

'More Physical Education': Critical Analysis of the Predominant Biomedical Discourse in Press Reports 'Más Educación Física': Análisis Crítico del Discurso Biomédico Predominante en las Noticias de Prensa

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Abstract. Why are more hours of physical education (PE) per week needed? This historical demand of PE teachers has not gone unnoticed by the media, but what message is being conveyed? To answer this question, two study goals were set: (1) to systematically examine the content of press reports in the main Spanish media regarding the increase in PE hours, and (2) to critically analyse the arguments and underlying discourse in favour of increasing PE hours in the educational system. A total of 24 press reports met the inclusion criteria for subsequent in-depth analysis. The results revealed that the main content was centred on physical activity and health as the main reasons justifying the increase in PE hours. These findings highlight the existence of a predominant underlying biomedical discourse (extrinsic value), displacing the evidence supporting the contribution of PE to the development of social, affective, emotional and personal components (intrinsic value). It is suggested that a more comprehensive and deeper view of the importance of PE should be communicated to society, with a public message that incorporates more of the available evidence from an educational, psychosocial and personal growth perspective. This could help to re-situate the true status and importance of PE in children and adolescents' lives, as well as its positive consequences in later adulthood, beyond the popular prevalence more focused on the physiological perspective of human movement.

Keywords: education, curriculum, health, youth, media.

Resumen. ¿Por qué se necesitan más horas de educación física (EF) a la semana? Esta demanda histórica de los profesores de EF no ha pasado desapercibida para los medios de comunicación, pero ¿qué mensaje se está transmitiendo? Para responder a esta pregunta, se plantearon dos objetivos de estudio: (1) examinar sistemáticamente el contenido de las noticias aparecidas en los principales medios de comunicación españoles en relación con el aumento de las horas de EF, y (2) analizar críticamente los argumentos y el discurso subyacente a favor del aumento de las horas de EF en el sistema educativo. Un total de 24 noticias de prensa cumplieron los criterios de inclusión para su posterior análisis en profundidad. Los resultados revelaron que el contenido principal se centraba en la actividad física y la salud como principales razones que justificaban el aumento de las horas de EF. Estos resultados ponen de manifiesto la existencia de un discurso subyacente biomédico predominante (valor extrínseco), desplazando las evidencias que apoyan la contribución de la EF al desarrollo de componentes sociales, afectivos, emocionales y personales (valor intrínseco). Se sugiere transmitir a la sociedad una visión más integral y profunda de la importancia de la EF, con un mensaje público que incorpore más evidencias disponibles desde una perspectiva educativa, psicosocial y de crecimiento personal. Esto podría ayudar a resituar el verdadero estatus y la importancia de la EF en la vida de niños y adolescentes, así como sus consecuencias positivas en la edad adulta posterior, más allá de la prevalencia popular más centrada en la perspectiva fisiológica del movimiento humano.

Palabras clave: educación, currículo, salud, juventud, medios de comunicación.

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Introduction

Physical Education (PE) is present in the educational system under officially established curricular parameters, within a legislative framework that necessarily conditions the general guideline to be followed in this subject (Kirk, 2019a). Movement is the main axis on which the objectives of this subject revolve (Whitehead, 2019). An extensive and comprehensive evidence-based academic review highlighted PE educational benefits, differentiating four major domains of learning and development: cognitive, physical, affective and social (Bailey et al., 2009). However, these multiple benefits claimed from PE depend to a large extent on how teachers apply the officially established curriculum to their particular classroom context, and what role students and teachers play during the teaching-learning process (Hastie & Casey, 2014). For example, a recent review of reviews found that certain student-centred teaching strategies (pedagogical models) can promote learning in the four learning domains (Fernandez-Rio & Iglesias, 2024). However, these positive results, again, depend

on multiple variables. As a consequence, both the educational nature of PE and its pedagogical approaches remain a matter of debate (Capel & Blair, 2019; Stürup & Hooper, 2021).

Many countries are repositioning the school PE curriculum towards health and well-being (Kirk, 2018a; Sargent, 2023) due to low levels of physical activity during adolescence (Beale et al., 2021; Guthold et al., 2020). There is a tendency to prioritise the extrinsic value of the subject (disease prevention, health promotion, physical development) rather than the intrinsic value (student interests, meaningful experiences), making it difficult to connect PE and participation in physical activity across the lifespan (Houser & Kriellaars, 2023; Sargent, 2023; Whitehead, 2019). As a result, this growing concern about the weight of the population has led PE curriculum policymakers to embrace a biomedical paradigm (Kirk, 2018a). That is, PE is seen as a means to an end: the fight against obesity; and this can be realised through the analysis of the curriculums of many countries (Kirk, 2018b). Since teachers are necessary consumers of the prescriptions emanating from legislators (through education laws), who in turn have taken ownership of the knowledge extracted

by theorists (Santos-Guerra, 2011), press reports may be helping to shift this debate towards the biomedical paradigm of PE. In the Spanish context, a review of the PE curriculum in secondary education concluded the need for a greater presence of the motor domain, 'at the service of education' (p.276), and integrated into the other dimensions of learning: cognitive, social, affective, emotional and expressive (Otero-Saborido et al., 2020). In line with this intrinsic perspective, authors such as Hastie (2023) advocate for a PE that supports the personal and lasting growth of children and young people, referring to the importance of the 'translational' nature of the subject, which includes two essential adjectives: 'meaningful' and 'beneficial'.

In this line of thinking, five key aspects have been identified in the literature as promoting 'meaningful' experiences: social interaction, fun, challenge, motor competence and personally relevant learning (Beni et al., 2017; Fletcher et al., 2021). In contrast to these ideas, some data indicate that not all students have positive experiences in PE classes (Fenandez-Rio et al., 2023; Ladwig et al., 2018). For example, content related to physical fitness tests has been identified as a source of negative feelings and unpleasant experiences for some students (Alfrey, 2023). Therefore, a perspective of PE focused exclusively on physical activity aspects (Cale & Harris, 2009; Iglesias et al., 2023; Wong et al., 2021) may be moving away from the true and authentic educational approach it should take (González-Calvo et al., 2022; Pérez-Pueyo et al., 2021).

Although scientific evidence supports the contribution of PE to comprehensive education and the specific literature also supports the effectiveness of certain pedagogical interventions in this overall direction, a daily and subjective reading of the Spanish press reports seems to provide a biased or incomplete view of the arguments in favour of an increased teaching load. For this reason, this study focused on contributing with objective data to the following general research question: What are the reasons for an increase in the number of hours of PE from the point of view of the information provided by the mainstream media in Spain? More specifically, the objectives of the study were two: (1) to systematically examine the content and coverage of press reports on the increase of PE hours, and (2) to critically analyse the arguments and the underlying discourse in favour of increasing PE hours in the education system.

Method

Information sources

Based on the official media survey in Spain (Encuesta general de medios, 2022), the top 12 media were searched for up to June 2023. In the category of Internet sites, El País (<https://elpais.com/>), La Vanguardia (<https://www.la-vanguardia.com/>) and RTVE (<https://www.rtve.es/>) were selected. In the television category, the websites of Antena 3 (<https://www.antena3.com/>), La 1 (<https://www.rtve.es/>) and La Sexta (<https://www.lasexta.com/>) were selected. In the radio

category, Cadena Ser (<https://cadenaser.com/>), COPE (<https://www.cope.es/>) and OndaCero (<https://www.ondacero.es/>) were chosen. Due to the fact that several media outlets were repeated, it was decided to select the websites of three newspapers in the written press category that had not been previously chosen: Marca (<https://www.marca.com/>), El Mundo (<https://www.elmundo.es/>) and ABC (<https://www.abc.es/>).

Search strategies and data collection process

The search combined keywords and filters with the Boolean logic commands "AND" and "OR" on each media outlet's website. Two main terms ("physical education" and "more hours") and related terms (e.g. "third hour") were entered into the search. To increase the reliability of the analysis, we followed the Cochrane guidelines for systematic reviews (Higgins et al., 2019) and contacted an external expert to provide eligibility criteria. Next, two authors searched for potentially relevant news coverages on media websites. The same two authors reviewed the press reports' titles and headlines, and those that met the inclusion criteria were selected for further analysis. They then evaluated the results to confirm that the topic was sufficiently developed and analysed those articles that met the criteria. The third author reviewed the correctness of these decisions. The first two reviewers were two PE teacher educators with 2 and 20 years of experience. The third one is also a PE teacher educator with 28 years of experience. All of them have extensive experience in systematic reviews.

Eligibility criteria and performance measurement

Press reports that addressed the increase in PE hours and provided reasons why this increase was desirable were included. Eight dichotomous items (yes/no) were used to assess news coverage of the increase in weekly PE sessions, consisting of the following:

The focus on the importance of increasing the number of hours of PE is centred on a medical perspective.

The concepts of PE and exercise/physical activity are used as if they were synonymous.

The benefits of physical activity are attributed to the subject of PE in order to justify its relevance.

The word "obesity" ["obesidad"] is mentioned.

"Sedentary behaviour" ["sedentarismo"] is mentioned.

The World Health Organization (WHO) is quoted.

A physician is interviewed to argue in favour of increasing the number of PE hours from a medical perspective.

Educational aspects of PE are mentioned in depth to justify increasing the subject hours (not only as a complement to the benefits of physical exercise).

Statistical analysis

The number and proportion of press reports related to the increase in PE hours were calculated. Since the purpose

of this study is informative, only descriptive statistics were applied.

Results

Study selection

Forty-three records were initially retrieved. After removing reports without an in-depth analysis, twenty-four news were selected (Figure 1). Press reports were ineligible if they were only brief comments on an event related to the increase of weekly PE sessions (e.g. an election promise from a political party to carry out this change if they come to power).

A summary of the included press reports is presented in Table 1; as well as the evaluation of the eight dichotomous items analysed in this study for each of them. Excluded press reports are listed in Supplementary Table 1.

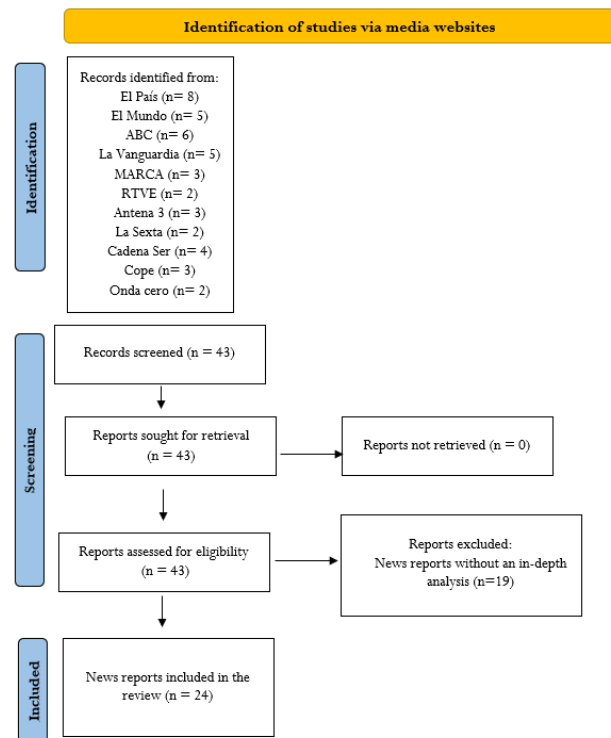


Figure 1. Flow diagram

Table 1. Summary of studies

El País									
https://elpais.com/mamas-papas/actualidad/2023-01-08/por-que-es-importante-aumentar-las-horas-de-educacion-fisica-en-los-colegios.html	1/2	Y	N	Y	Y	Y	Y	Y	4.5
https://elpais.com/elpais/2019/03/18/mamas_papas/1552903183_910660.html		Y	Y	Y	Y	Y	Y	Y	7
https://elpais.com/educacion/2022-03-06/la-gran-reivindicacion-de-la-educacion-fisica.html	1/2	N	Y	Y	Y	Y	N	Y	3.5
https://elpais.com/ccaa/2020/02/26/madrid/1582745440_456485.html		Y	Y	Y	N	Y	N	N	6
https://elpais.com/sociedad/2019/09/04/actualidad/1567622235_376596.html		Y	Y	Y	Y	Y	N	N	7
https://elpais.com/ccaa/2019/09/12/madrid/1568312952_339130.html		Y	Y	Y	N	N	Y	N	5
https://elpais.com/ccaa/2016/06/09/madrid/1465494861_540779.html		Y	Y	Y	Y	N	N	N	5
https://elpais.com/diario/2008/02/12/sociedad/1202770801_850215.html		Y	Y	Y	Y	N	N	Y	6
El Mundo									
https://www.elmundo.es/vida-sana/cuerpo/2021/06/08/60be2329fc6c83185b8b4691.html		Y	Y	Y	Y	Y	Y	N	7
ABC									
https://www.abc.es/familia/educacion/abci-tercera-hora-educacion-fisica-colegio-pildora-gratis-salud-202001080244_noticia.html		Y	Y	Y	Y	Y	Y	N	7
https://www.abc.es/familia/educacion/abci-medicos-familia-lamentan-ningun-plan-escolar-incremente-horas-educacion-fisica-202204100025_noticia.html?ref=https%3A%2F%2Fduckduckgo.com%2F		Y	Y	Y	Y	Y	Y	N	8
https://www.abc.es/espana/madrid/abci-madrid-aprueba-tercera-hora-educacion-fisica-colegios-y-apunta-hacia-cuarta-y-quinta-202001100031_noticia.html		Y	Y	Y	Y	Y	Y	N	7
La Vanguardia									
https://www.lavanguardia.com/vida/20211130/7900286/medicos-familia-reclaman-mas-horas-educacion-fisica-nuevo-curriculum.html		Y	Y	Y	Y	Y	N	Y	7
https://www.lavanguardia.com/vivo/mamas-y-papas/20190906/47194266969/mas-horas-gimnasia-escuelas.html		Y	Y	Y	Y	Y	Y	N	8
https://www.lavanguardia.com/local/aragon/20140524/54407251176/maestros-de-educacion-fisica-recogen-mas-de-10-000-firmas-en-rechazo-a-la-reduccion-de-horas-en.html		Y	Y	Y	Y	Y	N	N	6
MARCA									
https://www.marca.com/otros-deportes/2017/02/23/58aef17be2704efd2b8b4579.html		Y	Y	N	N	Y	Y	N	5
https://www.marca.com/blogs/espanasemueve/2020/02/05/la-region-de-murcia-aumentara-una-hora.html		Y	Y	Y	Y	N	N	N	5
RTVE									
https://www.rtve.es/play/audios/14-horas/ninos-necesitan-mas-horas-educacion-fisica/5377076/		Y	N	Y	Y	Y	Y	N	6
Antena3									
https://www.antena3.com/objetivo-bienestar-junior/noticias/deportistas-apuestan-mas-horas-educacion-fisica-colegios-combatir-obesidad-infantil_2016040600260.html		Y	Y	Y	Y	N	N	N	5
https://www.antena3.com/objetivo-bienestar-junior/noticias/mas-92000-ciudadanos-piden-hora-diaria-educacion-fisica-coles-combatir-obesidad-infantil_2017011300859.html		Y	N	N	Y	Y	N	N	4
Cadena Ser									
https://cadenaser.com/emisora/2019/11/14/radio_valencia/1573733254_430316.html		Y	Y	Y	N	N	N	N	4

COPE									
https://www.cope.es/actualidad/sociedad/noticias/los-medicos-familia-muestran-favor-aumento-horas-minimas-educacion-fisica-eso-bachillerato-20211130_1651947	Y	N	Y	Y	Y	N	Y	N	6
https://www.cope.es/emisoras/region-de-murcia/murcia-provincia/murcia---san-javier/informativos-en-murcia/noticias/consejeria-propone-implantar-una-hora-mas-educacion-fisica-musica-primaria-20200129_606606	Y	Y	Y	Y	N	N	N	N	5
OndaCero									
https://www.ondacero.es/programas/por-fin-no-es-lunes/podcast/entrevistas/la-educacion-fisica-debe-ser-una-asignatura-troncal_201911035dbebd410cf2e8dc5191bc14.html	Y	Y	Y	Y	Y	Y	N	N	7

Note: Yes (Y) = 1; No (N) = 0; Half true (1/2) = 0.5. *Item 8 is rotated (when "Y" = -1; when "N" = 1). 1. The focus on the importance of increasing the number of hours of PE is centred on a medical perspective. 2. The concepts of PE and exercise/physical activity are used as if they were synonymous. 3. The benefits of physical activity are attributed to the subject of PE in order to justify its relevance. 4. The word "obesity" ["obesidad"] is mentioned. 5. "Sedentary behaviour" ["sedentarismo"] is mentioned. 6. The World Health Organization (WHO) is quoted. 7. A physician is interviewed to argue in favour of increasing the number of PE hours from a medical perspective. 8. Educational aspects of PE are mentioned in depth to justify increasing the subject hours (not only as a complement to the benefits of physical exercise).

Proportion of press reports for each topic and year

Overall, a biomedical discourse predominated in arguing for more PE sessions per week (Table 2). The eight dichotomous items were identified in the press reports in a proportion (%) ranging from 71% to 96%; except for items 6 (i.e. the WHO is quoted) and 7 (i.e. a physician is interviewed to argue in favour of increasing the number of PE hours from a medical perspective), for which the percentages were 54% and 29% respectively, due to a low prevalence in the first years assessed. In the individual analysis of the dichotomous items, the highest percentage was found for the press reports focusing on the importance of increasing the number of PE hours from a medical perspective (96%). Notably, the lowest proportion was found for item 8 (i.e. educational aspects of PE are mentioned in depth to justify increasing the subject hours). Items 3 (i.e. the benefits of physical activity are attributed to the subject of PE in order to justify its relevance) and 4 (i.e. the word "obesity" ["obesidad"] is mentioned) were the next most identified prompts. As with items 6 and 7, item 5 (i.e. "Sedentary behaviour" ["sedentarismo"] is mentioned) has a lower proportion due to a low prevalence in the first years analysed (71%).

Table 2.

Proportion of press reports for each question and year (i.e. "how many of the total number of studies in each year included each of the items").

Items	2023	2022	2021	2020	2019	2017	2016	2014	2008	Total%
1.	½	1 ½	3	5	7	2	2	1	1	96%
2.	1	1	2	5	6	1	2	1	1	83%
3.	0	2	3	5	7	0	2	1	1	88%
4.	1	2	3	5	5	1	2	1	1	88%
5.	1	2	3	3	5	2	0	1	0	71%
6.	1	2	1	2	6	1	0	0	0	54%
7.	1	1	2	0	2	0	0	0	1	29%
8.	1	1	0	0	1	0	0	0	0	13%
Total _n	1	1	3	5	7	2	2	1	1	

Note: Dark grey: 0-33%; Grey: 33-66%; Light grey: 66-100%; 1: The focus on the importance of increasing the number of hours of PE is centred on a medical perspective; 2: The concepts of PE and exercise/physical activity are used as if they were synonymous; 3: The benefits of physical activity are attributed to the subject of PE in order to justify its relevance; 4: The word "obesity" ["obesidad"] is mentioned; 5: "Sedentary behaviour" ["sedentarismo"] is mentioned; 6: The World Health Organization (WHO) is quoted; 7: A physician is interviewed to argue in favour of increasing the number of PE hours from a medical perspective; 8: Educational aspects of PE are mentioned in depth to justify increasing the subject hours (not only as a complement to the benefits of physical exercise).

Discussion

The aim of this study was to analyse the reasons for an increase in the number of hours of PE from the point of view of the information provided by the mainstream media in Spain. This increase in the number of weekly PE classes is a historical demand in the Spanish educational panorama. For years, teachers of this subject have been demanding the need to increase the number of PE sessions per week for the effective development of pupils. As a result, many organisations have expressed their support for the proposal (COLEF Council, SEMEDE...). As it is a subject that in many cases represents the first and only approach to physical exercise among young people, medical assemblies have called for an increase in the number of PE hours per week with the aim of improving the health of young people (Sociedad Española de Medicina de Familia y Comunitaria, 2021). Obesity and sedentary lifestyles are issues of great relevance to public health. The WHO (2018) report on physical activity highlighted that physical inactivity is one of the main risk factors for mortality in the world. Moreover, 81% of adolescents (Guthold et al., 2020) do not reach minimum weekly physical activity levels. Consequently, a biomedical approach has been gaining traction to justify this demand as PE is seen as an ideal setting to increase physical activity levels of young people (Beale et al., 2021).

The analysis of the reasons found in all press reports of the main Spanish outlets to increase PE time identified elements of a biomedical visualisation of the subject. The focus under this paradigm is on the prevention of disease (specifically obesity), mainly through increased levels of physical activity. Several studies have reported associations between participation in physical activity during PE sessions and higher rates of compliance with minimum physical activity recommendations (Uddin et al., 2020). Specifically, one minute of physical activity during PE lessons was associated with approximately one-two minutes more physical activity throughout the day (Chen et al., 2014; Mooses et al., 2017). However, both studies also report that the average time spent in moderate-vigorous physical activity during PE lessons was less than 50%, with an average total time of 15.9 and 28.6 minutes, respectively. These results are in line with the findings of a recent review of systematic reviews which indicated that, although teachers could use more effective strategies to take advantage of the time avail-

able in each session (e.g., avoiding activities in which students wait in line, avoiding explanations of excessive length, etc.), students do not meet the 50% recommendation of moderate to vigorous physical activity during PE classes, regardless of country, school stage, gender, or measures of moderate to vigorous physical activity (Iglesias et al., 2023). This could be due to time spent on unavoidable tasks such as, for example, getting to the gym/playground, taking out the material, explaining the activities, or personal grooming time. Considering that children and adolescents (<18 years) should engage in at least 60 minutes of moderate to vigorous intensity physical activity each day and vigorous-intensity aerobic activities, as well as muscle and bone strengthening activities, at least three times per week (WHO, 2021), PE classes look to have only limited potential to have a direct effect on the percentage of youths achieving minimum weekly physical activity levels (regardless of whether two or three classes per week are conducted). However, this approach seems to have caught on among a portion of PE teachers who, in search of a solution to the pressing problem of sedentary behaviours, may focus their classes on physical fitness tests and activities that seek to increase physical activity levels "at all costs" (Cale & Harris, 2009; Romero-Chouza et al., 2021; Wong et al., 2021). However, the scientific literature indicates that these approaches may not be effective in increasing physical activity levels and may even promote negative experiences that are ultimately associated with lower levels of lifetime physical activity participation (Alfrey, 2023; Cardinal et al., 2013; Haverinen et al., 2022; Ladwig et al., 2018; Phillips et al., 2020). Major international organizations also seem to doubt this biomedical approach to PE. For example, UNESCO, in its guide for policy makers on quality PE, states the following:

With limited curriculum time allocation, PE alone cannot satisfy the physical activity needs of young people or address activity shortfalls, let alone achieve other significant outcomes. However, PE forms a foundation for positive patterns of behaviour and is the best way to access and systematically engage children and youth in a rounded and healthy lifestyle (McLennan & Thompson, 2015).

Again, considering the minimum weekly physical activity levels recommended for children and adolescents, PE time in the curriculum will be mostly insufficient to fill the physical activity deficits of young people regardless of whether two or three classes per week are devoted to this subject. As a consequence, multiple investigations point to a new approach to PE based on the intrinsic valuing of movement and the generation of meaningful experiences that support greater adherence to regular physical activity practice during leisure time and throughout life (Beni et al., 2017; Fletcher et al., 2021; Houser & Kriellaars, 2023). On the other hand, as UNESCO indicates (McLennan & Thompson, 2015), the subject could offer an ideal context for the approach of students to certain healthy habits that involve real and meaningful learning for the rest of their lives. However, complex issues such as childhood obesity

require a multifactorial approach that addresses the individual, the family, the physical environment, the social environment and social policy (Campbell, 2016). Therefore, the subject of PE, again, can exert a positive role in the lifestyle of young people, but it would be overly optimistic to think that, on its own, it can contribute to reducing childhood obesity rates. Therefore, this new approach to the subject towards valuing movement and generating meaningful experiences focuses on the physical, cognitive, affective and social development of the students and not towards meeting physical standards and guidelines to avoid non-communicable diseases (Kirk, 2018b). It will be then, through pursuing the goal of learning, that adherence to a healthy lifestyle will be fostered (Bailey et al., 2009). In this sense, the Meaningful PE framework could be of use for teachers to consider the main features of a student's meaningful experience when designing a class (Fletcher et al., 2021). Also, pedagogical models could be a good alternative since they offer a more inclusive and positive experience for all youngsters than traditional approaches (Kirk, 2019b). The scientific literature shows that pedagogical models are effective in improving students' learning in physical, cognitive, social and affective learning domains (Fernandez-Rio & Iglesias, 2024). In addition, they are generally effective in promoting higher levels of student motivation (Saiz-González et al., 2024a), as well as their interest in remaining physically active throughout their lives (Saiz-González et al., 2024b).

A post on one of the leading PE blogs, led by a university professor of PE, Sport and Physical Activity, conveys this line of thinking reflecting on the power of the subject:

PE is the place where all children and young people have the opportunity to learn about their bodies and human movement in a way that can contribute to finding meaning and expressing their own particular identity. We offer a way of developing knowledge of the world and understanding and relating to the world which is embodied, experiential and educative. This is what makes it unique, valuable and therefore powerful as no other subject has this as their central purpose. The outcomes that we attach to PE might be important to governments and society, but they are by-products of our central educative aim, not what the core of the subject should be built upon. (@ImSporticus, 2023).

With this educational approach in mind, we urge teachers and organizations to consider the educational benefits of the subject when demanding an increase in weekly PE classes. While this may not be so appealing to governments and the general population, we believe that claiming the pedagogical value of the subject for the proper development of students highlights the educational relevance of PE and explains why a greater number of weekly classes would be appropriate (González-Calvo et al., 2022). Educational benefits such as social (e.g. cooperation, personal responsibility, problem solving, empathy, self-regulation of learning), affective (e.g. self-esteem, self-concept, enjoyment) and cognitive improvements

(e.g. improved decision-making and skills performance) are key aspects that can be derived from PE classes. Together with physical benefits, the formative consequences of the subject make the call for more PE hours per week gain traction.

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Conclusions

Press reports in Spain present an incomplete view of the potential of PE. The discourse in favour of increasing the number of hours is mainly based on a biomedical perspective. There is, therefore, a lack of argumentation based on the educational evidence available in the literature. Consequently, it is suggested that a deeper and more comprehensive view of the multiple benefits of the subject should be conveyed to society. PE should not be relegated solely to its contribution to health in terms of physical activity. Hence, other no less relevant aspects related to cognitive, affective, social and personal dimensions should be highlighted. A more comprehensive public message, reinforced and supported by evidence from an educational, psychosocial and personal growth perspective, could help to re-situate the true status and importance of PE in children and adolescents' lives.

References

- Alfrey, L. (2023). An expansive learning approach to transforming traditional fitness testing in health and physical education: Student voice, feelings and hopes. *Curriculum Studies in Health and Physical Education*, 15(1), 24-39. <https://doi.org/10.1080/25742981.2023.2183477>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & BERA Physical Education and Sport Pedagogy Special Interest Group. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, 24(1), 1-27. <https://doi.org/10.1080/02671520701809817>
- Beale, N., Eldridge, E., Delextrat, A., Esser, P., Bushnell, O., Curtis, E., Wassenaar, T., Wheatley, C., Johansen-Berg, H., & Dawes, H. (2021). Exploring activity levels in physical education lessons in the UK: A cross-sectional examination of activity types and fitness levels. *BMJ Open Sport & Exercise Medicine*, 7(1), e000924. <https://doi.org/10.1136/bmjsem-2020-000924>
- Beni, S., Fletcher, T., & Ní Chróinín, D. (2017). Meaningful Experiences in Physical Education and Youth Sport: A Review of the Literature. *Quest*, 69(3), 291-312. <https://doi.org/10.1080/00336297.2016.1224192>
- Cale, L., & Harris, J. (2009). Fitness testing in physical education – a misdirected effort in promoting healthy lifestyles and physical activity? *Physical Education and Sport Pedagogy*, 14(1), 89-108. <https://doi.org/10.1080/17408980701345782>
- Campbell, M. K. (2016). Biological, environmental, and social influences on childhood obesity. *Pediatric Research*, 79(1), 205-211. <https://doi.org/10.1038/pr.2015.208>
- Capel, S., & Blair, R. (2019). *Debates in Physical Education*. Routledge.
- Cardinal, B. J., Yan, Z., & Cardinal, M. K. (2013). Negative Experiences in Physical Education and Sport: How Much Do They Affect Physical Activity Participation Later in Life? *Journal of Physical Education, Recreation & Dance*, 84(3), 49-53. <https://doi.org/10.1080/07303084.2013.767736>
- Chen, S., Kim, Y., & Gao, Z. (2014). The contributing role of physical education in youth's daily physical activity and sedentary behavior. *BMC Public Health*, 14(1), 110. <https://doi.org/10.1186/1471-2458-14-110>
- Encuesta general de medios. (2022). Entrega de resultados EGM 3ª ola 2022. *Asociación para la Investigación de Medios de Comunicación*. <https://www.aimec.es/blog/entrega-resultados-egm-3a-ola-2022/>
- Fernandez-Rio, J., García, S., & Ferriz-Valero, A. (2023). Selecting (or not) physical education as an elective subject: Spanish high school students' views. *Physical Education and Sport Pedagogy*. <https://doi.org/10.1080/17408989.2023.2256762>
- Fernandez-Rio, J., & Iglesias, D. (2024). What do we know about pedagogical models in physical education so far? An umbrella review. *Physical Education and Sport Pedagogy*, 29(2), 190-205. <https://doi.org/10.1080/17408989.2022.2039615>
- Fletcher, T., Chróinín, D. N., Gleddie, D., & Beni, S. (2021). *Meaningful Physical Education: An Approach for Teaching and Learning*. Routledge.
- González-Calvo, G., Otero-Saborido, F., & Hortigüela-Alcalá, D. (2022). Discussion of Obesity and Physical Education: Risks, Implications and Alternatives. *Apunts. Educación Física y Deportes*, 148, 10-16. [https://doi.org/10.5672/apunts.2014-0983.es.\(2022/2\).148.02](https://doi.org/10.5672/apunts.2014-0983.es.(2022/2).148.02)
- Guthold, R., Stevens, G. A., Riley, L. M., & Bull, F. C. (2020). Global trends in insufficient physical activity among adolescents: A pooled analysis of 298 population-based surveys with 1.6 million participants. *Lancet Child & Adolescent Health*, 4(1), 23-35. [https://doi.org/10.1016/S2352-4642\(19\)30323-2](https://doi.org/10.1016/S2352-4642(19)30323-2)
- Hastie, P. A. (2023). Sport Pedagogy Research and Its Contribution to the Rediscovery of Joyful Participation in Physical Education. *Kinesiology Review*, 12(1), 28-35. <https://doi.org/10.1123/kr.2022-0030>
- Hastie, P. A., & Casey, A. (2014). Fidelity in Models-Based Practice Research in Sport Pedagogy: A Guide for Future Investigations. *Journal of Teaching in Physical Education*, 33(3), 422-431. <https://doi.org/10.1123/jtpe.2013-0141>
- Haverinen, E. H., Elonheimo, H. M., Tolonen, H. K., Jousilahti, P. J., & Wennman, H. J. C. (2022). The effects of long-term physical activity interventions in communities: Scoping review in the Nordic countries. *Scandinavian Journal of Public Health*, 50(2), 272-286. <https://doi.org/10.1177/14034948211020599>
- Houser, N., & Kriellaars, D. (2023). "Where was this when I was in Physical Education?" Physical literacy enriched pedagogy in a quality physical education context. *Frontiers in Sports and Active Living*, 5, 1185680.

- Iglesias, D., Fernandez-Rio, J., & Rodríguez-González, P. (2023). Moderate-to-Vigorous Physical Activity in Physical Education: A Review of Reviews. *Journal of Teaching in Physical Education*, 42(4), 640-646. <https://doi.org/10.1123/jtpe.2022-0084>
- @ImSporticus. (2023, marzo 19). Some thoughts on the power of PE.... *Drowningintheshallow*. <https://drowningintheshallow.wordpress.com/2023/03/19/some-thoughts-on-the-power-of-pe/>
- Kirk, D. (2018a). *A new critical pedagogy for physical education in turbulent times: What are the possibilities?* (R. Pringle, H. Larsson, & G. Gerdin, Eds.; pp. 1-25). Routledge. <https://strathprints.strath.ac.uk/64016/>
- Kirk, D. (2018b). Physical education-as-health promotion: Recent developments and future issues. *Education and Health*, 36(3), 70-75.
- Kirk, D. (2019a). Government and physical education. En S. Capel & R. Blair (Eds.), *Debates in physical education* (2nd ed, pp. 3-17). Routledge. <https://doi.org/10.4324/9780429504365-1>
- Kirk, D. (2019b). *Prearity, Critical Pedagogy and Physical Education*. Routledge.
- Ladwig, M. A., Vazou, S., & Ekkekakis, P. (2018). "My Best Memory Is When I Was Done with It": PE Memories Are Associated with Adult Sedentary Behavior. *Translational Journal of the American College of Sports Medicine*, 3(16), 119. <https://doi.org/10.1249/TJX.0000000000000067>
- McLennan, N., & Thompson, J. (2015). *Educación física de calidad (EFC): Guía para los responsables políticos*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000231340>
- Mooses, K., Pihu, M., Riso, E.-M., Hannus, A., Kaasik, P., & Kull, M. (2017). Physical Education Increases Daily Moderate to Vigorous Physical Activity and Reduces Sedentary Time. *Journal of School Health*, 87(8), 602-607. <https://doi.org/10.1111/josh.12530>
- Otero-Saborido, F. M., Vázquez-Ramos, F. J., & González-Jurado, J. A. (2020). Análisis de la evaluación en los currículos de Educación Física en Secundaria. *Educación XXI*, 23(2), 259-282. <https://doi.org/10.5944/educxx1.25662>
- Pérez-Pueyo, Á., Hortigüela-Alcalá, D., Fernández-Fernández, J., Gutiérrez-García, C., & Santos, L. (2021). Más horas sí, pero ¿cómo implantarlas sin perder el enfoque pedagógico de la Educación Física? (More hours yes, but how can they be implemented without losing the pedagogical approach of Physical Education?). *Retos*, 39, 345-353. <https://doi.org/10.47197/retos.v0i39.80283>
- Phillips, S. R., Marttinen, R., Mercier, K., & Gibbone, A. (2020). Middle School Students' Perceptions of Physical Education: A Qualitative Look. *Journal of Teaching in Physical Education*, 40(1), 30-38. <https://doi.org/10.1123/jtpe.2019-0085>
- Romero-Chouza, Ó., Lago-Ballesteros, J., Toja-Reboredo, B., & González-Valeiro, M. (2021). Propósitos de la Educación Física en Educación Secundaria: Revisión bibliográfica (Purposes of Physical Education in Secondary Education: a bibliographic review). *Retos*, 40, 305-316. <https://doi.org/10.47197/retos.v1i40.80843>
- Saiz-González, P., Iglesias, D., & Fernández-Río, J. (2024a). Can Pedagogical Models Promote Students' Basic Psychological Needs in Physical Education? A Systematic Review and Meta-Analysis. *Quest*. <https://doi.org/10.1080/00336297.2024.2316146>
- Saiz-González, P., Iglesias, D., & Fernández-Río, J. (2024b). Pedagogical Models, Physical Activity and Intention to be Physically Active: A Systematic Review. *Quest*, 76(1), 39-53. <https://doi.org/10.1080/00336297.2023.2209734>
- Santos-Guerra, M. Á. (2011). *Una flecha en la diana: La evaluación como aprendizaje: 166*. Narcea Ediciones.
- Sargent, J. (2023). Two Fields, Overlapping Messages: Investigating the Related Concepts of Leisure Studies and Physical Education. *Quest*, 75(4), 295-309. <https://doi.org/10.1080/00336297.2023.2185159>
- Sociedad Española de Medicina de Familia y Comunitaria. (2021). *El Grupo de Trabajo en Actividad Física y Salud y el Programa de Actividades Preventivas y Promoción de la Salud, PAPP-semFYC, se posicionan a favor de un aumento de horas mínimas de Educación Física en Educación Secundaria Obligatoria (ESO), Bachillerato y Formación Profesional*. <https://www.semfyec.es/actividad-fisica-gobierno-comunicado-semfyec/>
- Stirrup, J., & Hooper, O. (Eds.). (2021). *Critical Pedagogies in Physical Education, Physical Activity and Health*. Routledge. <https://doi.org/10.4324/9781003003991>
- Uddin, R., Salmon, J., Islam, S. M. S., & Khan, A. (2020). Physical education class participation is associated with physical activity among adolescents in 65 countries. *Scientific Reports*, 10(1), 22128. <https://doi.org/10.1038/s41598-020-79100-9>
- Whitehead, M. (2019). What is the education in physical education? En S. Capel & R. Blair (Eds.), *Debates in Physical Education* (2nd ed., pp. 87-103). Routledge.
- WHO (2018). *Global action plan on physical activity 2018–2030: More active people for a healthier world*. World Health Organization. <https://apps.who.int/iris/handle/10665/272722>
- WHO. (2021). *Physical activity*. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>
- Wong, L. S., Gibson, A.-M., Farooq, A., & Reilly, J. J. (2021). Interventions to Increase Moderate-to-Vigorous Physical Activity in Elementary School Physical Education Lessons: Systematic Review. *Journal of School Health*, 91(10), 836-845. <https://doi.org/10.1111/josh.13070>

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