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Physical Education Pedagogies for Health

EDITED BY
LORRAINE CALE AND JO HARRIS



Physical Education Pedagogies for Health

This book focusses on health within physical education (PE) and specifically on PE pedagogies for health. It gives practitioners and students the knowledge, understanding, skills and confidence to employ effective health pedagogies and practices in their work, and to promote healthy, active lifestyles within their PE curricula.

Drawing on cutting-edge research, the book highlights key pedagogical issues and debates concerning the delivery of health in PE, and their implications for practice, such as in policy and curriculum development. It explores recent recommendations and developments in PE pedagogies for health which have been shown to enhance, or have the potential to enhance, practice in the area, as well as future opportunities for doing so. It provides practical tools that bridge the gap between research and application, including learning activities and questions that encourage the reader to reflect on their own professional practice and identify actions for developing their own pedagogy, practice and curricula in the area.

This is essential reading for all PE teachers, coaches working with children or young people, teacher and coach educators, and trainee teachers and coaches.

Lorraine Cale is a Professor in Physical Education and Sport Pedagogy and the Director of Teacher Education at Loughborough University, UK, as well as Adjunct Professor at the University of Limerick, Ireland. Lorraine's research centres on the promotion of physical activity and healthy lifestyles within schools, both within and beyond the curriculum.

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**Edited by
Lorraine Cale and Jo Harris**

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We, Lorraine and Jo, would like to dedicate this book to Dr Len Almond who supervised our PhDs, inspired us greatly, and whose influence still drives us to want to make advancements to health-based PE today.



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1 The Role of Physical Education in Health

Expectations, Challenges and Opportunities

Jo Harris and Lorraine Cale

Introduction

This chapter sets the context for the remainder of the book. It considers the growing expectation on schools and PE to take on health outcomes and reflects on the opportunities as well as challenges to effectively achieving these. Specifically, the chapter explores why PE is seen to have a role and responsibility in health, and considers what it can realistically strive to achieve in this respect. It also suggests future opportunities and possibilities for PE teachers to contribute to public health by supporting students in leading active lifestyles. This is needed now more than ever, given that, for most children around the world, physical activity levels reduced during the recent global pandemic (Rossi, Behme & Breuer, 2021).

The chapter initially discusses the role and responsibilities of PE in relation to health. It then outlines policy and curricular expectations in this area and some challenges to meeting these. PE teachers are encouraged to reflect on the extent to which their current PE curriculum meets health-related expectations and supports their students in adopting an active way of life. They are also asked to consider ways of addressing some of the challenges to meeting health-related expectations and maximising the opportunities available to them in this endeavour.

After reading this chapter, you will be able to:

- i engage in key debates associated with the role and responsibilities of PE in relation to health;
- ii understand health-related policy and curricular expectations;
- iii identify and critique challenges to meeting health-related expectations;
- iv address health-related challenges and maximise opportunities to promote health.

The Role and Responsibilities of PE in Relation to Health

It is widely advocated that schools can and should play a major role in contributing to public health, given their skilled workforce and ability to reach and influence virtually all children and their families (World Health Organisation [WHO], 2018). Interest in this role has heightened in recent decades due to growing concerns about young people's health. For example, depression has become a leading cause of ill health among adolescents; furthermore, half of all mental health disorders start by age 14 but most remain undetected and extend into adulthood, impairing both physical and mental health and limiting opportunities to lead fulfilling lives (WHO, 2021). An additional escalating health concern relates to the prevalence of overweight or obese children and adolescents, which increased more than fourfold between 1975 and 2016 from 4% to 18% globally (WHO, 2016).

To help address concerns about young people's health, schools around the world have been encouraged to adopt whole-school approaches to health promotion and the pursuit of health enhancing behaviours, such as being routinely active (WHO, 2018). With respect to the latter, physical activity levels among young people are decreasing, with global estimates indicating that 81% of adolescents do not meet the WHO recommendations for physical activity. There are also notable inequalities with girls being less active than boys in most countries and significant differences between higher and lower economic groups and between countries and regions (WHO, 2020).

Low levels of physical activity among young people are concerning, especially given increasing evidence that being regularly active during childhood provides physical, mental and social health benefits (Biddle & Asare, 2011; Janssen & LeBlanc, 2010). This evidence provides a strong rationale for the need to promote healthy, active lifestyles and has led to attention being paid to the potential role schools and in particular PE can play in this regard.

PE's relationship with health is long-standing and generally accepted, given that it provides young people with regular opportunities to engage in physical activity and learn about the health gains associated with an active way of life. PE's contribution to public health is mostly perceived positively (Harris & Cale, 2019) and indeed, health has increasingly become the leading justification for the subject in schools (Kirk, 2018). Consequently, PE is expected

to play a vital role in, and share responsibility for, enhancing health, and the promotion of active lifestyles has become an established goal of PE curricula globally (e.g. Australian Curriculum, Assessment and Reporting Authority (ACARA), 2012; Department for Education (DfE), 2013; New Zealand Ministry of Education (NZMoE), 2020).

In this respect, it is advocated that PE's role and responsibility should be to stimulate interest, enjoyment, knowledge, competence and expertise in physical activity and sport for health and well-being (Fox, Cooper & McKenna, 2004) among all young people. This includes equipping them with the knowledge and skills to access and appraise resources and evaluate personal progress towards active living (Macdonald, Enright & McCuaig 2018), and to critique health information and messages from sources beyond school, so that they feel empowered and can make informed, independent decisions about their health and physical activity behaviours (Cale, 2021). In summary, young people need to be supported to become lifelong, critical consumers of health-related information and possess the skills to access, appraise and apply health-related knowledge.

Box 1.1 PE's Role and Responsibilities in Relation to Health

Reflect on PE's role and responsibilities in relation to health by considering the following questions:

- 1 How important is PE's role in promoting health? How do you see this role playing out in practice?
- 2 What level of responsibility should PE have for promoting active lifestyles? With whom should this responsibility be shared?

Health-Related Policy and Curricular Expectations

Within the context just described, PE is viewed to be particularly suited to advocating and leading on a whole-school approach to promoting active lifestyles. In England, for example, health education is a compulsory subject in the National Curriculum, which incorporates teaching

students about the characteristics and benefits of an active way of life and the risks associated with a sedentary lifestyle (DfE, 2019). In addition, a specific aim of the PE curriculum in England is that all students lead healthy, active lives (DfE, 2013). To help meet this aim, primary school-aged children are expected to become increasingly competent and confident movers via accessing a broad range of opportunities, and secondary school aged children are expected to develop interest and confidence in a range of activities outside of school and in later life, understand and pursue the long-term benefits of physical activity, develop personal fitness and pursue active, healthy lives (DfE, 2013).

There are similar health-related expectations in PE in other UK countries. In addition, reforms in the PE curricula in Australia and New Zealand have resulted in increased health-related expectations. For example, the Australian Health and Physical Education curriculum incorporates the development of health literacy skills and adopts a critical enquiry-based approach (ACARA, 2012). Likewise, the PE curriculum in New Zealand has shifted towards a concern for well-being and has underlying concepts which guide learning such as Hauora (a Maori philosophy of well-being), health promotion and a socio-ecological perspective (NZMoE, 2020).

The above demonstrates that, although national PE curricula vary across the world, health is a prominent theme and the aim of promoting healthy, active lifestyles is well established. Chapter 2 explores how this is expressed and can be achieved within PE.

Box 1.2 Health-Related Expectations

Consider the following questions relating to health-related expectations of schools and PE:

- 1 Are the health-related expectations of schools and PE realistic?
- 2 In what ways does your school and PE curriculum support students in leading active lifestyles? How effective is this?

Challenges to Meeting Health-Related Expectations

Despite the widespread recognition that schools play a major role in contributing to public health, there are a number of challenges to

effectively fulfilling this role. A key challenge is that behaviour change is complex, and schools have little or no influence on important factors affecting young people's health such as genetics, the environment and family modelling. Moreover, the core business of schools is focussed on educational outcomes and there is inevitable tension in schools additionally taking on public health outcomes, especially given their limited capacity, funding and time (Gard & Pluim, 2014).

Furthermore, and with respect to PE, there continue to be long-standing debates about the purpose of the subject and how this is expressed in practice. PE has multiple objectives and health promotion is just one of these alongside others such as the development of physical competence, social skills and moral values (Lounsbery et al., 2011). Indeed, the appropriateness of a public health goal for the subject has been questioned by some (e.g. Evans, Rich & Davies, 2004; Kirk, 2018), and there is uncertainty about the 'proper role for PE in health' and the level of responsibility the profession should accept for children's health outcomes (Armour & Harris, 2013, p. 209). Some physical educators recognise and welcome the potential of the subject to achieve health outcomes but are mindful of significant constraints to realistically achieving this potential (Fox, Cooper & McKenna, 2004). These constraints include addressing the multiple and often competing objectives within limited curriculum time (Fardy, Azzollini & Herman, 2004). As discussed by Cale (2021) in her outline of PE's journey on the road to health, the subject cannot meet all of young people's physical activity and health needs, be held responsible for improving young people's health, nor can it solve societal health problems such as obesity and physical inactivity.

In addition, PE curricula that are overly focussed on objectives such as skill development have been criticised for not offering activities considered to be more effective in promoting regular physical activity (Trost, 2004). Further concerns have been reported about the way in which health is expressed and taught in PE, which has been found to be inconsistent and somewhat 'hit and miss' (Harris & Cale, 2019). Research also suggests that the learning associated with health can be minimal and narrow, and based on a limited and limiting discourse of health (Evans et al., 2008) which prioritises physical health over mental and social health and tends to be simplistic and reductive in nature (Hooper, Harris & Cale, 2022). Alongside this, are concerns about potentially detrimental health-related practices in PE such as dreary drill and monotonous cross-country, and the dominance of fitness testing and training regimes (Cale & Harris, 2009; Evans et al., 2008). Chapter 3 provides more detailed consideration of fitness testing as

a debated and contested PE-for-health practice. Suffice to say here is that this, and other such practices, suggest a lack of alignment between PE teachers' health-related philosophies and their practices with many declaring an intent to promote healthy, active lifestyles yet trying to achieve this through a narrow and potentially off-putting range of fitness testing and training activities (Harris & Leggett, 2015).

A further challenge is the somewhat vulnerable position of PE within a neoliberal context in which privatised reforms such as increased marketisation and performativity adversely affect the potentialities of PE (Evans & Davies, 2015; Macdonald, 2011). These debilitating influences seem most prominent in the area of health-related PE. For example, the dominance of fitness testing and regular calls for national fitness testing reflect the emphasis on high stakes testing within a broader neoliberal policy climate (Macdonald, 2011). This is despite counter-arguments that fitness testing in PE may well represent a misdirected effort in the promotion of active lifestyles (Cale & Harris, 2009). The pervasiveness of neoliberal agendas has also led to concerns about health promotion outcomes being unattainable for the profession, the narrowing of PE to what can be measured and an overemphasis on individual children's body shape or weight or fitness such that again, PE becomes a negative experience (Cale & Harris, 2009; Tinning, 2000). Furthermore, increased marketisation has led to a range of providers (e.g. health, fitness and exercise instructors) and products (e.g. those focussing on fitness scores, body weight measures and training plans), which claim to address public health crises such as low activity and fitness levels and increased obesity among young people (Evans, 2014). This further reinforces a narrow and limiting approach to health plus implies that there are simple, quick fixes to long-standing, complex societal health issues.

The concerns identified above are heightened by issues associated with the availability and uptake of initial and continuing professional development (CPD) for teachers relating to whole-school and subject-specific approaches to health promotion. Indeed, there has been limited attention to this area of CPD, and particularly to the development of PE-for-health pedagogies (Cale, Harris & Duncombe, 2016) which could provide clarity about how best to achieve health-enhancing PE. In terms of limitations in initial teacher education, Harris (2014) revealed inadequacies in the preparation of trainee PE teachers to promote active lifestyles and called for radical changes to PE teacher education, especially the school-based provision. There is also the identified 'conundrum' of many PE teachers having misguided confidence in their ability to teach health-related PE and

consequently choosing not to pursue professional development in this area even when it is available (Alfrey, Cale & Webb, 2012). Collectively, the above have resulted in calls for a critical approach to helping students to achieve healthy, active lifestyles in the form of new, evidence-based PE-for-health pedagogies (Armour & Harris, 2013; Kirk, 2006). Chapters 4–6 introduce and discuss examples of PE-for-health pedagogies, approaches and models.

Box 1.3 Challenges to Meeting Health-Related Expectations

Reflect on the challenges to meeting health-related expectations by considering the following questions:

- 1 Which, if any, of these challenges have you encountered in your school? Have you come across any additional barriers?
- 2 As applicable, in what ways have these challenges/barriers affected your practice? Have you been able to address or overcome any of these? If so, in what ways?

Addressing Health-Related Challenges and Maximising Opportunities to Promote Health within and through PE

There are now a growing number of government agendas and initiatives which prioritise health promotion and which can support schools and teachers in addressing some of the health-related challenges just identified. For example, in England, there are national health-enhancing social media campaigns entitled ‘Better Health’ and ‘Change4Life’ (National Health Service, 2021a, 2021b) to which teachers can make important connections. Another national social media campaign in England, ‘This Girl Can’, has a physical activity focus and aims to enhance the self-esteem and confidence of girls and women to move, regardless of their shape, size and ability (Sport England, 2021a). Health-related challenges can also be addressed through engagement in health-related work involving national PE and sport organisations such as the Association for Physical Education (afPE) and the Youth Sport Trust (YST) in the UK and the Australian Council for Health, Physical Education and Recreation. A specific example in England is a Sport England (2021b) initiative working in partnership with afPE, the YST, the Activity Alliance and the Teaching Schools Council. This

focusses on the promotion of active lifestyles in secondary schools and involves upskilling teachers to improve the quality and breadth of PE provision, so that it acts as a catalyst for achieving outcomes such as improved mental well-being, resilience and confidence.

Alongside making explicit links to national health-promoting campaigns and initiatives, PE teachers can address health-related challenges by making selective and effective use of technological advancements (which is the focus of Chapter 7), and by being an advocate for a whole-school approach to maximise opportunities to promote healthy behaviours among students (see Chapter 4). In this respect, cross-curricular links are encouraged, which help to connect health-related learning (e.g. about the effects of exercise or the risks of a sedentary lifestyle) across subjects such as PE, Science, and Personal, Social and Health Education, thereby improving the coherence and effectiveness of students' health-related learning (see Chapter 2). Incorporating activity breaks during the school day has also been found to improve concentration and behaviour (Donnelly & Lambourne, 2011) as well as increase physical activity (Lowden et al., 2001). Schools can furthermore encourage the adoption of active pedagogies across all subjects which involve students moving as part of the learning experience (Harris & Cale, 2019). This approach equally extends to and has value in PE as research has shown activity levels during PE lessons to be surprisingly low (Fairclough & Stratton, 2006; Hobbs et al., 2015).

Finally, recent studies have focussed on addressing known health-related challenges in PE through a variety of pedagogical approaches and this has become a developing area of research with some encouraging outcomes reported to date. For example, in the US, Weaver et al. (2018) involved PE teachers in a participatory-based, competency building professional workshop focussed on implementing physical activity promoting practices (e.g. using small-sided games, reducing queues, avoiding elimination activities), finding these to have a positive influence on students' physical activity within PE. In addition, Bowler (2019) and Sammon (2019) in the UK explored the development and application of a health-based PE model, which forefronts 'valuing a physically active life' as its primary goal and found that collaborative and sustained professional development supported teachers to adopt new ideas and change their practices over time. These and other studies have attempted to address the challenges that PE teachers face when teaching PE for health, including gaps in their knowledge and understanding and narrow and limiting curriculum discourses around

health. Chapters 4 and 5 provide more details about the health-based PE model, while Chapter 6 focusses on another study and pedagogical approach known as the Promoting Active Lifestyles (PAL) Project.

Box 1.4 Final Reflections

Reflect on the meaning and consider the implications of the following quotations, which relate to ongoing health-related issues:

- ‘If “exercise is medicine”, physical education is the pill not taken’ (McKenzie & Lounsbery, 2009, p. 219).
- ‘Reducing ‘health’ to only the most obvious aspects of measured performance (e.g. weight, height, exercise levels) while promoting the message at all ages and stages of schooling that healthy equals thin, should carry a government health warning’ (Evans, 2007).
- ‘... it may be better for physical educators to say nothing about obesity, exercise and health, rather than singing the praises of slimness and vigorous exercise and condemning the evils of fat and ‘sedentary life’ (Gard & Wright, 2001, p. 535).

Conclusion

This chapter has focussed on the role of PE in relation to health and revealed that the partnership between education and health is neither smooth nor straightforward. Indeed, caution has been expressed about what schools and PE can realistically achieve in terms of health outcomes, and there are concerns about some practices in PE which have been implemented in the name of health. So, while health-related expectations of PE are high and somewhat aspirational, the challenges to meeting these are complicated and numerous. This is not to say that schools and PE should not strive to make significant contributions to public health nor that they cannot positively influence the lifestyles of their students. Rather, these endeavours should be passionately and persistently pursued with full awareness and acknowledgement of the complexity of behaviour change among young people, and full understanding of the challenges to meeting health-related expectations

within school settings. This will help to ensure that future health-related possibilities in PE are evidence-based, more sophisticated and sustainable.

Summary and Recommendations

- Schools and PE are expected to play a major role in health and this responsibility has heightened due to escalating concerns about young people's health. Young people's physical activity levels are low, which has led to an increasing expectation that PE specifically should play a leading role in promoting active lifestyles.
- Schools are encouraged to adopt whole-school approaches to health promotion, and the promotion of healthy, active lifestyles has become a prominent theme in PE-specific curricula globally.
- Challenges to PE teachers effectively contributing to public health include them having little or no influence on key factors affecting young people's health, and limited time, capacity and resources to pursue both education and health outcomes.
- There is uncertainty about the level of responsibility PE should accept for children's health outcomes and concerns about the expression of health in PE, associated with a lack of alignment between PE teachers' health-related philosophies and practices. Neoliberal agendas have also led to debilitating influences on health-related PE such as an overemphasis on fitness testing and on body weight. However, despite the uncertainty and concerns, PE clearly has a role to play in health promotion and can and should be contributing to public health.
- There has been limited attention to health in teachers' initial and continuing professional development and many PE teachers have misguided confidence in their ability to teach health-related PE. This has led to calls for evidence-based PE-for-health pedagogies.
- Within a whole-school approach, PE teachers are well placed to lead or support school-wide initiatives. They should also encourage and facilitate cross-curricular links to improve the effectiveness of health-related learning across subjects and activity breaks to increase students' physical activity, concentration and behaviour.
- Schools can adopt active pedagogies that require students to move as part of the learning experience. They can also pursue research-informed pedagogical approaches to promoting health within PE

which have been found to enhance students' health-related learning and physical activity.

- We recommend that, during this current academic year, teachers review their PE curriculum in terms of how well it supports and drives school-wide efforts to promote healthy, active lifestyles and meets subject-specific health-related expectations.
- In preparation for the next academic year, we recommend that teachers connect with national health-promoting campaigns and initiatives and consider adopting research-informed pedagogical approaches to promoting health within PE.

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