H4 is fully confirmed.

Conclusions

By way of conclusion, the results obtained in this study analyse the current situation in Spain in secondary schools with regard to the development of activities in the natural environment as part of PE, at national level.

It is worth highlighting the increase in the number of teachers who consider PANE as part of their classroom programme, with the contents of orienteering, hiking, first aid and games in nature being the most frequently taught. Despite this, there are still a significant number of PE teachers who disregard this type of activity in their programmes. There are different reasons for this response. However, lack of training continues to be one of the main reasons why PE teachers do not include PANE in their sessions. With an educational law that incorporates a block of content dedicated to activities in the natural environment, it is time to rethink the hours of training offered within the PAASS degree, as well as the continuous training of teachers through teacher training centres, following the recommendations of Granero-Gallegos and Baena-Extremera (2014). The administrations themselves should find the best solution to help teachers feel the same confidence to carry out these activities in the natural environment as in other blocks of content. It is the responsibility of the

administration and the teacher to be properly trained in order to be able to respond correctly to the requirements set out in the curriculum legislation in terms of educational content.

On the other hand, it is interesting that in the group of teachers who programme these PANE there is a significant difference according to the ownership of the school, as well as the type of contract held by the teachers. Permanent staff in public institutions are the most involved with this content.

With regard to the contents included in this block, and despite the wide range of innovative possibilities it offers, teachers are still sticking to the same range of activities: hiking, orienteering, games in nature and first aid. This leads to monotony and boredom on the part of teachers and students and, as already expressed by Granero-Gallegos and Baena-Extremera (2014), it is necessary to overcome this situation by connecting with the students' interests. It can be observed that there is still a lot of work to be done in this block of content in which, despite an increase in classroom programming, there is a lack of variety of activities.

As can be seen, despite the progress that has been made over the years, there is still much to be done within PANE. We believe that this article can be a starting point for understanding the current shortcomings of teachers in Spain and the needs for a better implementation of this block of content within PE.

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Conflict of Interests: No conflict of interest was reported by the authors.



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Appendix

The teaching questionnaire is attached as it was sent to the schools.

Physical activity in the natural environment (PANE) is part of the Physical Education curriculum in Secondary Education. The decree of each community refers to "Activities of adaptation to the environment and the natural environment". However, there is no information on the training and knowledge of the teachers in order to carry out the programming of this block.

SECONDARY PHYSICAL EDUCATION TEACHERS ONLY

The aim of this questionnaire is to obtain relevant information in relation to the training and knowledge of Secondary Physical Education teachers about Adventure Education (AE) programming.

Dear colleagues, we ask you to fill in the questionnaire as honestly as possible, and we guarantee the absolute anonymity of your answers.

Put an X next to the answer.

We thank you in advance for your support.
Many thanks.

We will begin with a first section on socio-demographic questions

1. What is your gender?

2. How old are you?

3. What academic qualifications do you have in Physical Education? (select all that apply)

- a) Diploma
- b) Degree
- c) Bachelor's degree
- d) Other qualifications
- e) Doctorate, Master's Degree...

4. Could you tell us what activities in the natural environment you do in your free time?

	3 or more times per week	1 or 2 times a week	Less frequently	Only at weekends	Only during holidays
Camping					
Survival					
Raids / quests					
Horse riding					
Orienteering					
Mountaineering/trekking					
Mountain/trail running					
Mountain biking (MTB)					

Climbing					
Mountaineering					
Abseiling					
Caving					
Zipline					
Bungee jumping, goming					
Via ferrata					
Rope constructions (Tibetan bridges)					
Canyoning					
Rafting, kayaking					
Surfing, sailing, kitesurfing					
Others:					

Next, we include a section related to your teaching experience

5. What type of ownership does the school have?

- a) Public
- b) State-funded
- c) Private

6. How many years have you been teaching Physical Education?

7. What is your employment status?

Public school	Temporary replacement	
	Temporary with vacancy	
	Temporary staff	
	Permanent staff	
	Indefinite	
State-funded/private school	Substitution	
	Temporary employment	
	Indefinite	

8. Where is your centre located on the peninsula? (tick all that apply)

- a) Northern Spain
- b) Central Spain
- c) Southern Spain
- d) Coastal zone
- e) Mountain zone

9. Which area is your centre in?

- a) Rural
- b) Urban

10. Indicate what spaces and facilities you have available for the performance of activities in the natural environment, during school hours.

	None	Sometimes	Normally	Very often	Always
Indoor sports facility belonging to the school (sports hall, gymnasium...)					
Indoor sports facility not belonging to the school (sports hall, gymnasium...)					
Outdoor sports facilities belonging to the school (multi-sports courts, football pitch, etc.).					
Outdoor sports facility not belonging to the school (multi-sports courts, football pitch, etc.).					
Communal areas belonging to the centre					
Recreational open spaces outside the centre (parks, squares, gardens...)					
Classrooms or other enclosed non-sports spaces					
Peri-urban parks close to the city centre or town centre					
Natural parks near the city					
Forests or beaches					
Other (specify):					

We will continue with a section on the knowledge you have about outdoor activities and what you apply in the centres

11. Is the teaching of PANE part of your classroom programme?

- a) Yes (if yes, go to question 13)
- b) No

12. What are the reasons why you do not work on these contents in Physical Education? (only answer in the negative case in question 11) (Please tick those that apply, max. 3)

- a) I don't like them
- b) I don't know them well
- c) I see no use or benefits
- d) I do not have adequate materials and facilities, nor any nearby
- e) Due to safety and risk concerns
- f) I consider other content more important
- g) Other reasons (specify)

13. How are activities in the natural environment valued in the Physical Education department?

	Strongly disagreed with	Slightly agreed with	Agreed with	Strongly agreed with	Totally agreed with
They are part of the JEP					
The same as the rest of the content blocks					
They are used as a complement to programmes, without assessment					
Working in complementary and extracurricular activities is interesting					
Occasionally as novel content to round out the term					
Other (specify):					

14. How important is it to you to carry out PANE within the school?

Not at all	
A little	
Quite	
Very	

15. How do you organise PANE within your programme? (tick all that apply)

I don't include them		
They are present in the Annual General Programme and in the Centre's Educational Project to be worked on in a transversal way in the school and especially in PE.		
Organisation	Through my own initiative	
	Jointly with the whole department	
	Jointly with other departments	
Educational planning	Through didactic units (DU)	
	In centre activities, as a complementary activity	
	In school activities, such as extracurricular activities	
	Others (specify):	

16. What PANE content do you currently include in your programme? (tick all that apply)

	1st CSE	2nd CSE	3rd CSE	4th CSE	1st BACH
Knotting					
Rucksack packing					
Tent pitching					
First aid					
Camping					
Survival					
Games in nature					
Raids					
Orienteering					
Mountaineering/trekking					
Mountain/trail running					
MTB					
Climbing					
Mountaineering					
Abseiling					
Caving					
Zipline					
Bungee jumping, goming					
Via ferrata					
Rope constructions					
Canyoning					
Rafting/kayaking					
Surfing, sailing, kite surfing					
Others					

17. Including all the levels you teach, how many PANE teaching units do you carry out in your PE programme? (Indicate the number of didactic units (DU))

	DU
Knotting	
Rucksack packing	
Tent pitching	
First aid	
Camping	
Survival	
Games in nature	
Raids/quests Horse riding routes	
Orienteering	
Mountaineering/trekking	
Mountain/trail running	
MTB	
Climbing	
Mountaineering	
Abseiling	
Caving	
Zipline	
Bungee jumping	
Via ferrata	
Rope constructions	
Canyoning	
Rafting/kayaking	
Surfing, sailing, kitesurfing	
Others (specify)	

18. If you include theoretical content in your PANE sessions, how do you do it?

Separate theory and practical elements	
Theory integrated into practical elements	
Work in small groups, with theoretical and practical presentation by the students	
Small projects to be carried out over the course of a term, supervised by the teacher	
Service Learning	
Shared use of ICT	
Nature classrooms	
Project-based learning	
Others (specify):	

19. Where did you learn this content in order to work on it in the classroom? (tick the appropriate ones)

During university studies	
Sport technicians training courses	
In Teacher and Resource Centre activities	
At other courses, conferences and congresses	
With associations and friends	
On your own account	
Others (specify)	

20. Which professionals deliver PANE during the PE sessions in your school? (please tick all that apply)

Adventure company monitor	
Specialised sports technician/guide	
PE teacher	
Corresponding Federation	
Associations or clubs	
Others (specify):	

21. What kind of adventure sport facilities do you have in or around the centre that you can use freely?

Climbing wall	
Zipline	
Rope constructions (bridges...)	
Cycle paths	
Bikes parks	
Permanent, signposted orienteering circuits	
Others (specify)	

22. Do you have at school and/or do you use any kind of material for PANE in PE, how many? (tick all that apply)

	School equipment	Own material
Tent		
Sleeping bag and insulation mattress		
Mountain equipment (rucksack, boots...)		
Climbing equipment (harness, rope, carabiners, climbing shoes...)		
Mountain/road bicycle		
Caving equipment		
Head torch		
Static ropes		
Coordinates		
Others (specify):		

Finally, a section of five questions to explore the educational models you are familiar with.

23. How did you learn and how do you teach during your PE sessions? (tick all that apply)

		Training	Teaching
Traditional approaches	Direct involvement		
	Assigning tasks		
Individualised approaches	Group work		
	Individual work		
Participatory approaches	Reciprocal teaching		
	Small groups		
	Microteaching		
Cognitive approaches	Guided discovery		
	Problem solving		
Creative approaches			
Socialisation approaches			

24. What models of adventure and education programmes are you familiar with, and do you apply any of them? (tick all that apply)

	I know	I apply
Experiential learning		
Adventure learning		
Adventure education		
Outdoor education		
Outdoor learning		
High ropes courses		
Others (specify)		
I don't know any		

25. How did you learn about these adventure and education programme models?

Research and education papers	
Training through the Teachers' and Resources Centre	
University training	
Others (specify)	
I don't know any	

26. Are you willing to train in adventure and education programme models?☐

Yes

☐

No

If yes, what would be the ideal format?

University Expert Course on activities in the natural environment	
Master's Degree in activities in the natural environment	
Course organised by the Teachers Centre with a sufficient number of hours to guarantee adequate training.	
Intensive weekend courses	
Other (specify):	

27. Are you familiar with Baena's (2011) adventure teaching model for working with an Adventure Education programme?

<https://www.researchgate.net/publication/277275059> Programas didacticos para Educacion Fisica a traves de la educacion de aventura

Yes, I know it, but I have not applied it	
Yes, I know it and I have applied it	
I don't know it	