

Review

The Distinct Role of Physical Education in the Context of Agenda 2030 and Sustainable Development Goals: An Explorative Review and Suggestions for Future Work

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Abstract: Agenda 2030 is a universal call to action which emphasises that all sectors of society should mobilise to create an inclusive and equal society and improve the lives of people world-wide. Education, physical activity and sport are recognised as critical means to achieve the Sustainable Development Goals (SDGs); therefore, it makes sense that school physical education (PE) also has the potential to contribute to the visions set out by Agenda 2030. A critical question is how sustainability can be understood, framed and integrated in PE. In this explorative paper, we, therefore, performed a review regarding the distinct role of PE in the context of Agenda 2030 and its SDGs. The overall research question that guided this paper is as follows: what perspectives related to PE in the context of Agenda 2030 and its SDGs have been discussed in the research literature? To identify relevant papers, five electronic databases (Education Research Complete, ERIC, Education database, SportDiscus, and Scopus) were systematically searched with search strings developed in an effort to identify research that supports the SDGs. The search resulted in about 4300 papers published between 2015 and 2021. Three unique papers met the inclusion criteria. We conclude that, so far, Agenda 2030 is a largely unexplored area of research in the field of PE, and that more research is needed to understand how sustainability can be understood, framed and integrated in PE. Based on the findings, we conclude the paper by providing suggestions for future work.

Keywords: Agenda 2030; children and adolescents; physical education; school; sustainable development



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1. Introduction

Physical education (PE) is part of the compulsory school curriculum in many countries around the world. Although there are regional and national variations in terms of time allocation, core content, and resources, PE usually includes physical activity (PA), sports and movement education as well as health and lifestyle topics [1]. The educational benefits claimed for PE encompass not only physical domains, but also cognitive, social, and affective domains [2]. The PE classroom is typically characterised by PA, and the activities performed might promote learning of movement capability and promote life-long PA and choices for a healthy lifestyle [3–6]. In addition, PE arranges for opportunities to experience positive social interactions and cooperation [2,7,8].

Despite these potential educational benefits, research indicates that several critical issues are present within contemporary PE. For example, researchers have criticised the multi-activity-based PE curriculum [9] that sometimes follows conventional sport logic [10] and where a narrow set of sport-related activities seems legitimate [11]. In addition, some studies indicate that PE serves more as recreation than an environment for learning [10], and that PE teachers and pupils sometimes seem unaware of what they are expected to teach and learn, respectively [12,13]. The significance of the multi-activity-based curriculum has also been called into question, due to the presumed limited relevance for pupils beyond

PE [14,15]. Some researchers have, therefore, emphasised the necessity for PE teachers to work with innovation in relation to the PE curriculum by designing open tasks that can produce a wide range of educational outcomes [15].

Besides having limited relevance beyond PE, another critical issue is that contemporary PE seems to be an exclusionary and marginalising environment for some pupils. PE has a tendency to recognise pupils who possess idealised physicality and attitudinal dispositions informed by sports and performance [11]. The opportunity to be recognised in PE might, therefore, not only be dependent on previous experience from sports and performance, but also on other factors, such as gender, sexuality, disability, social class, and ethnicity [11].

Moreover, although health and lifestyle topics usually are included as part of the PE core content, it seems unclear how health should be understood and framed within PE [16,17]. Health seems predominately framed from a biomedical perspective, neglecting, for example, social and cultural aspects and alternative (salutogenic) perspective of health [16,18]. In spite of the growing research on environment exposures and positive effects on human health, health related to the environment is a subjugated discourse in the field of PE and less researched [18–21]. In a didactic sense, the biomedical perspective is mainly concerned with PA for health, and this might mean that increased PA equals improved health, suggesting that PE should arrange for opportunities for pupils to engage in PA. The alternative perspective, however, presents a different conception of health and well-being that is significantly broader than the biomedical perspective [16]. From the alternative perspective, it has been suggested that PE teachers should make arrangements for pupils to discuss different theoretical perspectives on health, learn about health (rather than merely present health-related information), and provide them with knowledge and skills to be critical of and reflective about health-related information [16]. Here, PE teachers are required to involve the pupils in the co-construction of their own learning [16]. Although both the biomedical and alternative perspective of health currently co-exist, it might be argued that the biomedical perspective dominates the contemporary PE culture. Hence, it might be critical to bridge the gap between the biomedical and alternative perspectives.

Some of the above-mentioned issues have been debated for several decades, yet PE seems to have remained highly resistant to change over time [9,22]. It is likely that several factors contribute to such resistance to change, including the fact that pre-service PE teachers tend to have vast experience from PA and sports [23,24]. The challenges that are present in contemporary PE might also be understood as a representation of the shortcomings in PE teacher education (PETE). Some research suggests that PETE might have limited impact in altering pre-service PE teachers' perception and ideas about PE [25]. It might also be argued that the preparations of pre-service PE teachers do not fully comply with the requirements and expectations placed on PE teachers in contemporary schools. To some extent, PE and PETE cultures, norms and values might also be taken for granted and seldom challenged by surrounding discourses [22,26]. At present, it is also unclear how sustainability is dealt with in PETE.

1.1. Agenda 2030 and Education, Physical Activity, Sport and Physical Education

In 2015, Agenda 2030 replaced the expired Millennium Development Goals. Agenda 2030 is a universal call to action which emphasises that all sectors of society should mobilise to create an inclusive and equal society and improve the lives of people worldwide. Based on global solidarity, Agenda 2030 calls for all countries and stakeholders to implement the action plan to create an inclusive and equal society to improve the lives of people globally. The United Nation has explicitly recognised education as a main driver to realise Agenda 2030 with its 17 Sustainable Development Goals (SDGs) and 169 targets (Figure 1) [27].

SUSTAINABLE DEVELOPMENT GOALS



Figure 1. Agenda 2030 and the 17 Sustainable Development Goals.

Education is claimed to have a potential to contribute to the sustainability challenges that humanity faces [28]. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the concept of education for sustainable development (ESD) aims at [29] (p. 20):

... encouraging the transformation of education so that it is able to contribute effectively to the reorientation of societies towards sustainable development. This requires a reorientation of education systems and structures, as well as a reframing of teaching and learning. ESD concerns the core of teaching and learning and should not be considered as an add-on to existing curriculum or educational practices.

Furthermore, it is suggested that ESD should rest on quality education, reorient existing education to address sustainable issues, increase public awareness of sustainability and provide training in this in all sectors [29]. In order to realise this, ESD need to address deep and enduring social and cultural changes [30].

In addition to education, several organisations and authorities have recognised PA and sports as critical means to achieve the SDGs. For example, in the Global Action Plan on Physical Activity 2018–2030, the World Health Organization (WHO) explicitly link PA to 13 SDGs (#2–5, #8–13, and #15–17), including good health and well-being (#3), gender equality (#5), reduced inequalities (#10), and sustainable cities and communities (#11) [31]. It is specified that, in addition to the health benefits of regular PA, “societies that are more active can generate additional returns on investment including a reduced use of fossil fuels, cleaner air and less congested, safer roads” [31] (p. 6). It is acknowledged that PA promotion requires a systems-based approach encompassing not only physically active people, but also physically active societies (positive social norms and attitudes) and environments (supportive spaces and places). Through direct and indirect pathways, “investing in policies to promote walking, cycling, sport, active recreation and play can contribute directly to achieving many of the 2030 sustainable development goals” [31] (p. 7).

In relation to sport, the heads of state and government and high representatives acknowledged in the political declaration for Agenda 2030 [27] that (p. 11):

Sport is also an important enabler of sustainable development. We recognize the growing contribution of sport to the realization of development and peace in its promotion of tolerance and respect and the contributions it makes to the empowerment of women and of young people, individuals and communities as well as to health, education and social inclusion objectives.

Acknowledging sports as a critical mean to achieve the SDGs led the United Nations Office on Sport for Development and Peace (UNOSDP) to suggest how sport can contribute to all the 17 SDGs [32]. In addition, Commonwealth has suggested that sport for development and peace can contribute to 6 (#3–5, #8, #11, and #16) of the 17 SDGs [33]. Despite the shared links between PA, sport and Agenda 2030, it should be noted that the terms PA and sport might differ in both meaning and scope. In their global action plan, WHO considered a broad definition of PA that encompassed walking, cycling, sports, and active forms of recreation [31]. While the UNOSDP did not provide any definition, Commonwealth defined sport as “all forms of physical activity that contribute to physical fitness, mental well-being and social interaction, such as play, recreation, organised or competitive sport, and indigenous sports and games” [33] (p. v). Despite these differences in meanings and scope of the term used, however, PA and sport are acknowledged as critical means to achieve at least some of the SDGs.

Given the possible implications of education, PA, and sport in relation to the SDGs, it makes sense that PE also have the potential to contribute to the visions set out by Agenda 2030. This also includes the connectedness between environment and health. As part of the OECD Future of Education and Skills 2030 project, specific attention was paid to the PE and health curriculum. The report Making Physical Education Curricula Dynamic and Inclusive for 2030 aligns with Agenda 2030 [34]. In the report, it is stated that “the effective development of competencies requires nurturing knowledge (i.e., content, concepts), skills, attitudes and values” [34] (p. 80), thus emphasising the need to move towards knowledge-rich, competence-based curricula. The implementation of the PE curricula should ensure inclusiveness for the diverse range of pupils in terms of gender, disability, social class, ethnicity, and sexuality, by choosing appropriate content and focus, as well as adequate forms of delivery [34].

1.2. The Present Paper

Although some previous papers have discussed PA and sport in relation to Agenda 2030, it makes sense to distinguish PA and sport from the field of PE. This is because policy and evidence chains vary and differ across PA, sport, and PE [35]. Here, we argue that the issues that exist in contemporary PE, as presented in the beginning of this paper, pose a number of challenges in relation to the visions set out in Agenda 2030 and its SDGs. To take on ESD and Agenda 2030 might offer a new departure point for the field of PE, but a critical question is how sustainability can be understood, framed and integrated in PE. Sustainability in education is often described as part of a whole-of-curricula or cross-curriculum approach touching on several learning areas, complementary and across subjects and are not subject specific [19,36]. To the best of our knowledge, there has, so far, been no attempt to perform a systematic search of the literature regarding the distinct role of PE in the context of Agenda 2030 and its SDGs. However, a summary of such papers would be interesting to the field of PE, as it might provide some suggestions on how PE can contribute to the visions set out by Agenda 2030.

In this explorative paper, we performed a review regarding the distinct role of PE in the context of Agenda 2030 and its SDGs. The overall research question that guided this paper is as follows: what perspectives related to PE in the context of Agenda 2030 and its SDGs have been discussed in the research literature? Based on the findings, we conclude the paper by providing suggestions for future work.

2. Materials and Methods

2.1. Systematic Search

In this explorative paper, our ambition was to include all available literature in the field. Guided by the principles of the PRISMA statement [37], we used what characterises a systematic literature review, namely, a systematic search in multiple electronic databases with comprehensive search strings to identify relevant papers. Papers were then selected based on inclusion criteria [38,39].

2.1.1. Electronic Databases

Five electronic databases (Education Research Complete, ERIC, Education database, SportDiscus, and Scopus) were systematically searched to identify relevant papers. These electronic databases were selected, as they, together, cover education sciences (Education Research Complete, ERIC, and Education database), various aspects of sport and exercise sciences (SportDiscus), and social sciences (Scopus).

The search was conducted in March 2021 with support from two university librarians. The comprehensive search strings used were previously developed by Jayabalasingham, Boverhof, Agnew, and Klein in an effort to identify research that supports 16 SDGs (#1–16) [40] (no search string was developed for the SDG Partnerships for the goal, #17). The process of developing these search strings is available online (<https://data.mendeley.com/datasets/87txkw7khs/1>, accessed on 1 March 2021). As an example, the search string for the SDG Quality education (#4) is available in Appendix A (Table A1). Furthermore, to identify papers relevant for PE, the term “physical education” was added to each search string used.

Moreover, the search strings developed by Jayabalasingham et al. were supplemented with a general search. The general search was developed with support from the two university librarians and included the terms “Sustainability”, “Agenda 2030”, “Millennium Development Goals”, and “physical education” (see search string in Appendix A, Table A1). The term “Millennium Development Goals” was included in the search string, as these goals were replaced by Agenda 2030 in 2015.

All searches were limited to title, abstract and keywords, and English language documents published in peer-review journals, but no date limits were added.

The search result for each SDG was exported from the four electronic databases into EndNote (version X9, Clarivate Analytics) software for managing and citing the references. This resulted in 85 individual groups in the EndNote library ($n = 5$ groups for each of the 16 SDGs, in addition to $n = 5$ groups for the general search). Duplicates within each SDG were identified and removed through the EndNote system and by manually checking the imported references. Since Agenda 2030 was set by the United Nations General Assembly in 2015, references published between 2015 and 2021 were sorted, selected and moved to a specific group for each SDG, leaving a total of 17 groups ($n = 1$ group for each of the 16 SDGs, and $n = 1$ group for the general search).

2.1.2. Selection of Papers and Data Extraction

The inclusion criteria were formulated using the Population (P), phenomenon of Interest (I), and Context (Co) (PICo) framework [41]. In terms of Population (P), we included papers dealing with pupils and students from all educational levels, such as primary and secondary education, and higher education. The papers were also required to discuss ideas, such as concepts, viewpoints and issues, related to the distinct role of PE in the context of Agenda 2030 and any of the SDGs (phenomenon of Interest, I). The Context (Co) was PE. In practice, this meant that we selected and extracted papers that explicitly (i) refer to PE and Agenda 2030 and/or any of the SDGs in the title or abstract, and (ii) discussed ideas related to the distinct role of PE in the context of Agenda 2030 (how PE can contribute to the visions set out by Agenda 2030). We omitted papers with a broader focus, such as those only paying attention to PA and sports in relation to Agenda 2030 and any of the SDGs. In addition to these inclusion criteria, all papers were required to be published

in a peer-reviewed English-language journal. Here, we were permissive in terms of type of paper and included original contribution (observational or experimental studies), different types of reviews, and position and theoretical papers, as well as commentaries. However, we excluded books, book chapters, and conference papers.

After we had completed our independent selection of papers, we met and compared them. Full-text copies of all potentially relevant papers were retrieved and reviewed for eligibility; we included those that met the above inclusion criteria. Any disagreements during the process were discussed until we reached consensus. Finally, we manually checked the reference lists of all the papers included to search for additional papers of relevance. The flow of the process from the systematic search to the final number of papers selected for inclusion is illustrated in a PRISMA flowchart.

Given the heterogeneity in terms of study design and scope, we could not perform a meta-analysis or assess publication bias. Moreover, since only three papers were selected for inclusion, we undertook a narrative analysis. In doing so, we descriptively analysed the papers, and extracted the following information to a table: (1) citation details; (2) aim (of relevance for the present paper); (3) type of paper; and (4) main findings.

Since we allowed various types of papers to be selected for inclusion, we assessed the methodological quality (risk of bias) of the included papers, using two different assessment tools. The Scale for the Assessment of Narrative Review Articles (SANRA) was used to assess the methodological quality of the review selected for inclusion. SANRA includes six items scored with either 0 points (low quality), 1 point (intermediate quality) or 2 points (high quality), with the maximum score being 12 points [42]. Examples of areas covered in SANRA are “Statement of concrete aims of formulation of questions”, “Description of the literature search”, and “Scientific reasoning”. Furthermore, we used the Critical Appraisal Skills Programme (CASP) tool for qualitative research to assess the methodological quality of the case study selected for inclusion [43]. The CASP includes 10 items for the assessment of methodological quality. After assessing each item, the answered could be marked by a yes, no, or cannot tell, where we gave 1 point if the assessment could be confirmed with a yes. Examples of items are “Was there a clear statement of the aims of the research?”, “Was the research design appropriate to address the aims of the research?”, and “Is there a clear statement of findings?”. The methodological quality of the third paper was not assessed, as it was an introductory article to a special issue.

We independently assessed the methodological quality of the two papers included, and compared the assessments; any disagreements during the process were discussed until we reached consensus.

3. Results

3.1. Results from the Systematic Search

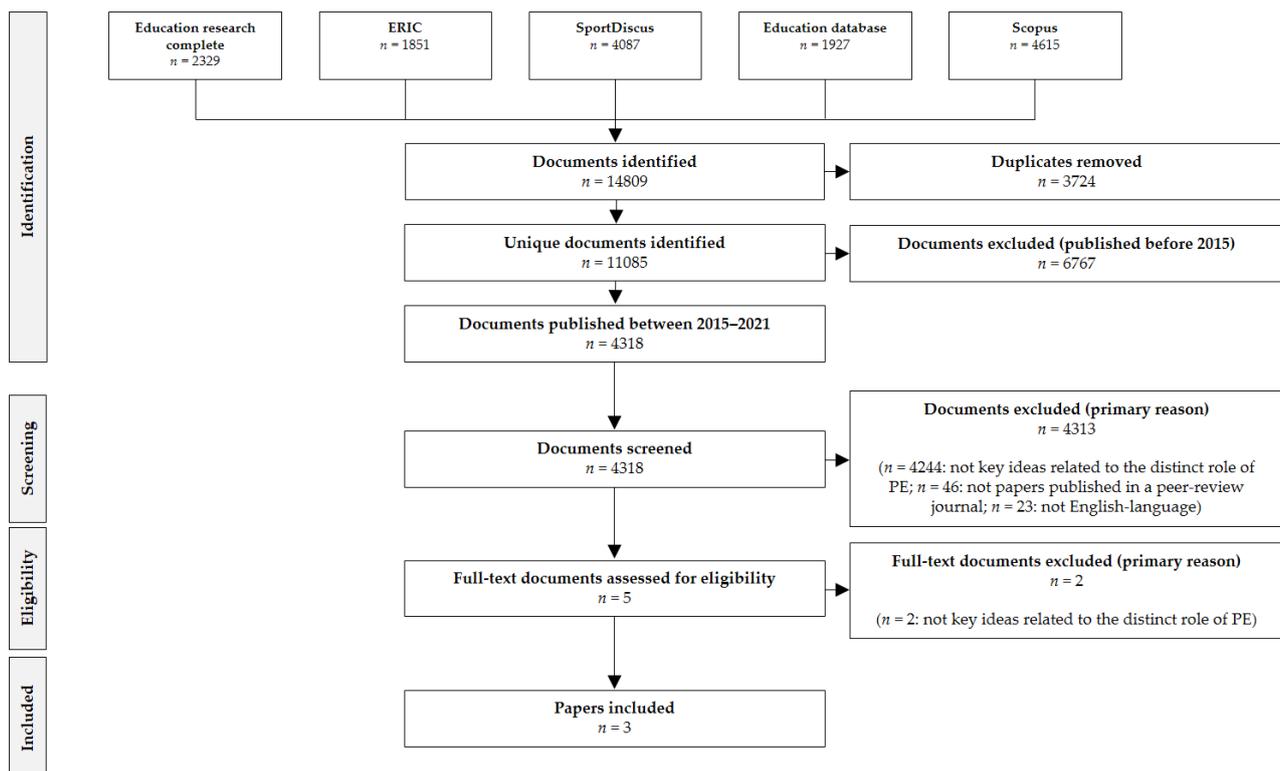
The results from the systematic search in the five electronic databases and the number of included papers is presented in Table 1. The PRISMA flowchart is available in Figure 2. In total, the systematic search resulted in more than 11,000 unique papers across the 16 SDGs and the general search. Of these, about 4300 papers were published between 2015 and 2021.

Our first finding was that the number of unique papers (after removing duplicates) varied significantly across the 16 SDGs, ranging from 1 to 2231 papers (see Figure 3 and Table 1). For example, the SDGs clean water and sanitation (#6), responsible consumption and production (#12), climate action (#13), and life below water (#14) resulted each in fewer than 10 unique papers. In contrast, the SDGs good health and well-being (#3) and quality education (#4) resulted in 2231 and 997 unique papers, respectively. Figure 4 show the proportion of papers published between 2015 and 2021 captured by the general search that included the terms “Sustainability”, “Agenda 2030”, “Millennium Development Goals”, and “physical education”. According to this search string, there was a gradual increase in the number of papers identified from 10% in 2015 to 24% in 2020. The exception was 2021 (5%), and this was expected, given that the systematic search was conducted in March 2021.

Table 1. Results from the systematic literature search in the electronic databases. See Supplementary Materials (Table S1) for search strings used when performing the systematic literature search.

	Electronic Database (<i>n</i> Papers)					Selection (<i>n</i> Papers)		
	Education Research Complete	ERIC	SportDiscus	Education Database	Scopus	Unique (Duplicates Removed)	Published between 2015 and 2021	Included *
#1—No poverty	25	26	40	20	6	75	33	0
#2—Zero hunger	9	0	9	4	33	46	17	0
#3—Good health and well-being	1325	824	2259	1299	3033	6523	2231	0
#4—Quality education	571	694	817	315	629	2226	997	1
#5—Gender equality	86	86	157	56	138	346	124	0
#6—Clean water and sanitation	0	0	0	0	3	3	1	0
#7—Affordable and clean energy	5	2	16	2	49	68	17	0
#8—Decent work and economic growth	14	13	35	19	51	110	56	0
#9—Industry, innovation and infrastructure	0	1	1	0	16	16	10	0
#10—Reducing inequality	33	33	57	44	69	146	77	1
#11—Sustainable cities and communities	15	7	37	11	56	104	49	0
#12—Responsible consumption and production	3	1	7	1	4	13	6	0
#13—Climate action	41	43	59	38	88	143	65	0
#14—Life below water	2	1	4	1	11	17	7	0
#15—Life on land	1	0	10	2	8	20	7	0
#16—Peace, justice, and strong institutions	96	80	176	16	226	431	175	0
General search	103	40	403	99	195	798	446	3

Notes: The following limits were used when performing the systematic literature search: Education research complete: peer-review, TI AB SU KW; ERIC: peer-review, TI AB SU KW DE; SportDiscus: peer-review, TI AB SU KW; Education database: peer-review TI AB all indexing. * In total, three papers were included but there were overlapping papers from the searchers for the SDGs quality education (#4), reducing inequality (#10), and the general search (“Sustainability”, “Agenda 2030”, “Millennium Development Goals”, and “physical education”).

**Figure 2.** PRISMA flowchart.

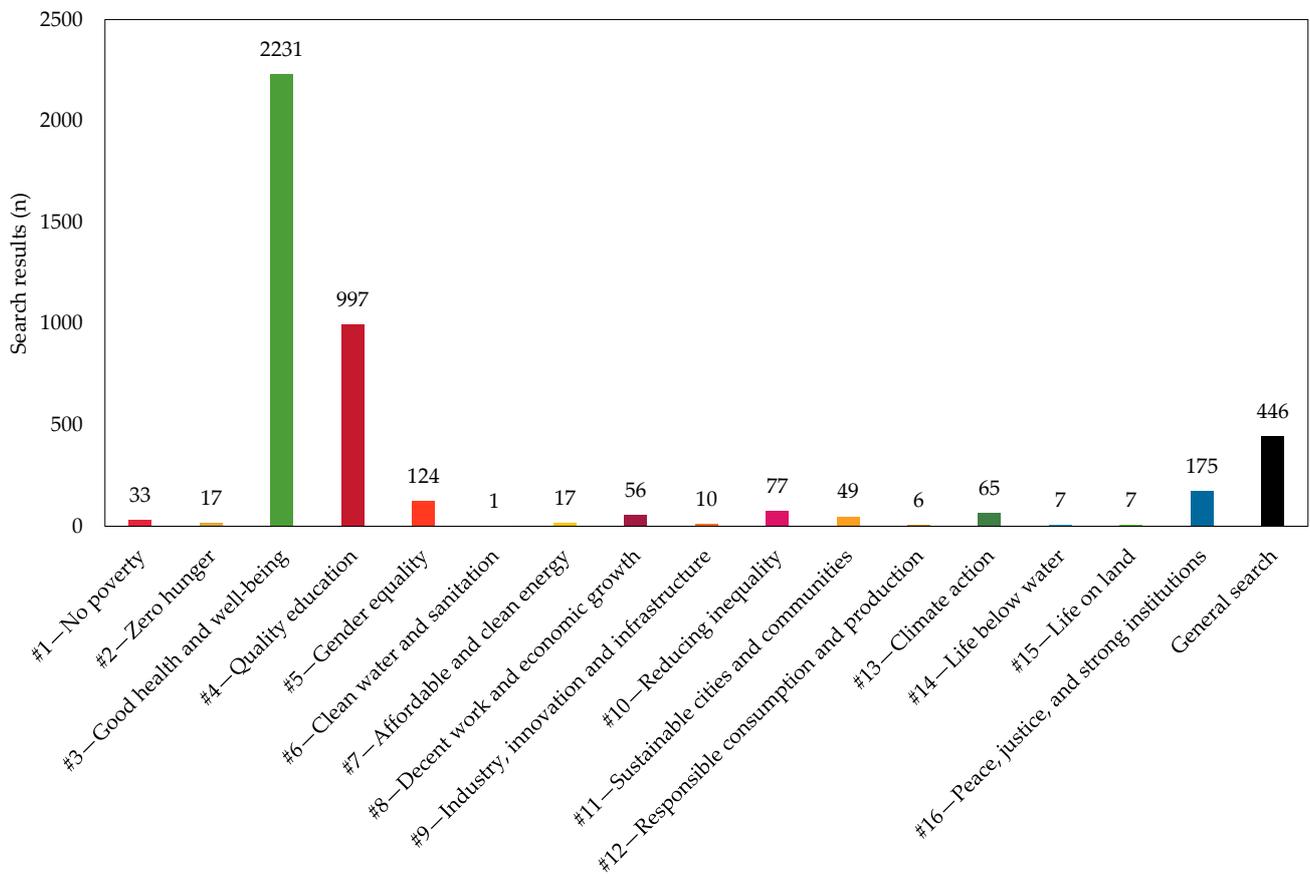


Figure 3. Total number of unique papers published between 2015 and 2021 for each sustainable development goal and the general search. See Table 1 for additional details.

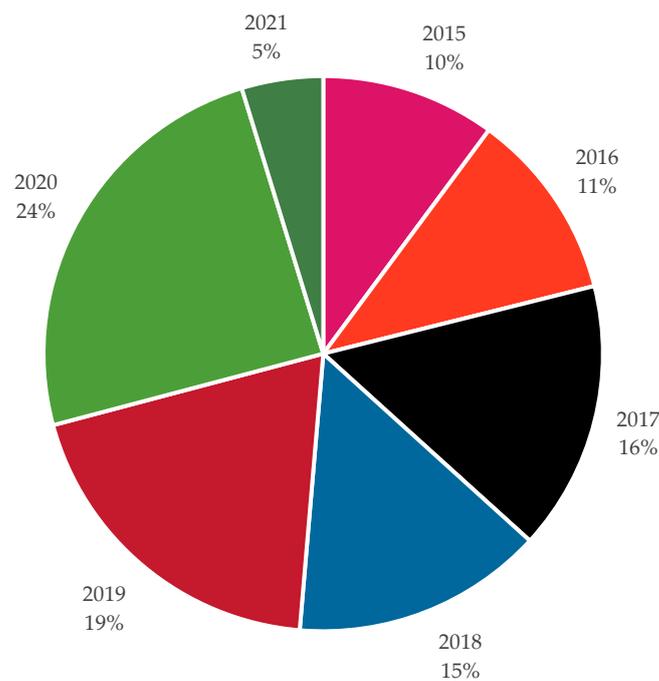


Figure 4. The proportion of papers published between January 2015 and March 2021 (general search: “Sustainability”, “Agenda 2030”, “Millennium Development Goals”, and “physical education”).

Our second finding was that, in total, three unique papers met the inclusion criteria; one paper was a review [44], one a case study [45], and one an introductory article to a special issue [46]. Furthermore, no additional paper was identified when we manually checked the reference lists of the three papers.

Only the SDGs quality education (#4) and reducing inequality (#10) resulted in papers eligible for inclusion. Furthermore, all of the papers included were retrieved from the general search that included the terms “Sustainability”, “Agenda 2030”, “Millennium Development Goals”, and “physical education”. In the next section, we present the three papers selected for inclusion.

3.2. Papers Selected for Inclusion

The three papers selected for inclusion are summarised in Table 2. The methodological quality of the two papers assessed were moderate. In the first paper, Baena-Morales et al. (methodological quality: 9/12) performed a critical review to analyse and select the specific SDGs that can be implemented in the area of PE, and how these specific goals could be related to different PE practice-based models proposed in the previous literature [44]. Three institutional documents that had related PE to specific SDGs were analysed. These were the Ibero-American Sports Council; Ministers and Senior Officials Responsible for Physical Education and Sport; and Commonwealth. The authors found that PE had been related to 10 SDGs (#3–5, #8, #10–13, #16–17).

Table 2. Overview of the papers selected for inclusion.

Citation Details	Aim	Type of Paper	Main Findings
Baena-Morales et al. [40]	To analyse and select the specific SDGs that can be implemented in the area of PE, and to relate these specific goals to the different PE practice-based models.	Critical review.	Of the 169 specific targets proposed in the SDGs, the authors concluded that 24 (14%) could be worked on in PE. These targets involved the following eight SDGs: good health and well-being (#3), quality education (#4), gender equality (#5), decent work and economic growth (#8), reducing inequality (#10), responsible consumption and production (#12), climate action (#13), and peace, justice, and strong institutions (#16). The authors, furthermore, presented a proposal for the relationship between these 24 targets and PE practice-based models as follows: content of curriculum model ($n = 12$ targets), cooperative learning model ($n = 10$ targets), personal and social responsibility model ($n = 9$ targets), adventure education model ($n = 7$ targets), self-construction material model ($n = 6$ targets), sports education model ($n = 2$ targets), and health education model ($n = 1$ target).
Dudley and Cairney [42]	To explore the concept of physical literacy, and how a special issue on physical literacy is addressing a range of UN agenda initiatives, including the UNESCO Quality PE Guidelines for Policymakers, and the UN 2030 SDGs.	Introductory to special issue.	In the context of a special issue on physical literacy, the authors present previous literature dealing with the importance of a quality pedagogy and the complex interactions of contemporary learning science’s impact on the construct and conceptualisation of physical literacy. In addition, how this will be critical if society and its educational institutions are to make any headway in addressing the SDGs. They suggest that physical literacy is the foundation of a quality PE agenda, and are currently related to notions of physical, affective, cognitive, and social learning that aligns with the SDG quality education (#4).

Table 2. Cont.

Citation Details	Aim	Type of Paper	Main Findings
Lynch [41]	To provide insights into cross-sector partnerships, identified as essential for the implementation of the SDGs.	Case study.	A cross-sector partnerships program aimed to implement the SDGs good health and well-being (#3) and quality education (#4) by improving PETE through stronger partnerships between schools and universities, and a greater integration of theory and practice. The program that involved pre-service teachers who taught PE lessons to pupils in a low socio-economic rural area was successful and deemed significant to educators and governments who are challenged to rethink their connections between university courses, school experiences and community health promotion.

Abbreviations: PE, physical education; PETE, physical education teacher education; SDG, sustainable development goal; UN, United Nations; UNESCO, United Nations Educational, Scientific and Cultural Organization.

Moreover, Baena-Morales et al. found that 14% of the targets ($n = 24$ out of $n = 169$ targets) could be worked on in PE. These targets involved the following eight SDGs: good health and well-being (#3), quality education (#4), gender equality (#5), decent work and economic growth (#8), reducing inequality (#10), responsible consumption and production (#12), climate action (#13), peace, justice, and strong institutions (#16) [44]. After analysing and selecting the specific targets that could be implemented in the area of PE, the authors also presented a proposal for the relationship between the selected targets and PE practice-based models. In doing so, they found that most targets could be worked on using the content of curriculum model, the cooperative learning model, and the personal and social responsibility model. They, furthermore, suggested that the health education model only could be used to work on one target. In addition to these PE practice-based models, the authors stressed that the content covered in the PE curriculum also allows the development of different targets.

In the second paper, Lynch (methodological quality: 7/10) aimed to provide insights into cross-sector partnerships, identified as essential for the implementation of the SDGs [45]. The program that involved pre-service teachers who taught PE lessons to pupils in a low socio-economic rural area was successful and deemed significant to educators and governments who are challenged to rethink their connections between university courses, school experiences and community health promotion.

The third paper was an introductory article to a special issue about the concept of physical literacy written by Dudley and Cairney [46]. They explored the concept of physical literacy, and how a special issue on physical literacy is addressing a range of UN agenda initiatives, including the UNESCO Quality PE Guidelines for Policymakers, and the United Nations 2030 SDGs. With references to the UNESCO Quality Physical Education Guidelines for Policy Makers, it was stated that physical literacy is included in the UN educational literature as the foundation of a quality PE agenda that aligns with the SDG quality education (#4).

4. Discussion

In this explorative paper, we performed a review regarding the distinct role of PE in the context of Agenda 2030 and its SDGs. Of the approximately 4300 papers published between 2015 and 2021, we found few unique papers regarding the distinct role of PE in the context of Agenda 2030 and its SDGs. This indicate that, so far, Agenda 2030 is a largely unexplored area of research in the field of PE. The fact that only three papers were included, and that only two SDGs generated papers eligible for inclusion, was unexpected. For example, despite the search resulting in 2231 papers, the SDG good health and well-being (#3) did not result in any included papers.

Together, the three included papers provide some suggestions on how PE can contribute to the visions set out by Agenda 2030. While the three papers indicate that PE relate to the SDGs good health and well-being (#3) and quality education (#4), Baena-Morales et al. suggested that targets from another six SDGs (#5, #8, #10, #12–13, and #16), could be worked on in PE [44]. As suggested by two of the papers, these SDGs and targets could benefit from using different PE practice-based models (e.g., the content of curriculum model, cooperative learning model, and personal and social responsibility model), or by considering physical literacy as the foundation of a quality PE agenda, respectively [44,45].

During the process of reading and checking the titles and abstracts against our inclusion criteria, we excluded papers that together represented three broad themes. The search result for the SDG good health and well-being (#3) resulted in papers on the adoption of sustainable healthy living as a theme. This theme included papers about the promotion of PA and a healthy body weight (e.g., through reduction of body mass index, BMI), or sustainable implementation of health-related interventions. The search result for the SDG quality education (#4) resulted in several papers with sports events or sport policies as a theme. Another theme found in relation to the SDG quality education (#4) were papers with a whole-school and interdisciplinary curricula approach.

Furthermore, we acknowledged that, despite not explicitly addressing the link between PE and the SDGs, a great amount of research within the area of PE has implications for issues related to Agenda 2030. For example, research show that PE might contribute to the promotion of various aspects of health [2,7,8]. A number of papers have also discussed didactic aspects of health [16], as well as challenges related to the social justice agenda and inclusion [47,48].

4.1. Suggestions on Future Work

As mentioned in the beginning of this paper, several organisations and authorities have recognised PA and sports as critical means to achieve the SDGs. Despite this, it makes sense to distinguish PA and sport from the field of PE since policy and evidence chains vary and differ across PA, sport, and PE. Given that few papers were identified, however, we can only assume that the role of PE in the context of Agenda 2030 and the SDGs has received little attention in research. This signals both a possibility and a need to work with the conceptualisation of sustainability and the SDGs in relation to the field of PE. We encourage both researchers and practitioners to critically reflect on what it can mean to take on educative aspects of sustainable development in PE. From our point of view, this could be one way to call into question existing cultures and practices. Ultimately, this could both challenge and enable a re-thinking and re-orientation of PE practices and open up for the enabling of new teaching and learning practices regarding the interconnection of environment and health, leaving the image of environment just as a backdrop.

To start to think about and include SDGs in relation to PE practices offers ways to explore the complexity of sustainability and the conceptualisations of multiple understandings of what creates health and well-being. Such an approach could challenge the biomedical risk approach to health and create space for collective and relational understandings of health [19]. As part of this, traditional teaching and learning practices can also be challenged by innovative ways to teach PE. This might include, but is by no means limited to, using information and communication technology in the form of flipped learning method [49] together with student-centred learning [50].

Future studies should pose questions, such as what does Agenda 2030 and SDGs mean in a multidisciplinary discipline like PE, and how can sustainability be understood, integrated and converted into pedagogical strategies in PE and PETE practices? These questions could be explored through several research designs, including original contribution, such as observational or experimental studies, position and theoretical papers, and commentaries.

4.2. Strengths and Limitations

This review has both strengths and limitations. In terms of strengths, we systematically searched five electronic databases with comprehensive search strings previously developed in an effort to identify research that supports the SDGs. These search strings were also supplemented with a general search of papers related to PE, Agenda 2030 and its SDGs. We also checked the reference lists of all the papers included papers to search for additional papers of relevance.

In terms of limitations, all searches were limited to English language documents published in peer-reviewed journals. This possibly introduced a language bias, as there may exist papers that discuss PE in the context of Agenda 2030 and its SDG in other languages. During the process of reviewing and checking the titles and abstracts, a few papers of potential interest were excluded since they were written in other languages (e.g., Chinese and Portuguese). It should also be noted that our searchers generated some book chapters that discuss how PE might contribute to issues related to sustainable development [51,52]. Another limitation is that few papers were selected for inclusion. However, the number of published papers related to PE, Agenda 2030 and its SDGs might increase in the future. To keep up with the published literature, an update of this review might be necessary in the future.

5. Conclusions

This review focused on the distinct role of PE in the context of Agenda 2030 and its SDGs. Our main finding was that few unique papers have provided suggestions on how PE can contribute to the visions set out by Agenda 2030. We conclude that, so far, Agenda 2030 is a largely unexplored area of research in the field of PE, and that more research is needed to understand how sustainability can be understood, framed and integrated in PE. In this paper, we have also provided some suggestions for future work.

Supplementary Materials: The following are available online at <https://www.mdpi.com/article/10.3390/su132111900/s1>, Table S1: Search strings used when performing the systematic literature search in the electronic databases Education Research Complete, ERIC, SportDiscus, Education database, and Scopus.

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Appendix A

Table A1. The search string used for the SDG Quality education (#4), and the search string used for the general search, when performing the systematic literature search in the electronic databases Education Research Complete, ERIC, SportDiscus, Education database, and Scopus.

Sustainable Development Goals	Search String
#4—Quality education	<p>TI (((school OR education OR educational) AND ("school attendance" OR "school enrollment" OR "school enrolment" OR "inclusive education" OR "educational inequality" OR "education quality" OR "educational enrolment" OR "educational enrollment" OR "adult literacy" OR "numeracy rate" OR "educational environment" OR "educational access" OR ("development aid" AND "teacher training") OR "early childhood education" OR "basic education" OR "affordable education" OR "educational financial aid" OR "school safety" OR "safety in school" OR ("learning opportunities" AND ("gender disparities" OR empowerment)) OR ("learning opportunity" AND ("gender disparities" OR empowerment)) OR "youth empowerment" OR "women empowerment" OR "equal opportunities" OR "child labour" OR "child labor" OR "discriminatory" OR "educational inequality" OR "educational gap" OR ("poverty trap" AND "schooling") OR "special education needs" OR "inclusive education system" OR ("schooling" AND ("gender disparities" OR "ethnic disparities" OR "racial disparities")) OR "education exclusion" OR "education dropouts" OR "global citizenship" OR "sustainable development education" OR "environmental education" OR "education policy" OR "educational policies" OR "international education" OR "education reform" OR ("educational reform" AND "developing countries") OR "educational governance" OR ("developing countries" AND "school effects") OR "education expenditure" OR "foreign aid" OR ("teacher training" AND "developing countries") OR "teacher attrition")) NOT "health literacy") OR SU (((school OR education OR educational) AND ("school attendance" OR "school enrollment" OR "school enrolment" OR "inclusive education" OR "educational inequality" OR "education quality" OR "educational enrolment" OR "educational enrollment" OR "adult literacy" OR "numeracy rate" OR "educational environment" OR "educational access" OR ("development aid" AND "teacher training") OR "early childhood education" OR "basic education" OR "affordable education" OR "educational financial aid" OR "school safety" OR "safety in school" OR ("learning opportunities" AND ("gender disparities" OR empowerment)) OR ("learning opportunity" AND ("gender disparities" OR empowerment)) OR "youth empowerment" OR "women empowerment" OR "equal opportunities" OR "child labour" OR "child labor" OR "discriminatory" OR "educational inequality" OR "educational gap" OR ("poverty trap" AND "schooling") OR "special education needs" OR "inclusive education system" OR ("schooling" AND ("gender disparities" OR "ethnic disparities" OR "racial disparities")) OR "education exclusion" OR "education dropouts" OR "global citizenship" OR "sustainable development education" OR "environmental education" OR "education policy" OR "educational policies" OR "international education" OR "education reform" OR ("educational reform" AND "developing countries") OR "educational governance" OR ("developing countries" AND "school effects") OR "education expenditure" OR "foreign aid" OR ("teacher training" AND "developing countries") OR "teacher attrition")) NOT "health literacy") OR AB (((school OR education OR educational) AND ("school attendance" OR "school enrollment" OR "school enrolment" OR "inclusive education" OR "educational inequality" OR "education quality" OR "educational enrolment" OR "educational enrollment" OR "adult literacy" OR "numeracy rate" OR "educational environment" OR "educational access" OR ("development aid" AND "teacher training") OR "early childhood education" OR "basic education" OR "affordable education" OR "educational financial aid" OR "school safety" OR "safety in school" OR ("learning opportunities" AND ("gender disparities" OR empowerment)) OR ("learning opportunity" AND ("gender disparities" OR empowerment)) OR "youth empowerment" OR "women empowerment" OR "equal opportunities" OR "child labour" OR "child labor" OR "discriminatory" OR "educational inequality" OR "educational gap" OR ("poverty trap" AND "schooling") OR "special education needs" OR "inclusive education system" OR ("schooling" AND ("gender disparities" OR "ethnic disparities" OR "racial disparities")) OR "education exclusion" OR "education dropouts" OR "global citizenship" OR "sustainable development education" OR "environmental education" OR "education policy" OR "educational policies" OR "international education"</p>

Table A1. Cont.

	Search String
#4—Quality education	OR “education reform” OR (“educational reform” AND “developing countries”) OR “educational governance” OR (“developing countries” AND “school effects”) OR “education expenditure” OR “foreign aid” OR (“teacher training” AND “developing countries”) OR “teacher attrition”) NOT “health literacy”) OR KW (((school OR education OR educational) AND (“school attendance” OR “school enrollment” OR “school enrolment” OR “inclusive education” OR “educational inequality” OR “education quality” OR “educational enrolment” OR “educational enrollment” OR “adult literacy” OR “numeracy rate” OR “educational environment” OR “educational access” OR (“development aid” AND “teacher training”) OR “early childhood education” OR “basic education” OR “affordable education” OR “educational financial aid” OR “school safety” OR “safety in school” OR (“learning opportunities” AND (“gender disparities” OR empowerment)) OR (“learning opportunity” AND (“gender disparities” OR empowerment)) OR “youth empowerment” OR “women empowerment” OR “equal opportunities” OR “child labour” OR “child labor” OR “discriminatory” OR “educational inequality” OR “educational gap” OR (“poverty trap” AND “schooling”) OR “special education needs” OR “inclusive education system” OR (“schooling” AND (“gender disparities” OR “ethnic disparities” OR “racial disparities”)) OR “education exclusion” OR “education dropouts” OR “global citizenship” OR “sustainable development education” OR “environmental education” OR “education policy” OR “educational policies” OR “international education” OR “education reform” OR (“educational reform” AND “developing countries”) OR “educational governance” OR (“developing countries” AND “school effects”) OR “education expenditure” OR “foreign aid” OR (“teacher training” AND “developing countries”) OR “teacher attrition”) NOT “health literacy”) AND “physical education”
General search	
Sustainability, AGENDA 2030 and Millennium Development Goals	Education research complete: “physical education” AND (sustainab* OR “agenda 2030” OR “Millennium Development Goals”) Eric: “physical education” AND (sustainab* OR “agenda 2030” OR “Millennium Development Goals”) SportDiscus: “physical education” AND (sustainab* OR “agenda 2030” OR “Millennium Development Goals”) Education database: noft(“physical education” AND (sustainab* OR “agenda 2030”)) Scopus: TITLE-ABS-KEY (“physical education” AND (sustainab* OR “agenda 2030” OR “Millennium Development Goals”))

Note: The original search string was used for the SDG good health and well-being (#3). The process of developing the search strings used for SDG #1–16 is available online: <https://data.mendeley.com/datasets/87txkw7khs/1> (accessed on 1 March 2021).

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