

Abstract

There are growing expectations on schools to promote health and physical activity and helping schools to effectively do so is considered a priority. This paper reports on selected findings from a research project which was concerned with supporting secondary schools in the effective promotion of physical activity and establishing their needs in this regard. Specifically, the paper explores secondary school teachers' experiences of and perspectives on promoting physical activity. The study involved an online survey with secondary schools across the United Kingdom, plus interviews with teachers from eight schools from different regions in England. The findings highlighted a number of issues concerning the promotion of healthy, active lifestyles generally, many of which seem to be long-standing. For example, issues associated with the status and place of health, the amount and nature of the training and support provided or accessed by teachers in the area, and schools' effectiveness in promoting and engaging all pupils in healthy, active lifestyles were identified. These led to questions regarding the extent to which teachers are adequately and appropriately equipped to effectively promote physical activity and to recommendations to improve the support for and practice of schools in this area.

Introduction

The growing importance of schools and physical education in promoting health and physical activity is widely acknowledged in the literature (Cale and Harris, 2005; Penney and Jess, 2004; Salmon et al., 2007). As a subject, physical education in particular is seen as a key vehicle through which to promote health and physical activity (Cardon and De Bourdeaudhuij, 2002; Fairclough and Stratton, 2005; Green, 2002; Shephard and Trudeau, 2000; Stratton et al., 2008) with the adoption and maintenance of a physically active lifestyle now an established goal of the physical education curriculum in many countries (e.g. Australian Curriculum and Reporting Authority, 2012; Department for Education, 2013; National Association for Sport and Physical Education, 2004).

Government policies, strategies and reports also readily recognise the role of schools and physical education in promoting health and physical activity.

According to Armour and Harris (2013), governments are increasingly looking to schools as a convenient form of public health investment. Recent examples in the United Kingdom (UK) include 'Moving More, Living More', The Physical Activity Olympic and Paralympic Legacy for the Nation (Cabinet Office, 2014), and the All-Party Commission on Physical Activity report (2014) 'Tackling Physical Inactivity - A Coordinated Approach' (available at: <http://activitycommission.com/>). 'Moving More, Living More' sets out the Government's commitment to promoting physical activity and aim of having a much more physically active nation. The document identifies areas with particular potential for substantially increasing physical activity and proposes many strategies centred on young people, schools and the curriculum. Similarly, the All-Party Commission on Physical Activity report (2014) highlights schools and physical education as core in increasing physical activity. It advocates

a whole school approach and active school plans including high quality physical education, the development of physical literacy as integral to the curriculum, active lessons across the curriculum, plus activity breaks and active travel. The report furthermore calls for the quality of physical activity provision to be formally evaluated by Ofsted¹ in order to elevate its importance in the curriculum and provide a balance to an emphasis on academic results.

In addition, and significantly for physical education, is the increasing prominence that 'healthy active lifestyles' have been given within subsequent revisions of the National Curriculum (NC) for Physical Education (NCPE) in England. Within the current NCPE, providing opportunities for pupils to become physically confident in a way which supports their health and fitness features within the purpose of study, whilst ensuring that 'all pupils are physically active for sustained periods of time' and 'lead healthy, active lives' represent two of the four aims of the subject (Department for Education, 2013).

Collectively, the above place ever growing expectations on schools to promote physical activity and moreover to be effective in doing so, not least to ensure that statutory requirements are met. Yet despite this, effective physical activity promotion within schools appears to be a global issue (Cardon et al., 2012). Concerns have been expressed over the relative marginal status and limited attention often afforded to health and physical activity in schools (e.g. Alfrey et al., 2012; Cale, 2000; Cale and Harris, 2012; Harris, 2010; Marks, 2008), as well as over teachers' and physical education teachers' limited knowledge and understanding and inadequate professional development in the area (Alfrey et al., 2012; Armour and Harris, 2013; Cale, 2000; Castelli and Williams, 2007; Davidson,

2007; Fox and Harris, 2003; Jourdan et al., 2010; Kulinna et al., 2008; ; Larsen et al., 2013; McKenzie, 2007; Marks, 2008; Speller et al., 2010; St Leger, 2004; Tang et al., 2008; Trost, 2006).

Equally, it is important to appreciate that schools and physical education have multiple objectives which extend well beyond health, and physical education accounts for only a small proportion of young people's time (Cale and Harris, 2013). Numerous factors within and beyond the school environment impact on children's health and physical activity levels including individual (e.g. age, gender, socio-economic status, education, beliefs, self-efficacy), sociocultural (e.g. social support, parental/sibling physical activity, ethnicity, social and cultural norms, social capital) and environmental influences (e.g. urban and transport policy, access to facilities, traffic, crime rates and safety, seasonality) (Davison and Birch, 2001; King et al., 2002). These multiple influences highlight the complexities involved in changing health and physical activity behaviours (NICE, 2007). Coupled with the concerns mentioned above, they furthermore highlight the challenge that schools and physical education face in the effective promotion of physical activity.

This paper therefore reports on selected findings from a research project which was concerned with supporting secondary schools in the effective promotion of physical activity. Initially, the aim and research question guiding this project was 'what are the needs of secondary schools with respect to the promotion of physical activity'? This necessitated an exploration of secondary teachers' experiences of and perspectives on the promotion of physical activity which is the specific focus of this paper. From these, a number of key issues are highlighted and discussed

concerning the promotion of healthy, active lifestyles and recommendations are made with a view to addressing these and improving the support for and practice of schools in this area. Helping schools to fulfil their physical activity promotion role has been identified as a priority (Cardon et al., 2012) and this research endeavours to assist in this regard.

In keeping with the co-ordinated approach advocated in the All-Party Commission on Physical Activity Report (2014), and in recognition of the multiple influences on and complexity of physical activity, the theoretical framework for the research was based on the ecological model of health promotion and involved exploration of the promotion of healthy, active lifestyles generally across the whole school. The ecological approach has attracted growing support in physical activity promotion in recent years (Ball et al., 2006; Sallis et al., 2006; Spence and Lee, 2003), including within the school context (Cale and Harris, 2005; Cardon et al., 2012; Fox et al., 2004; McMullen et al., 2015; Naylor et al., 2008; Timperio et al., 2004; Weschsler et al., 2000) in that it takes into account the range of interacting individual, sociocultural and environmental factors on physical activity behaviour. Indeed, the importance of a whole school approach as opposed to just concentrating on discrete curriculum areas has been identified as one of the seven best investments by the Global Alliance for Physical Activity (Blanchard et al., 2013). In the physical activity context specifically, this approach acknowledges the need to move beyond the 'restrictive, one-dimensional focus on traditional curricular physical education and sport to a model in which the culture and policy of the school is child-centred and health- and activity-driven' (Fox et al., 2004, p. 344).

Methodology

The methods employed with the teachers included an online survey involving secondary schools across the UK and interviews. Prior to the commencement of the project, ethical consent was sought and granted from the University's ethics committee and prior to data collection, consent was obtained from all concerned. In terms of the policy context at the time of the research, data collection took place during the period leading up to the Olympic and Paralympic Games and the development and introduction of the new NC and NCPE.

Online survey

The online survey was designed using Survey Monkey and emailed to all state secondary schools in the UK where e-mail addresses were available (n = 3990). The purpose of the survey was to gain a general understanding of how physical activity and health are promoted to young people in secondary schools, to identify areas for improvement, and to explore some of the issues schools and teachers face with respect to the promotion of physical activity. The survey comprised 21 questions organised into four broad sections which gathered information about: the respondents and their schools; their policies and practices with regards to the promotion of physical activity and health, and their views and perceptions of these; their training, strengths and needs in physical activity and health promotion; and finally their suggestions and thoughts regarding this area for the future.

The survey link was sent to the headteacher and a request was made to forward it to 'a relevant person' in their school. This was qualified to be someone who was responsible for or centrally involved and/or knowledgeable about the area in the school. In total, 603 responses were received, representing an overall response

rate of 15.1%. The survey asked respondents to indicate the type of school they worked at and their role in the school, and the responses revealed a mix of teachers from different types of schools to have completed it. Over two thirds of respondents were from mixed state or academy secondary schools (67.4%), with others from boys' only (2.8%), girls' only (6%), or religious schools (12.8%), and 11% from Sports Colleges². Thirty percent held general management roles including those of headteacher/assistant head or equivalent, whilst nearly a quarter (23%) had subject specific management roles in the schools including head of physical education (PE) or specialism (19%), director of sport (3%) or head of personal, social and health education (PSHE) (1%). Other respondents included general (1%) or subject teachers for PE (8%), PSHE (3%) or science (1%), to those who held roles such as school sports co-ordinator (2%) or health/well-being/pastoral co-ordinator (7%). As this breakdown shows though, approximately a third could be classed as having a physical education or sports background.

Interviews

The interviews aimed to build on the information gathered from the survey and gain a deeper understanding of teachers' views, practices and needs with respect to the promotion of physical activity. In order to obtain a geographically spread sample, schools from each of the nine Government regions in England were invited to take part in this aspect of the study. Within each region, counties were randomly selected according to their position in the alphabet and headteachers from every school within the chosen counties were contacted inviting them to participate. Responding schools were selected on a 'first come, first served' basis until eight

schools from eight of the nine regions had replied. The schools varied in size, type, age range, socio-economic status and ethnic composition and each were visited once in order to conduct the interviews.

The interview schedules were informed by the literature and the survey. Some of the questions were purposefully the same or similar to those from the survey (but with additional prompts), whilst others were generated as a result of the survey responses. In this way the interviews served both as a means of triangulation, corroborating the survey findings, and building on them in order to gain as accurate and in depth an insight into some areas and issues as possible. Example interview questions are shown in table one.

Insert table one here

In terms of selection criteria for the interviews, schools were asked to identify the staff they deemed it was most appropriate to involve due to their responsibility for or central involvement and/or knowledge about their school's practices in this area. A total of 17 staff were interviewed either individually or as part of a focus group by one and the same member of the research team who assumed 'outsider' status. The interviewees included at least one member of staff from each school and with consent, all interviews were recorded. Where more than one member of staff was interviewed in a school a comparison of their responses provided another means of verifying the data. The final sample comprised a mix of males and females of various ages and levels of experience including a headteacher, an assistant head, a director of sport, an assistant head of PE, a head of PSHE and citizenship, a nurse, a well-being mentor, an outdoor

education coordinator, three heads of PE, three PE teachers and three school sport coordinators. Thus, 71% of the interview sample could be classed as being predominantly from a physical education or sports background.

Data analysis

The two methods of data collection required differing approaches to data analysis. The online survey asked predominantly closed questions and the breakdown of responses to these questions was downloaded from Survey Monkey into an Excel document. With a number of the survey questions, however, the teachers were given the opportunity to explain or expand on their responses and these were qualitatively analysed via a thematic approach. This approach was also applied to the interview data and is explained below.

The process of data analysis has been described as reducing and organising data into a more manageable format (Ritchie and Lewis, 2003). Thus, all qualitative data gathered were firstly made more 'manageable'. Following transcription, the interview and focus group responses were collated by question for each school (as they were for the survey) and summarised in an Excel file, and the data were then classified by assigning chunks of data to emerging categories or themes (Dey, 1993). The next stage in the analysis then involved drawing together the data and common themes from both the survey and interviews. A number of categories, themes and sub-themes emerged but for the purpose of this paper, those of concern related specifically to the teachers' experiences and perspectives on the promotion of physical activity in secondary schools. For example, seven survey questions with open ended response options related to training in the promotion of healthy, active lifestyles, some of which also featured or led to similar responses

within the interview schedules. The data obtained from both sources from these questions thus led to the identification and illustration of one of the key themes in the findings, namely that of Professional Development and Support.

Whilst the process of qualitative data analysis employed drew broadly on the inductive process described as 'Grounded Theory' (Glaser and Strauss, 1967), in that hypotheses and theories were not tested but instead concepts and themes emerged as the data were collected and subsequently analysed, a more flexible approach to the analysis akin to that outlined by Charmaz (2000) was applied. The advantage of this was that it allowed for the data to be considered at an individual level (i.e. the interviews), as well as enabling a more collective view (i.e. the survey responses).

Findings and discussion

Policy, status and place

Policy has been identified as a key principle and component of successful implementation of health promotion initiatives in schools (Samdal and Rowling, 2011), including in the implementation of physical activity strategies (Cardon et al., 2012). Samdal and Rowling (2011) explain that a written policy ensures that priority is given from leadership in terms of facilitation and resource allocation and commits all stakeholders to working towards achieving agreed aims. It was thus encouraging to find that approximately 64% of the schools surveyed had a policy for physical activity and health and that virtually all (99%) were currently promoting healthy, active lifestyles, deeming this to be very or quite important (71% and 28% respectively). Teachers who considered promoting healthy, active lifestyles to be

important typically commented that this was because their school was a Sports College, it had or was working towards Healthy Schools status, or because it was part of a whole school ethos or focus. Comments from the teachers surveyed included:

'We are a sports college and I believe that it is a fundamental part of any good physical education/sports programme in any school whether having a sports specialism or not'.

'As a 'Healthy School', we actively encourage students to be healthy'.

These findings are similar to those of some other studies which have revealed such policies to be in place in many schools (Alfrey et al., 2012; Cale, 2000; Cardon et al., 2012; Haug et al., 2009; Lee et al., 2006) and teachers to view the promotion of health and physical activity to be valuable and important (Alfrey et al., 2012; Byrne et al., 2012; Cale, 2000).

Those teachers who did not consider promoting healthy, active lifestyles to be important in their schools blamed this on the priority given to other subjects and examinations, or to a lack of support by senior management or other members of staff. Teachers' comments in the survey included:

'It [promoting physical activity] would be very important, but many other factors in PSHE and exam results have to come first these days'.

'Not important unless it will get students a GCSE!'

'...nothing is done to promote this [physical activity] throughout the school and it lacks back up from the rest of the school'.

The relative marginal status of health and physical activity within schools and the curriculum has been identified by various researchers (e.g. Alfrey et al., 2012; Cale, 2000; Cale and Harris, 2012; Harris, 2010; Marks, 2008; McMullen et al., 2015). For example, pressures for academic accountability and results-driven curricula have been recognised to restrict the attention and time devoted to curriculum areas and school activities such as health (Larsen et al., 2013; Lee et al., 2003; Marks, 2008) and other areas having higher priority has been found to negatively impact efforts to promote physical activity specifically (Cardon et al, 2012). Indeed, it is for this reason that the All-Party Commission on Physical Activity Report (2014) called for Ofsted to 'inspect' the quality of physical activity provision schools. In addition, and as acknowledged earlier, health has been found to be generally absent from teachers' professional development profiles, again suggesting the relatively lower status afforded to the area. This was also found to be the case in this study and is an issue which will be explored further later on. Suffice to note here though, is recognition of the importance of health by the whole staff, and particularly school leaders, and their influence on the uptake of professional development, the school culture, and/or on the implementation of strategies relating to physical activity (Cardon et al., 2012; Larsen et al., 2013; Till et al., 2011).

In terms of the place of physical activity promotion within the schools, the survey findings revealed it to be promoted primarily through the curriculum, most notably through physical education and PSHE but also, to a lesser extent, through food technology and science. When asked whose responsibility the promotion of healthy, active lifestyles was in schools, a number of teachers identified more than one subject area but the most frequently cited response was physical education (77%) and the next most popular PSHE (48%). Of course, the fact that approximately a third of survey respondents and 70% of interview participants had a physical education or sports background also confirms whose responsibility many schools considered the promotion of healthy, active lifestyles to be. The respondents' responses to this question are furthermore perhaps not particularly surprising given their backgrounds and the emphasis within the NCPE on 'healthy, active lifestyles'.

Interestingly, very few teachers reported the whole school to have a responsibility or for a number of staff to have joint responsibility for the promotion of healthy, active lifestyles (<1%). The importance of and need to move beyond the curriculum and discrete curriculum areas to adopt a whole school approach to promoting and learning about health was acknowledged earlier. In relation to this, teachers' willingness to embrace this holistic philosophy (St Leger and Nutbeam, 2000) and to change their long established and traditional approaches to health education (Lee et al., 2003) has been identified as key. Following a survey of the contribution of schools to health and well being, Ofsted (2006) also reported how 'successful' schools generally took a whole school approach to promoting pupils' health and well-being. Yet, the schools in this study did not appear to have made much progress in embracing this philosophy and approach. Whilst some teachers

identified examples of whole school strategies that were adopted by their schools, such as health events/days/weeks and active travel, there was relatively little evidence of there being a collective responsibility or coordinated effort, or of their recognition of the multiple influences which impact on young people's physical activity. Limitations in the implementation of whole school approaches in practice have similarly been reported in the literature with relatively little attention reported to be afforded to environmental or community strategies in particular (Cardon et al., 2012; Deschesnes et al., 2003; Jourdan et al., 2010). At the same time, the challenge of adopting such approaches and the skills, time and resources needed to effectively do so have been recognised (Deschesnes et al., 2003; Fox et al., 2004; Larsen et al., 2013; Lee et al., 2003). Indeed, a recent discussion paper on international approaches to whole school physical activity promotion identified tangible, financial support for the development and implementation of whole school physical activity programmes and initiatives to be the area in most need of development (McMullen et al., 2015).

Given the current concerns over young people's health and physical activity and the growing expectations as well as statutory responsibility on schools to promote healthy, active lifestyles, it might have been anticipated that the teachers would uniformly have accepted a clear and collective responsibility for this undertaking. On the contrary though, a few questioned or challenged this notion. One teacher in the survey noted:

'It [promoting physical activity] is obviously important, but we do not regard it as our core mission – being healthy is a family and personal responsibility, not the school's',

Another explained:

'...some staff in school view it as PE's responsibility and so don't promote it'.

These findings contradict those of other studies where pre-service teachers and other school staff appear to have been more accepting of their collective roles and responsibilities in health or physical activity promotion (Byrne et al., 2012; Jourdan et al. 2010; Till et al., 2011). That said, the results correspond with observations made in physical education whereby it has been claimed that the profession is uncertain about its role in public health and the level of responsibility it is willing to accept for delivering health outcomes (Armour and Harris, 2013; O'Sullivan, 2004; Quennerstedt, 2008). Whilst there seems to be general agreement that physical education should promote health enhancing physical activity, O'Sullivan (2004), notes that there are disagreements over the degree to which the subject should focus on public health goals. Indeed, some authors are highly critical of government policies on health education, of schools' and physical education's unquestioned role within it, and of the uncritical, simplistic and narrow way in which schools and teachers often engage with health issues (e.g. Evans, 2007; Evans et al., 2008; Gard and Wright, 2001; Wright and Dean, 2007). There would therefore seem to be a need for some consensus and clarification regarding the role schools should and can play in the promotion of healthy, active lifestyles.

Professional development and support

If schools are to be effective in the promotion of physical activity then teachers need not only 'an enthusiasm for and belief in its value, importance and role' but a clear understanding of the area (Cale, 2000, p. 167), developed through adequate and appropriate professional development. Professional development and learning is another key component of successful health promotion implementation in schools, with staff competence and understanding having been found to be critical (Samdal and Rowling, 2011). However, approximately 16% and 13% of the teachers surveyed had not received any relevant pre- and in-service training respectively and a further 12% and 11% respectively reported what training they had received to be inadequate or poor. Comments from teachers included:

'Pre-service – none whatsoever'.

'Pre-service training included relationship between physical activity and health. I haven't received any other formal training since then'.

'Other than my formal training as a PE teacher, no opportunities for CPD [continuing professional development]'.

"I have been on one inset course in 10 years regarding physical activity and health. This highlights that there are not enough of these..."

Similarly, none of the teachers who were interviewed reported receiving any specific, formal pre-service training and three teachers reported to have had no in-service training in this area. Two teachers commented:

*'I can't remember ever going to a session, like called Healthy Lifestyle'
(head of PSHE; female).*

*'I think it's kind of built in as a PE teacher. You don't necessarily do any
training' (school sport co-ordinator; male).*

These findings confirm the concerns highlighted in previous research and noted earlier concerning teachers' lack of professional development in the area (Ball et al., 2006; Byrne et al., 2012; King et al., 2002; Larsen et al., 2013; Sallis et al., 2006; Spence and Lee, 2003; Till et al., 2011). In particular the teachers' comments illustrate the importance of adequate pre-service training with it representing the only relevant professional development undertaken by some. Worryingly though, findings from a survey conducted in the South-East of England highlighted great variability in teacher training provision in health and a lack of any consistent or coherent approach, resulting in trainee teachers' knowledge, including aspects of their physical activity knowledge, remaining low even after their training (Speller et al., 2010). That said, studies have revealed a number of positive outcomes when teachers do engage in professional development in the area, for example, on teachers' attitudes, involvement and implementation of strategies, and on their confidence, skills, knowledge and understanding of health or physical activity promotion or education (Byrne et al., 2012; Cardon et al., 2012; Davidson, 2007; Paakkari et al., 2010; Till et al., 2011).

Furthermore, the types and consequently the appropriateness of the training the teachers in this study had received were also found to be variable. Some teachers identified that they had a degree or other qualifications in specific areas, with typical survey responses including:

'Degree in sport and exercise science...'

'Degree in physiology, including nutrition, gymnastics coach'

'Trained as a coach in various aspects i.e. athletics, swimming, gymnastics, badminton, trampolining'

Other respondents commented on the broader training they had received highlighting opportunities they had accessed through National Programmes:

'I am trained in citizenship, PSHE and technology with specialism in food technology'. (Survey)

'Many courses on healthy eating, sexual health, substance misuse'. (Survey)

'We've had training from the Healthy Schools team'. (Interview; deputy head; female)

Whilst it is encouraging to see that the teachers had accessed a variety of professional development opportunities, it is also interesting to note that some cited their sports science (or similar) degree and various coaching qualifications as being relevant. Given the backgrounds of many respondents this is understandable to a point and such professional development is likely to have been useful and certainly better than none. However, this alone is arguably limited in scope in that it is unlikely to further develop teachers' knowledge and understanding of the broad and multi-dimensional nature of health, of appropriate pedagogical approaches for the delivery of health, or of National Curriculum requirements, and hence their health and physical activity promotion practices. Indeed, in an earlier study of physical activity promotion in secondary schools, physical education teachers were found to demonstrate a narrow understanding of the concept, often equating or restricting it to providing sporting opportunities for young people (Cale, 2000). Related to this, the dominance of physical education teachers' sporting philosophies and of competitive sport and team games within the subject (Green 2003; 2009; Kirk, 2010; McKenzie and Kahan, 2004; Trost, 2006), and how these influence and may hinder the delivery of health within the curriculum has been highlighted in previous literature (Cale and Harris, 2012). For example, in that they often result in a 'sport', 'performance' and 'fitness' oriented approach to its delivery (Alfrey et al., 2012; Green and Thurston, 2002; Harris, 2010; Harris and Leggett, 2015; Puhse et al., 2011). A concern with this is that it results in a narrow curriculum with restricted provision of a range of non-competitive, more recreational and individual lifetime activities, which in turn may limit learning and have little appeal for many young people (Alfrey et al., 2012; Fox and Harris, 2003; Green, 2002). Following their study of the factors and strategies that facilitate the physical activity promoting role of schools, Cardon et al., (2012) revealed a similar issue and acknowledged that

further efforts are needed to convince schools to offer more non-competitive activities.

Of course, there may equally be limitations with some of the broader health training the teachers had received. Whilst on the one hand this may have provided better insight into the broad and multi-dimensional nature of health, it may not have been sufficiently specific and helpful in informing and enhancing schools' physical activity promotion practices on the other. Calls have in fact been made for access to more physical activity specific support and training on whole school physical activity promotion from personnel with such school-based expertise and knowledge (Cardon et al., 2012; McMullen et al., 2015).

As well as formal training opportunities, other teachers in the study highlighted more informal forms of professional development they had drawn on. For instance, teachers reported:

'I subscribe to Workout, Health and Fitness, PE Review and Physical Education Matters...'. (Survey)

'I guess it just comes from, it just comes from different places doesn't it I guess. It comes from the media, I guess it comes from the fact of being sporty and being told yourself as you have grown up, as to what you should do...'. (Interview; school sport co-ordinator; female)

The trend of relying on public pedagogies as a key source of health knowledge, including in and through mass media, has been discussed in broader terms elsewhere (Giroux, 2004; Rich, 2011) and it is therefore perhaps not surprising to find some teachers drawing on such sources to develop their own knowledge and practice. However, whilst these can be useful sources of information, it has been suggested they may not always be wholly accurate, reliable and appropriate for an educational context (Alfrey et al., 2012). They are also unlikely to be comprehensive or cover the numerous recent and on-going developments of relevance to health and the promotion of healthy, active lifestyles in schools and of which teachers need to keep abreast. With this in mind, the perhaps limiting influence of popular pedagogies upon knowledge and understandings of health and health and physical activity promotion practice should not be underestimated.

The issues raised by the findings concerning the adequacy, nature and appropriateness of the teachers' training and sources of knowledge in turn pose serious questions about the extent to which they are adequately and appropriately equipped to effectively promote physical activity and implement successful physical activity strategies with their pupils. They certainly suggest that the development, promotion and implementation of physical activity and physical activity initiatives in many schools may be being hindered. More specifically, the bias towards sport of much of the teachers' reported professional development, alongside the evidence from the literature concerning physical education teachers' strong sporting philosophies and the influence of these on practice, furthermore raises questions about whether physical education and physical education teachers are best placed and equipped to assume responsibility for promoting physical activity. Certainly, it

has been argued that physical education should not be the sole subject with this key responsibility (Cale and Harris, 2013) with a call instead for schools to ‘develop their physical activity promotion plan within a working group that exceeds the PE teachers...’ (Cardon et al., 2012, p. 480). While clearly recognising and retaining the important and statutory contribution of physical education to physical activity promotion, this further reinforces the case for a whole school approach which provides a more balanced and broader emphasis.

On a more positive note, in both the survey and interviews, the teachers reported numerous and varied sources of support that were or had been available to assist them in promoting physical activity. Most commonly cited was the support provided by local authorities and National Programmes such as the Healthy Schools Programme and School Sport Partnerships³. Whilst still feeling that more was needed, most teachers surveyed were receptive to and positive about the support they had received. Comments made by those surveyed included:

‘Mostly been very good but increasingly difficult to access as cuts made personnel move on’.

‘When available, it can be good/excellent – but there is little and it’s getting less’.

‘Overall excellent due to our involvement in a variety of initiatives but too much is one off...’.

The limitations and inadequacy of one off courses with no follow up (Armour and Yelling, 2002; Harris et al., 2010) and the importance of a collective and sustainable approach to professional development relating to physical activity (Till et al., 2011) has been acknowledged elsewhere. The same could be said for one off initiatives and, with few being subjected to any formal evaluation, there appears to be no substantive evidence to refute this. Owing to a lack of or limited evaluation it has been claimed that little is known about the effectiveness of many potentially valuable physical activity promotion initiatives, thus hindering their future design and delivery (Cale and Harris, 2005; Fox and Harris, 2003). One notable exception in the UK however, has been the Healthy Schools Programme (see Arthur et al., 2011).

Despite many of the teachers in this study being positive about the support their schools received, still nearly a fifth (19%) claimed not to have had any support and 58% felt that their school could be better supported to promote healthy, active lifestyles. When asked to identify in what ways, many of the teachers' responses were in keeping with the needs and recommendations identified within the literature which have stressed the importance and/or desirability of policy, co-ordination, involvement of parents, and of more time, professional development and support (Cardon et al., 2012; Deschesnes et al., 2003; Jourdan et al., 2010; Larsen et al., 2013; Marks, 2008; McMullen, 2015; Speller et al., 2010; Till et al., 2011).

Related to policy, many teachers expressed concern over the impact of the significant cuts to government funding which had been experienced in the UK and which were still fresh in their minds at the time of the research, notably to the

School Sports Partnership and Healthy Schools Programmes. When asked about these, two teachers in the survey stated:

'.... short term savings without any thought to long term impact...'

'The cutbacks have and will have a huge impact on the promotion and time given to healthy, active lifestyles.'

In the survey other teachers reported the cuts to be 'detrimental', 'catastrophic' and to be '...the most appalling political decision ever made'. Political and financial commitment from policy makers has been identified as a key condition and component for enhancing the implementation of approaches to health promotion (Deschesnes et al., 2003) and health promoting schools respectively (Samdal and Rowling, 2011). If we are therefore serious about the promotion of healthy, active lifestyles in schools, then it seems that this condition needs once again to be met and sustained.

Effectiveness

In terms of effectiveness, only approximately 30% of the teachers surveyed felt that their school was effective in promoting healthy, active lifestyles. Those teachers who did not feel this to be the case cited problems associated with cuts in funding and timetable reductions to be impacting on their efforts. Comments from the survey included:

'Spending cuts will impact on participation opportunities. The demise of the School Sport Partnerships will reduce recreational/active extracurricular opportunities...'

'From Sept, our students lost all timetabled PSHE lessons.... We have lost some time in PE, where it is on rotation with RE [Religious Education] at Key Stage 4.'

Most teachers felt that more could be done to promote healthy, active lifestyles and that their schools could be more effective in doing so. When asked specifically how, responses included: by having more time, better resources/facilities, better cross-curricular and departmental links, improving the health ethos, offering more or a wider range of activities/clubs/health events, and engaging parents. Many of these factors, and most notably time, resources, cross-curricular and departmental links, co-ordination, and school ethos or culture have been recognised to be important earlier and/or elsewhere in health and physical activity promotion and education (Deschesnes et al., 2003; Jourdan et al., 2010; Larsen et al., 2013; Till et al., 2011).

Another indicator of the schools' effectiveness in promoting physical activity from the data related to the extent to which the teachers felt their schools adequately engaged pupils in healthy, active lifestyles. Whilst three quarters of the teachers surveyed felt that their schools adequately achieved this with all or most of their pupils, a fifth (20.3%) felt it did so for only some. More specifically, over a quarter of teachers felt that their school did not, or only engaged some girls, disabled and ethnic minority pupils in healthy, active lifestyles, 30% or more felt that they did not,

or only engaged some Special Educational Needs (SEN) and lower ability pupils, whilst the figure for overweight or obese pupils was even higher (over 45%).

More targeted physical activity interventions have been called for in schools (McMullen et al., 2015). However, the survey and interview data revealed that most did not target specific groups of pupils when promoting healthy, active lifestyles but instead used general strategies aimed at the less engaged, such as being more flexible over sports clothing or the 'kit' policy, or offering a choice of or alternative activities. Most did, however, recognise their limitations in this regard, but also the difficulties of reaching some pupils. One teacher explained:

'No. I think we probably should but I don't think we do. I think we are aware of the children that we need to attract, but they are the ones that are the most difficult to get to as well'. (Interview; assistant head of physical education; female)

Only a minority of schools targeted certain groups via strategies such as offering specific initiatives, running targeted clubs, organising matched ability competitions, or engaging and involving parents. The following are some such examples:

'We put on girls' football. I've got a group at the moment, 15 year 11 girls doing rugby and that's because they wanted to have a go at rugby... but there's a certain type of female that games is not for them, so we always put in an option, trampolining, possibly badminton, aerobics, which isn't games orientated...' (Interview; head of physical education; male).

'We have several days for pupils who are not the best at sport to enter Partnership games'. (Survey)

'A special group for students who are overweight is run after school...'
(Survey)

Thus, teachers were clearly aware of the need to engage all pupils in healthy, active lifestyles and schools were generally making efforts to do so. However, that a significant proportion of teachers felt that their school was only adequately engaging some pupils and some groups, and implementing few targeted strategies, suggests they need further support to more effectively do so. Similar concerns have been drawn with respect to including children with SEN and disabilities in physical education where teachers have usually been found to be positive about inclusion, but often to lack the knowledge, confidence and training to meet the physical activity needs of such children (Hodge et al., 2004; Morley et al., 2005; Smith and Thomas, 2014; Vickerman, 2012).

Strengths and limitations

The strengths of this research include the use of mixed methods, with the adoption of a large scale survey involving secondary schools across the UK, combined with interviews. This allowed for a broad insight into the promotion of physical activity in over 600 schools as well as a more in depth insight into some to be gained. The main limitations of the study though, were the low response rate to the survey and the limited number of teachers interviewed. This was despite allowing three weeks for schools to complete the survey initially and

follow up email reminders after this period extending the deadline date by a further two weeks. Reasons for the low response are unknown but it may simply reflect the many pressures and demands on schools and teachers, and/or the lower status of physical activity and health relative to other areas. Indeed, the findings presented here have confirmed such issues to be real in many schools. Furthermore, despite efforts to obtain as representative a sample and picture of teachers' experiences and perspectives on physical activity promotion as possible, the responding schools (for both the survey and interviews) were self-selected and schools themselves identified which individual(s) within their school should be involved. Whilst general selection criteria for participants were given, it is also noteworthy that a good proportion of survey respondents and most interviewees were from a physical education or sports background. Collectively the above may have led to sample and acquiescence bias and a narrower range of responses, thereby potentially influencing the results.

Conclusions and recommendations

Drawing on selected findings from a research project concerned with supporting secondary schools in the effective promotion of physical activity, this paper has explored teachers' experiences of and perspectives on physical activity promotion and in so doing, has highlighted a number of issues. In particular, issues associated with the status and place of health within schools, the amount and nature of professional development and support provided to or accessed by teachers in the area, and schools' effectiveness in promoting and engaging all pupils in healthy, active lifestyles have been identified. What is striking though is that these issues are not new, but many are the 'same old' or long-standing ones

that have been previously found and reported elsewhere. Although disappointing, this is a significant finding in that it suggests that, despite the growing expectations on schools and physical education to promote physical activity, little real progress has in fact been made over recent years. Further, they suggest that schools and teachers are not adequately and appropriately equipped to effectively promote physical activity. Given the above, expecting them to do so therefore seems unreasonable and unrealistic. If expectations are to be realised in practice and schools and teachers are ever to be successful in this endeavour, then these issues clearly need to be taken seriously and addressed. Moreover, and for the reasons highlighted earlier, it is suggested that this responsibility should not be carried by physical education and physical education teachers alone. Based on the findings and discussion presented here, the following recommendations are therefore proposed to address these issues and improve the support for and practice of schools in this area:

- That schools and teachers be provided with adequate and appropriate professional development opportunities to support the effective promotion of physical activity, including on how to promote physical activity amongst specific groups. Training should begin at the pre-service stage and be a key component of teacher education programmes, and thereafter be promoted and provided in different modes to make it both more accessible and sustainable for teachers. Training should furthermore equip teachers with knowledge of understanding of health and health promotion broadly, as well as of physical activity and physical activity promotion specifically.
- That government and other organisations continue to support schools in the promotion of physical activity, both financially and in the development and thorough evaluation of coordinated programmes and resources. Programme

and resource development and implementation should furthermore be research-informed if real progress and sustainable impact is to be achieved.

- That, consistent with the ecological model, schools strive to adopt a whole school approach to the promotion of physical activity which emphasises collective responsibility, coordinated effort, and which pays attention to individual, sociocultural and environmental factors and influences on physical activity. In so doing, schools should identify their own priorities for physical activity promotion based on their specific context and staff and pupil needs, and draw on the experiences of others as well as on the range of initiatives, practical guides, ideas and resources available, as appropriate.
- That, linked to the above, whilst continuing to play an important role, the reliance or over reliance or dominance of physical education, physical education teachers and sport in the promotion of physical activity be challenged, and that schools make a concerted effort to move towards a more shared, balanced and broader approach and emphasis. This shift should be achievable with commitment to a whole school approach and to careful consideration, planning and mapping as to how a broad range of physical activity opportunities can be integrated within other subjects and within (and beyond) the school day.

Footnotes

1. Ofsted is the Office for Standards in Education, Children's Services and Skills. It is a non-ministerial government department which inspects and regulates services that care for children and young people and that provide education and skills for learners of all ages. For example, and amongst other responsibilities,

they regulate, inspect and report on the effectiveness of maintained schools and academies, some independent schools, and many other educational institutions and programmes outside of higher education.

2. Sports Colleges were introduced in 1997 as part of the Specialist Schools Programme in the United Kingdom. The Programme enables secondary schools to specialise in certain fields, in this case, physical education, sports and dance and to place these at the centre of the curriculum as a vehicle to raise standards and develop and improve learning opportunities for all. They also act as a local point of reference for other schools and businesses in the area, with an emphasis on promoting sports within the community.

3. School Sport Partnerships were one strand of the labour government's Physical Education, School Sport and Club Links strategy launched in 2002 in England. They were a family of secondary, primary and special schools working together to increase the quality and quantity of physical education and sports opportunities for young people. From 2006 and until the funding ceased in 2011, all schools in England were part of a Partnership.

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Table 1 - Example Interview Questions

- How is your school currently promoting healthy, active lifestyles to its students? Who is responsible (in the curriculum; across the whole school; out of hours learning)?
- How effective do you feel your school is currently in promoting physical activity? Why? What would you say the evidence is for this?
- How effective do you feel your school is currently in promoting healthy lifestyles generally (i.e. including health behaviours other than just physical activity)? Why? What would you say the evidence is for this?
- How effective do you feel your school is in promoting physical activity compared to other health behaviours (e.g. healthy eating; smoking; drugs education etc)? Why?
- Do you feel that your school could better promote physical activity to young people? If so, how and in what ways?
- Do you feel that the messages and efforts to promote healthy, active lifestyles are reaching all young people?
- Does your school target any particular groups of young people when promoting healthy, active lifestyles (e.g. girls, BME groups, SEN pupils, disabled)?
- Could the school better promote healthy, active lifestyles to all young people? If so, how and in what ways?
- What pre/in-service training have you/other members of staff had to help you promote healthy, active lifestyles in your school? How effective/adequate has this been?
- Do you, personally, feel confident and competent in promoting healthy, active lifestyles?
- What support has the school had in promoting physical activity and health (e.g. resource packs, lesson ideas, literature, play times, national programmes, other)? How useful did you find this/these?
- Can you identify any additional support or training that would help you to better promote physical activity and health in your school? If so, what would be the most helpful format for this to be in? Why?
- Could anything be done (or any more be done) within school to improve the promotion of physical activity and health (school policy, ethos, curriculum, informal curriculum, school environment)?
- Could anything be done (or any more be done) beyond the school to support it

in its promotion of physical activity and health (families, community, government policy, the environment, national curriculum, peer groups)?

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