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1 **Physical education teachers' continuing professional development in**
2 **Health Related Exercise**

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1 Physical education teachers' continuing professional development in

2 Health Related Exercise

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4 *Background:* As a component of the physical education curriculum, Health
5 Related Exercise (HRE) has been subject to intensive critique in terms of its
6 status, organisation and expression in schools. Concerns and questions have also
7 been raised about physical education teachers' professional knowledge of health
8 and the extent to which HRE features within their continuing professional
9 development (CPD) profiles.

10 *Aims:* This paper presents findings from a research project which investigated
11 English secondary physical education teachers' experiences, views and
12 understandings of HRE and related CPD (HRE-CPD). It also draws upon
13 existing research, sociological theory and the concept of 'philosophies' in order
14 to present an explanatory model which may help the physical education
15 profession better understand the often problematic organisation and expression
16 of HRE in schools.

17 *Methods:* The research was undertaken via a two-phase, mixed-method study.
18 Phase one consisted of a survey questionnaire, which was completed by 112
19 secondary physical education teachers. Phase two involved semi-structured
20 interviews with 12 teachers from the phase one sample.

21 *Results and Discussion:* The survey revealed that approximately half of the
22 physical education teachers who participated in the study reported to have had no
23 prior professional experience of HRE before teaching it, and most had not taken
24 part in any CPD related to health and lifelong physical activity in the previous 12
25 months (80%) or three years (70%). Further, the teachers' responses to both the
26 survey and the interviews suggest that HRE within physical education continues
27 to be characterised by incoherence and misunderstanding. The interdependent and
28 emerging themes which provided an explanation for this include: i) the tendency
29 for the teachers' philosophies to bear the hallmark of sport and fitness related
30 ideologies; ii) many of the teachers' narrow understandings of HRE and how best
31 to teach it; iii) the teachers' largely misguided confidence in their ability to teach
32 HRE; iv) a general lack of teacher engagement with any CPD related to health
33 and lifelong physical activity.

34 *Conclusions:* With regard to HRE, both the 'I' in ITE and the 'C' in CPD appear
35 to have been overlooked, and this inevitably raises questions about the degree to
36 which teachers are prepared to teach this area of the curriculum. It is argued that
37 now is the time for action, and that relevant, effective and ongoing CPD
38 has the capacity to address the problematic teaching of HRE and develop
39 in teachers the knowledge, skills and understandings that are necessary to
40 promote healthy, active lifestyles among young people. Many physical
41 education teachers are not engaging in HRE-CPD but in order to disturb common
42 and often narrow understandings of HRE it is arguably necessary What a
43 conundrum!

44

45

46 **Keywords:** physical education; teachers; continuing professional development; health
47 related exercise, sociology.

1 **Summary for Practitioners**

2 This paper presents findings from a study that explored English secondary physical
3 education teachers' experiences, views and understandings of Health Related Exercise
4 (HRE) and related continuing professional development (HRE-CPD). The results
5 revealed that many of the teachers had not engaged professionally with HRE before
6 being expected to teach it. There was a tendency for the teachers to demonstrate
7 narrow understandings of HRE, with many seeming preoccupied with sport and
8 fitness. Given the pressures upon physical education teachers to promote healthy,
9 active lifestyles, their lack of HRE-CPD is an issue. This paper highlights the issue
10 and discusses some contributing factors, and a forthcoming paper draws on broader
11 findings from the same research project to suggest how it can be overcome.

12 **Introduction**

13 Over the past decade there has been increasing academic, political and media interest,
14 on a global scale, in the role of schools and physical education in promoting healthy,
15 active lifestyles. Indeed, there is a long-standing assumption that schools generally
16 play a fundamental role in producing healthy nations (Penney and Jess, 2004; Salmon
17 et al. 2007) and that physical education and Health Related Exercise (HRE)
18 specifically are key vehicles through which to promote health and physical activity
19 among young people (Harris, 2010; Kirk, 2006; Seghers, de Martelaer and Cardon,
20 2009; Stratton et al., 2008; Webb and Quennerstedt, 2010). In England, Australia,
21 New Zealand, Canada and the United States, this assumption has consistently been
22 manifested within various government policies, initiatives and documents (Bulger,
23 Mohr, Carson and Wiegand, 2001; Cale, 2000; Evans et al. 2008; Gard and Wright,
24 2005; Penney, 2008; Wright & Burrows, 2004). For example, 'Healthy Weight,
25 Healthy Lives' (Department of Health and Department for Children, Schools and

1 Families, 2008), ‘Healthy Weight 2008: Australia’s’ Future’ (Department of Health
2 and Aging, 2003) and the ‘Physical Education for Progress Act’ (U.S. Department of
3 Education, 2001) have all served to reinforce the view that schools, and physical
4 education in particular, have a responsibility to promote health and physical activity.

5 Public messages also continue to place schools and most notably physical
6 education in a prominent position with regards to the health of young people (Kirk,
7 2006; Rich, 2011). An article from an English newspaper (The Guardian), for
8 example, reported that a leading doctor “accused schools of making children more
9 overweight after government figures showed rates of obesity rise” (Batty, 2008). In
10 the same article “Dr David Haslam, Clinical Director of the National Obesity Forum
11 called for children to do more physical education” in order to combat the rise in
12 overweight children (Batty, 2008). These kinds of messages have, over time,
13 presented physical education as both a problem and a solution in terms of particular
14 public health issues such as obesity (Gard and Wright, 2005; Webb and Quennerstedt,
15 2010). Given claims that physical educators have a responsibility for public health
16 promotion, it is considered important to explore their experiences, views and
17 understandings of the most obvious vehicle through which physical activity and
18 health can be promoted within the curriculum, namely HRE.

19 HRE is known by a range of terms globally (such as Health Related Fitness
20 and Health Based Physical Education) and is a statutory component of physical
21 education curricula in England, Australia, New Zealand, Canada and the United States
22 and beyond. At the risk of over-simplifying, the purpose of HRE is to promote in
23 pupils the knowledge, skills and understanding necessary to lead healthy, active
24 lifestyles (Harris, 2010; Qualifications and Curriculum Authority, 2007). Within the
25 most recent National Curriculum for Physical Education (NCPE) in England, for

1 example, HRE is concerned with the ‘key concept’ of ‘healthy, active lifestyles’
2 (QCA, 2007, 191) and it seeks to promote the ‘key process’ of ‘making informed
3 choices about healthy, active lifestyles’ (QCA, 2007, 193). Essentially, HRE is a
4 context within which pupils should learn through active participation in purposeful
5 activity embracing a broad and balanced range of educative experiences (Cale and
6 Harris, 2009b).

7 Although HRE has been a statutory component of physical education curricula
8 since the late 1980s and early 1990s, literature reveals continuing concerns over its
9 status, organisation and expression in schools (Almond and Harris, 1997; Harris,
10 1994, 2009; Trost, 2006). More recently, questions have also been raised about
11 physical education teachers’ professional knowledge of health and the extent to which
12 they have engaged with continuing professional development in the area (HRE-CPD)
13 (Cale, Harris and Leggett, 2002; Trost, 2006; Ward, Cale and Webb, 2007). Armour
14 and Harris (2008) have suggested that the physical education profession seems
15 uncertain about its role in public health, unclear about the kinds of health knowledge
16 required, and the level of responsibility it is willing to accept for delivering health
17 outcomes.

18 The work of Leggett (2008) confirms concerns relating to the expression of
19 HRE and suggests that whilst rhetoric within the physical education domain tends to
20 focus on healthy, active lifestyles, HRE in practice often mitigates against this by
21 focusing upon the ‘products’ of sport performance and fitness. This issue is not new
22 and Harris (1997, 2010), amongst others, has continued to make this point for over a
23 decade. While sport performance and fitness are valuable components of physical
24 education, it is argued that an over emphasis upon these products as opposed to the
25 processes underpinning them can limit pupil learning and engagement.

1 In terms of professional knowledge, the concerns surrounding physical
2 education teachers' HRE knowledge are not confined to England. Similar issues have
3 been identified in Australia (Brown, 2003) and North America (Castelli and Williams,
4 2007). Castelli and Williams (2007) carried out a study whereby they tested the
5 Health-Related Fitness¹ (HRF) knowledge of 73 physical education teachers. Whilst
6 the findings revealed that the teachers were very confident in their perceived
7 knowledge of HRF, their test scores did not meet the standard of achievement
8 expected of a ninth-grade student. It was thus concluded that a large proportion of the
9 teachers did not have the necessary knowledge to teach pupils in, through and about
10 HRF and consequently CPD was highlighted as an issue of "the highest importance"
11 (Castelli and Williams, 2007, 14).

12 Over the past decade the concept of CPD has become increasingly valued, at
13 least at policy level (Keay, 2005, 2007a), and it has been suggested that CPD is "an
14 expectation of all professionals" (Day and Sachs, 2004, p.4) and "both a contractual
15 right and a contractual duty" for all teachers (Johnson, 2001, p.5). That is to say, if
16 teachers are to be 'professionals' then it is necessary for them to continually engage
17 with professional development. The increasing value attached to CPD has been
18 evidenced by extensive government investment in England through the National CPD
19 Strategy (Department for Education and Employment [DfEE], 2001) and the
20 Department of Education's 'National Strategies' (2008) which seek to raise standards
21 of teaching and learning by encouraging teachers to maximise their CPD
22 opportunities (Day et al., 2006; Keay, 2005). It has been argued that the heightened
23 interest in teacher CPD is associated with the growing acknowledgement of its effect

¹ Health-related fitness is another term for HRE and one that is commonly used in North America. (HRF is also used by some in the UK).

1 upon pupil learning (Armour and Yelling, 2007; Borko, 2004; DfEE, 2001, Guskey
2 and Sparks, 2004). Whilst teacher CPD should not be viewed as a panacea for all that
3 is wrong with education (Armour and Yelling, 2007; Fishman, Marx, Best and Tal,
4 2003), research suggests that it can contribute in a positive way towards the quality of
5 teaching and learning in schools (Armour and Yelling, 2007). With regard to HRE in
6 particular, and as noted earlier, questions have been raised over physical education
7 teachers' knowledge of the area, and the extent to which it features within their CPD
8 profiles (Almond and Harris, 1997; Armour and Harris, 2008; Armour and Yelling,
9 2004; Cale, Harris and Leggett, 2002; Castelli and Williams, 2007).

10 Acknowledging that ITE is, of course, also a crucial part of the teacher CPD
11 process, it is therefore concerning that the structure and funding of ITE in England often
12 serves to "limit prospective teachers' experiences of Health-Related Exercise within the
13 curriculum" (Harris, 2005, p.91). Similarly, in North America there is evidence to suggest
14 that ITE "may inadequately address the needs of prospective physical educators in the
15 areas of physical activity promotion and health-related physical fitness" (Bulger et al.,
16 2001, p.404).

17 While physical education teachers' experiences of HRE-CPD have been raised
18 as a matter of concern, the reasons underpinning these remain relatively unexplored.
19 In light of the issues identified above and the relative gap in the literature, this paper
20 presents and discusses findings from a research project which explored English
21 secondary physical education teachers' experiences, views and understandings of
22 HRE and HRE-CPD. The concepts of 'philosophies'² (Armour and Jones, 1998;

² Teachers' philosophies are grounded in their context, and comprise an array of beliefs and underlying ideologies that result from "personal and sporting biographies and...working context" (Green, 2003, p.146).

1 Evans, 1992; Green, 2003) and ‘residual ideologies’³ (Kirk, 1988) are drawn upon in
2 order to illuminate the role of prior knowledge and experience in teachers’ knowledge
3 construction as it relates to HRE (Kirk, 1988). Finally, a model is presented in order
4 to explain the relationships between some of the concepts and themes which emerged
5 from the study.

6 **The Research Process**

7 The objectives of inquiry were addressed via two phases of research. Phase one
8 involved a survey questionnaire completed with a sample of physical education
9 teachers from secondary schools across England. Phase two comprised semi-
10 structured interviews with a sample of twelve teachers drawn from the original
11 broader sample. From a figurational sociological perspective, if one is to understand a
12 particular social phenomenon it is imperative to trace its socio-historical development.
13 On this basis it was important not to address the teaching of HRE as an issue in time
14 but, rather, to attempt to trace the teachers’ experiences, views and understandings
15 over time (i.e. from their own school experiences, to their experiences of ITE, to their
16 current experiences and views of HRE and their CPD).

17 Acknowledging that teachers do not exist in a vacuum, a process or
18 ‘figurational’ sociological approach (Elias, 1978, 2000) allowed for an appreciation of
19 the complex and dynamic web of human interdependencies within which the teachers
20 were enmeshed (van Krieken, 1998). As part of a socio-historical frame, characteristic
21 of a figurational approach (Mennell, 1992), the central concept of ‘figuration’ was
22 used to illuminate the network of interdependent relationships (figurations) which
23 served to both enable and constrain the physical education teachers’ engagement with

³ The term ‘residual ideologies’ refers to the influence of prior knowledge and experiences upon physical education teachers’ orientation and practices.

1 HRE and HRE- CPD. The concept of figuration encouraged a consideration of the
2 ways in which the teachers were enabled and constrained in certain ways as a result of
3 ever-changing, multi-directional relationships with others (Green, 2003; Mennell,
4 1992). For example, teachers' day-to-day practices can be influenced by the pupils
5 they teach, their past and present colleagues and policy makers.

6 *Phase One*

7 A total of 112 teachers agreed to participate in the study. They were selected
8 from a proportionate, stratified random sample of schools from Local Authorities
9 (LAs) across England. The Schools' Web Directory (www.schoolswebdirectory.co.uk)
10 for England identified 148 LAs and each was categorised according to size⁴ -
11 small, medium, large - and a proportionate number of schools were selected from
12 each category. Based on these categories, there were two small, 121 medium and 24
13 large LAs. Two schools were selected from each small LA, three schools from each
14 medium LA, and four from each large LA. Within each LA, schools were listed in
15 alphabetical order and, where possible, every tenth school was selected. With LAs
16 with less than 10 schools, every fifth school was chosen. The majority (90%) were
17 state schools, 13% of which were Specialist Sports Colleges⁵, and the remainder were
18 independent or academies. Having selected the schools, questionnaires were sent to
19 the Head of Department (HoD) for physical education within each. Accompanying the
20 questionnaire was a self-addressed envelope and a covering letter requesting
21 permission for a physical education teacher within the department to take part in the

⁴ Small (comprising 2-5 secondary schools), medium (6-49 secondary schools) and large (more than 49 secondary schools).

⁵ Specialist Sports Colleges are part of a broader government initiative, 'Specialist schools', which position PE and sport at the centre of the curriculum, using it as a vehicle to develop and improve learning opportunities for all.

1 study. More specifically, and in order to reduce the risk of ‘sampling error’, male and
2 female physical education teachers representing different levels of teaching
3 experience were included within the sample (Day et al., 2006) by asking each HoD to
4 ensure that a teacher of a particular sex and experience completed the questionnaire.
5 Experience categories comprised of: i) 0-7 years; ii) 8-15 years; and iii) 16 plus years
6 of experience, organised around the ‘Professional Life Phases’ proposed by Day and
7 colleagues (2006). Emphasising the difference between professional life phases
8 highlights the processual nature of teaching and furthermore acknowledges that
9 teachers are dynamic, continually changing and far from homogenous (Elias, 1978;
10 Green, 2008; van Krieken, 1998).

11 The survey questionnaire was developed to explore the physical education
12 teachers’ experiences, views and understandings of HRE and HRE-CPD. Their
13 engagement with physical education CPD (PE-CPD) more generally was also
14 investigated in order to provide a benchmark for comparison. From a figurational
15 perspective, social phenomena are determined by socio-historical processes and are
16 directed towards future events (van Krieken, 1998). When designing the
17 questionnaire, therefore, it was considered important to avoid being present-centred
18 (Elias, 1987) but to look at the teachers’ engagement with HRE and HRE-CPD over
19 time.

20 The survey comprised four sections which focused on: i) demographics; and
21 the teachers’ experiences, views and understandings of ii) HRE; iii) PE-CPD; and iv)
22 HRE-CPD. With reference to Tsangaridou’s (2006, p.487) ‘categories of experience’,
23 and in order to explore engagement over time, particular attention was paid to the
24 teachers’ HRE and HRE-CPD experiences, as applicable: i) at school as a pupil; ii)
25 during their ITE; iii) whilst teaching; and vi) within their general life experiences. The

1 questionnaires were coded for follow-up purposes. Quantitative data from the
2 questionnaires were entered into SPSS 16.0 (Statistical Package for the Social
3 Sciences) for analysis and descriptive statistics were employed. Responses to
4 qualitative questions were transcribed verbatim and coded using NVivo 8 software.
5 The use of this software is explained in the following section.

6 *Phase Two*

7 A purposive sample of twelve teachers⁶ (six male and six female) was drawn from the
8 phase one sample. In selecting the teachers, the intention was to obtain a group that
9 included males and females from different types of schools within different LAs.
10 Attention in selection was also paid to the teachers' reported experiences of HRE, PE-
11 CPD and HRE-CPD, with those chosen having varying amounts of each. The
12 interviews provided an opportunity to expand upon, clarify and add meaning to the
13 questionnaire findings. Whilst each interview schedule was slightly different, all were
14 organised into five sections and, as with the survey, focused broadly on the teachers'
15 experiences, views and understandings of HRE, PE-CPD and HRE-CPD. Interviews
16 took place in a quiet room, were recorded with permission from the interviewees, and
17 lasted between 50-90 minutes. Following the interviews, the transcripts were prepared
18 and electronically mailed to each teacher for them to check for accuracy.

19 The transcripts were coded using NVivo 8 software. This allowed for the
20 generation and organisation of ideas, and the gathering of data by topic or 'node'
21 (Silverman, 2006). Examples of the nodes which emerged included
22 'professionalisation', 'sport' and 'fitness'. In analysing the data, the work of Elias
23 (1978) and, in particular, the concept of 'figuration' proved useful. As highlighted

⁶ The decision to interview 12 teachers was informed by the literature including a review of 22 studies involving teachers which revealed an average sample size of 12 (Beijaard, Meijer and Verloop, 2004).

1 earlier, locating the teachers within their historically-rooted figuration encouraged an
2 appreciation of the social interdependencies (e.g. with their Head of Department) and
3 processes (e.g. the privileging of sport within physical education) which had come to
4 both enable and constrain their experiences of HRE and HRE-CPD over time.

5 **Physical Education teachers' experiences of HRE over time**

6 The findings revealed that less than half (43%) of the teachers reported to have been
7 taught HRE whilst they were at school. Of those who had, many (63%) had had a
8 positive experience of the area. Most of the teachers were taught about HRE as pupils,
9 mainly through cross-country running (59%) and circuit training (38%). Focusing upon
10 ITE, approximately half (49%) of the teachers had engaged with HRE but approximately
11 three quarters of the sample felt that that the amount (76%), content (74%) and structure
12 (73%) of their HRE-ITE, as well as the support (79%) they received was inadequate.
13 Over half also felt that their ITE had failed to prepare them to teach PE generally (58%)
14 and HRE specifically (73%). That said, most of the teachers reported to be 'confident' or
15 'very confident' in teaching HRE (86%) and viewed it as a 'valuable' or 'extremely
16 valuable' aspect of Physical Education (96%).

17 Overall, the survey revealed that only half of the physical education teachers
18 reported to have had prior experience of HRE (either at school or during their ITE)
19 before being expected to teach it. Furthermore, only a minority had taken part in any
20 related CPD in the previous 12 months (20%) or three years (30%) (see Figure 1).

21 **INSERT TABLE 1**

22 These findings confirm concerns highlighted in previous research which suggest that
23 health and lifelong physical activity are two areas which tend to be absent from
24 teachers' CPD profiles (Armour and Yelling, 2004; Castelli and Williams, 2007;
25 Harris, 2010; Kulinna, McCaughy, Martin, Cothran and Faust, 2008; Trost, 2006).

1 The findings also raise questions about the extent to which the physical education
2 teachers in the study were equipped to teach pupils about health and lifelong physical
3 activity.

4 The teachers' lack of professional engagement HRE was also reflected in the
5 interviews, with many of the teachers reinforcing how their professional development
6 had not adequately prepared them to teach HRE:

7
8 I've never been on a course for HRE... I guess that it's (HRE-CPD) just never been
9 made readily available. (Nathan, male, 4-7 years of experience)

10
11 In terms of HRE I wouldn't say I've really learnt how to teach it. (Toni, female, 8-15
12 years of experience)

13
14 There hasn't been CPD to do with HRE. (Ethan, male, 8-15 years of experience)
15

16 As stated earlier, teachers are enabled and constrained in certain ways as a result of
17 ever-changing, multi-directional relationships with others. During their ITE, for
18 example, pre-service teachers' engagement with HRE is very much constrained by
19 often time-poor teacher educators. As just noted, almost three-quarters (73%) of the
20 teachers felt they had not been adequately prepared to teach HRE during their ITE.
21 The quotations below are representative of most of the teachers who were
22 interviewed.

23 It would have been valuable to have had some insight into HRE (during
24 ITE)... I had to work my ass off to build my resources and knowledge around
25 it. (Sophie, female, 0-3 years of experience)

26
27 Regarding HRE, my ITE was pretty much bog standard. I definitely would have
28 wanted more training on the course and info on delivery. (Stuart, male, 4-7 years
29 of experience)
30

31 These quotations support previous work which discusses the importance of ITE,
32 whilst also acknowledging that it may not be adequately preparing prospective

1 physical educators to meet their professional responsibilities related to HRE (Bulger
2 et al., 2001; Fox and Harris, 2003).

3 While many of the teachers had not engaged with HRE-CPD, most (87%) had
4 participated in some form of professional development in the previous 12 months and
5 the majority reported positive experiences. These findings thus highlight the disparity
6 between the teachers' engagement with professional development generally and
7 health related CPD specifically. As highlighted earlier, given the on-going concerns
8 surrounding the teaching of HRE, together with the responsibility placed on physical
9 education teachers to promote healthy, active lifestyles, the lack of teacher
10 engagement in health related CPD is an issue.

11 Opportunities for HRE-CPD do exist in England (for example, HRE modules
12 were offered as part of the National CPD Strategy [DfEE, 2001]) but the earlier
13 quotations from Nathan and Ethan suggest that a limited awareness of these is an
14 issue. Given the teachers' general lack of awareness of the HRE-CPD available, it is
15 not surprising that many of the teachers had not experienced any. Clearly, if teachers
16 are not aware of opportunities to engage in HRE-CPD they will not access them,
17 regardless of whether they recognise the need to do so. This issue needs addressing
18 sooner rather than later.

19 For the minority of teachers who had experienced HRE-CPD, both the survey
20 and interview data suggested that their experiences had typically focused upon fitness
21 testing, circuit training and how to use fitness equipment. For example, during the
22 interview one teacher stated "We recently just did fitness testing which was run by the
23 Head of Department and the year coordinator" (Ethan, male, 8-15 years of
24 experience). While this experience may have been useful in some respects, it does not

1 reflect the broad and multi-dimensional nature of HRE and is likely to do little to
2 further enhance or develop teachers' experiences and understandings of the area.

3 With regards to the teaching of HRE, in a third of the schools (33%) the
4 physical education teachers did not have access to unit or lesson plans or resources to
5 support their practice. As Harris (1997) noted following similar findings from her
6 study, a lack of planning and resources raises questions about structure, progression
7 and coherence within HRE. Moreover, their absence in some schools could be taken
8 to reflect a generally 'ad-hoc' attitude towards HRE and perhaps teaching more
9 broadly, as evidenced by comments from some of the teachers interviewed:

10 It's an easy lesson to deliver more to the point... **ad hoc**. (Toni, female, 8-15 years of
11 experience)

12

13 We don't have a unit on health-related issues unless they [the pupils] opt for GCSE
14 PE. A health-related strand runs through all units but the topic **is not set in stone**. We
15 don't have a scheme of work. (Joanne, female, 4-7 years of experience)

16

17 While planned and well-resourced HRE (or physical education more generally) does
18 not necessarily equate to a progressive, coherent and educationally sound programme,
19 it would seem to be one way of maximising this possibility.

20 The NCPE in England outlines the content to be taught within physical
21 education but does not stipulate how it should or could be taught. Given this
22 flexibility, it seems the majority of the teachers in this study chose to teach HRE
23 predominantly through fitness related activities (usually fitness testing and circuit
24 training), with links often being made to sports performance. For example:

25 Implicit in all lessons, all physical education lessons is the fitness element... it's gotta
26 run through all the activities that you run, they've gotta have that fitness element, it
27 has to be there. (Philip, male, 30+ years of experience)

28

29 Fitness is prioritised... HRE is obviously to do with how fit we are. (Fred, male, 8-15
30 years of experience)

31

1 For rugby and football we try and do a number of fun tests with the kids based around
2 the bleep test and we incorporate tackle bags, kicking skills and things like that so we
3 try and make it a bit more specific to sport ... and basketball skills into circuit
4 training, so instead of just doing weights and press ups and sit ups, they are doing
5 skills of a certain game so they are learning skills and doing repetitions of skills
6 instead of repetitions of press ups. (Nathan, male, 4-7 years of experience)
7

8 The fitness orientated approach to HRE reflected in these quotes is not a new
9 phenomenon (Capel, 2007; Green, 2008; Leggett et al., 2008; Penney, 1998). Indeed,
10 the findings suggest that little has changed since the earlier work of Harris (1994;
11 1997) which revealed that physical education teachers often focused upon fitness
12 rather than the broader concept of health.

13 While the findings paint a relatively bleak picture for HRE, it is important to
14 highlight that there were also some positive findings from the research. For example,
15 one teacher, Sophie (female, 0-3 years of experience), was an anomaly with regards to
16 her experiences, views and understandings of HRE. During the interview with Sophie
17 it was clear that, in comparison to the other teachers, her philosophies and practices
18 were not as heavily circumscribed by residual sport and fitness related ideologies⁷.
19 Rather, she was found to have a broader HRE biography⁸, and ‘physical activity for
20 health’ featured more heavily within her philosophies. After competing in gymnastics
21 at regional level, Sophie suggested that her interest in HRE was:

22 mostly down to working in the gym at university. After my boss forced me to deliver
23 classes, I learned I actually loved it and so I brought that into school with Fit ball and
24 Boxercise lessons. I also enjoy doing the Pump It Up DVDs 'n' stuff like that at home
25 so I like challenging the kids with the routines I pick up. (Sophie, female, 0-3 years of
26 experience)
27

⁷ Although sport and fitness ideologies are discussed together, they are indeed separate but often related.

⁸ The term ‘HRE biography’ refers to the teachers’ views and experiences of HRE across their life span.

1 From the above it is interesting to note that the experiences which Sophie valued and
2 which had prepared her most to teach HRE tended to be from general ‘life
3 experiences’ (O’Sullivan, 2005; Tsangaridou, 2006) as opposed to experiences gained
4 at school, during her ITE or whilst teaching. Similarly, another teacher stated during
5 his interview that “A lot of my HRE knowledge comes from personal interest -
6 magazines, websites and DVDs” (Stuart, male, 16-30 years of experience).

7 Although popular media can provide useful information it may not always be
8 wholly accurate, reliable and appropriate for an educational context. In our view, the
9 resources physical education teachers primarily draw upon to inform their teaching of
10 HRE should be specific to the area and in keeping with National (or State) Curriculum
11 requirements. As revealed earlier, the teachers were rarely aware of CPD
12 opportunities and resources that could support and guide their teaching of HRE.
13 Consequently, some may have felt it necessary to acquire HRE knowledge through
14 more ‘popular’ or ‘public’ means. This trend has been discussed in broader terms by
15 Giroux (2004) and more recently Rich (2011), who argue that learning and ‘public
16 pedagogies’ related to health occur in and through “sports and entertainment media,
17 cable television networks, [and] churches...” (Giroux, 2003, 497), as well as in
18 schools and universities. With this in mind, the perhaps limiting influence of popular
19 pedagogies upon physical education teachers’ (and therefore pupils’) knowledge and
20 understandings of health and HRE should not be underestimated.

21 The limitations of teachers uncritically drawing upon popular pedagogies are
22 further heightened when we consider the numerous developments within education in
23 recent years which are of relevance to HRE (such as curriculum revisions, new
24 physical activity recommendations for young people, and the introduction of
25 government initiatives such as ‘Healthy Schools’). If physical education teachers are

1 to be effective, then it would seem important that they are kept abreast of such
2 developments via accessing appropriate resources and CPD opportunities. The
3 findings from the present study, however, suggest that this is not happening in all
4 schools.

5 **Health Related Exercise: What a conundrum!**

6 The previous section highlighted physical education teachers' experiences of HRE
7 over time and revealed a number of issues associated with these. Drawing upon these
8 findings, previous research and the concept of 'philosophies', this section presents a
9 model (see Figure 1), referred to as 'The HRE Conundrum', in an attempt to explain
10 these issues and better understand the often-problematic organisation and expression
11 of HRE in schools. The model comprises four stages, each of which is discussed in
12 turn.

13 **INSERT FIGURE 1**

14 ***Physical education teachers' philosophies: The privileging of sport and fitness***

15 The tendency for the teachers to focus upon sport and fitness within HRE was
16 arguably a manifestation of their deeply-rooted and often persistent 'philosophies'
17 which, for the most part, were strongly attached to sport and fitness ideologies (e.g.
18 sports participation equates to health). This claim supports that of Kirk (1988) and
19 Green (2003) who proposed that residual sport and fitness ideologies permeate many
20 physical education teachers' philosophies, with their past experiences of physical
21 education and sport leading them to privilege the latter. As a result, teachers
22 generally tend to apply a sporting frame when teaching other components of physical
23 education, including HRE. While the presence of sport and fitness ideologies within
24 physical education is not necessarily negative, an over emphasis upon them at the

1 expense of a broad and balanced curriculum may limit pupil learning in this context.
2 Further, given that a large proportion of the teachers had not engaged with HRE-CPD
3 in the three years prior to the research, there will have been limited opportunities for
4 their philosophies to be meaningfully challenged or changed in any way.

5 *Narrow understandings of HRE: The manifestation of privileged ideologies*

6 Findings from both phases of the study suggested that the majority of the
7 teachers held narrow, inconsistent and at times contradictory views with regards to the
8 aims of HRE. For example, when asked what they viewed the aims of HRE to be, one
9 teacher reported that it “is to improve fitness levels” (Sarah, female, 4-7 years of
10 experience), whilst another claimed “HRE is a massive way of keeping people within
11 sport” (Nathan, male, 4-7 years of experience). Not only do these quotations reflect a
12 narrow understanding of HRE but also a privileging of sport and fitness in this
13 context.

14 Traditionally the terms ‘fitness’ and ‘health’ have been confounded
15 (Waddington, Malcolm and Green, 1997) and, as such, it is perhaps not surprising that
16 some of the teachers tended to use one term, usually ‘fitness’, to refer to both
17 concepts. It is suggested that the ideologies and core assumptions that seem to have
18 infiltrated physical education teachers’ philosophies (Capel, 2007; Green, 2003) have
19 constrained their understandings and the development of HRE and reduced the focus
20 to the ‘product’ of physical fitness as opposed to the ‘process’ of lifelong physical
21 activity and health. This reductionist approach was also evidenced by the narrow
22 range of teaching methods which the teachers appeared to adopt. Previous research
23 has likewise acknowledged this as an issue (Harris, 1997; Leggett, 2008).

24 As mentioned earlier, both the survey and the interview data suggested that
25 fitness testing and circuit training were the most popular vehicles through which to

1 teach HRE. Yet, Cale and Harris (2009b, 103) suggest that fitness testing in schools
2 “may well represent a misdirected effort in the promotion of healthy lifestyles and
3 physical activity, and that physical education time could therefore be better spent”.
4 Similarly, Garrett and Wrench (2008, 21) contend that “the continuing and
5 unproblematic use of fitness testing in schools and universities might actually
6 contribute to narrow learning outcomes that cause more pain than pleasure”. It is
7 maintained, however, that if carried out appropriately, in an individualised and
8 educational manner as part of a planned HRE programme, fitness testing could be
9 valuable in terms of promoting physical activity (Cale and Harris 2009b; Cale et al.,
10 2007).

11 ***Physical education teachers and HRE: Misguided value and confidence***

12 How physical education teachers express HRE is likely to be influenced by
13 how they view and understand the area. The survey findings suggested that most of
14 the teachers valued HRE (96%) and were confident in their ability to teach it (86%).
15 The subsequent interviews provided an opportunity for teachers to communicate the
16 reasons underpinning the value they attached to HRE, with one teacher stating:

17 If physical education was a wheel, HRE would be the hub. Although it’s the smallest bit,
18 without that everything falls apart... Understanding as well, we really need to push that. Later
19 on, you hope that they will continue to do activities ‘cause they enjoy it, but also for the
20 benefits for their body. (Philip, male, 30+ years of experience)

21
22 Whilst it is perhaps encouraging that most of the physical education teachers
23 in this study valued HRE and felt confident teaching it, according to Cale (2000, 167),
24 if teachers are to be successful in promoting healthy, active lifestyles amongst young
25 people it requires “more than an enthusiasm for and belief in its value, importance and
26 role”. Indeed, if the aims of HRE are to be achieved, teachers need to have a clear

1 understanding of the area, and of the distinction between the terms health, fitness,
2 physical activity and sport. The findings suggest, however, that this was not the case.

3 In terms of the teachers' confidence, these findings support those of Castelli
4 and Williams (2007), reported earlier, in that while the teachers claimed to be
5 confident in their ability to teach HRE, their experiences and understandings of the
6 area were often limited. Given that approximately half of the teachers had not
7 formally experienced HRE in any capacity prior to being expected to teach it, it is
8 surprising that the majority felt so confident.

9 It is proposed that the teachers' misguided value and confidence were rooted,
10 at least in part, in their philosophies and narrow understandings of HRE. It appears
11 that the teachers felt confident in their ability to promote knowledge, skills and
12 understanding through sport and fitness related activities (such as fitness testing and
13 circuit training), but were less aware of other means by which they could do this. For
14 example, when asked if he felt confident teaching HRE in comparison to other areas
15 of physical education, Thomas (male, 0-3 years of experience) stated,

16 Yeah, I'm quite a confident teacher through my own sport. When I was playing sport
17 as a participant, a lot of the things we did were related to HRE, fitness testing 'n'
18 stuff, so I've had experience of doing it myself.

19
20 Despite Thomas's claims of confidence, by focusing upon sport and fitness within his
21 response he highlighted the privileged ideologies within his philosophies, as well as
22 his narrow understanding of the nature and purpose of HRE. While sport may be one
23 valuable vehicle through which to deliver HRE, an over-emphasis on it at the expense
24 of other broader educational experiences is considered limiting.

25 ***HRE and the status quo***

26 The preceding discussion has confirmed that the historically rooted concerns
27 surrounding the organisation and expression of HRE continue to be evidenced and

1 reinforced across multiple levels and over time. Further, the present findings suggest
2 that some of the contributing factors (such as the nature of teachers' philosophies) to
3 these concerns are not being addressed. If these findings are representative of physical
4 education teachers generally, as other literature suggests they are likely to be, then
5 this is an issue which needs to be addressed. With reference to the HRE conundrum
6 introduced earlier (figure 1), it would seem that physical education teachers'
7 philosophies and practices, often bearing the hallmark of sport and fitness ideologies,
8 need to be challenged via relevant, effective and ongoing HRE-CPD. In the absence
9 of sufficient challenge, status quo prevails and HRE will continue to be characterised
10 by incoherence, misunderstanding and an overriding focus on sport and fitness related
11 knowledge and practice.

12 Whilst it has been acknowledged that this issue is not confined to England, the
13 findings presented in this paper originate from the English context and the authors are
14 therefore not in a position to comment on their transferability to other countries or
15 contexts. That said, some of the findings may be generalisable in similar curriculum
16 contexts where HRE (or the equivalent) is a recognised component. It is argued that
17 now is the time for action, and that relevant, effective and ongoing CPD has the
18 capacity to address the problematic teaching of HRE and develop in teachers the
19 knowledge, skills and understandings that are necessary to promote healthy active
20 lifestyles among young people. Potentially, CPD has an important role to play in
21 challenging the status quo and in equipping teachers with the knowledge, skills and
22 understandings they need to effectively teach HRE. The process of CPD is especially
23 pertinent when the growing acknowledgement of its effect upon pupil learning is
24 recognised (Armour and Yelling, 2007; Borko, 2004; DfEE, 2001, Guskey and
25 Sparks, 2004). Yet, given the misguided confidence physical education teachers seem

1 to have in relation to HRE, encouraging them to participate in any related CPD
2 remains a challenge. Indeed, it appears that, with regards to HRE, both the ‘I’ in ITE
3 and the ‘C’ in CPD have been overlooked and this inevitably raises questions about
4 the degree to which teachers are prepared to teach this area of the curriculum. If
5 physical education teachers’ experiences, views and understandings of HRE are to be
6 broadened, this persisting cycle needs to be disturbed. It seems ironic however, that in
7 order to disturb common and often narrow understandings of HRE, HRE-CPD is
8 arguably necessary. What a conundrum!

9
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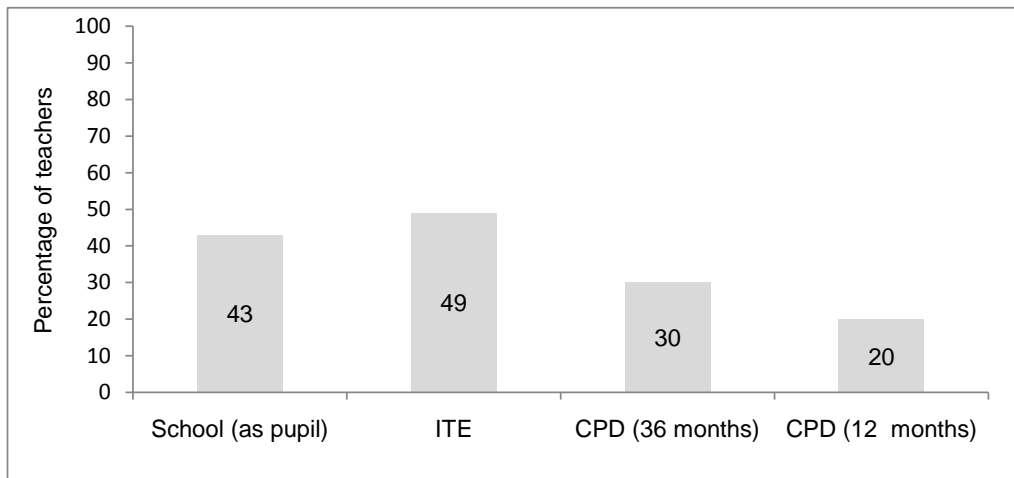
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1 Table 1. The physical education teachers' experiences of HRE



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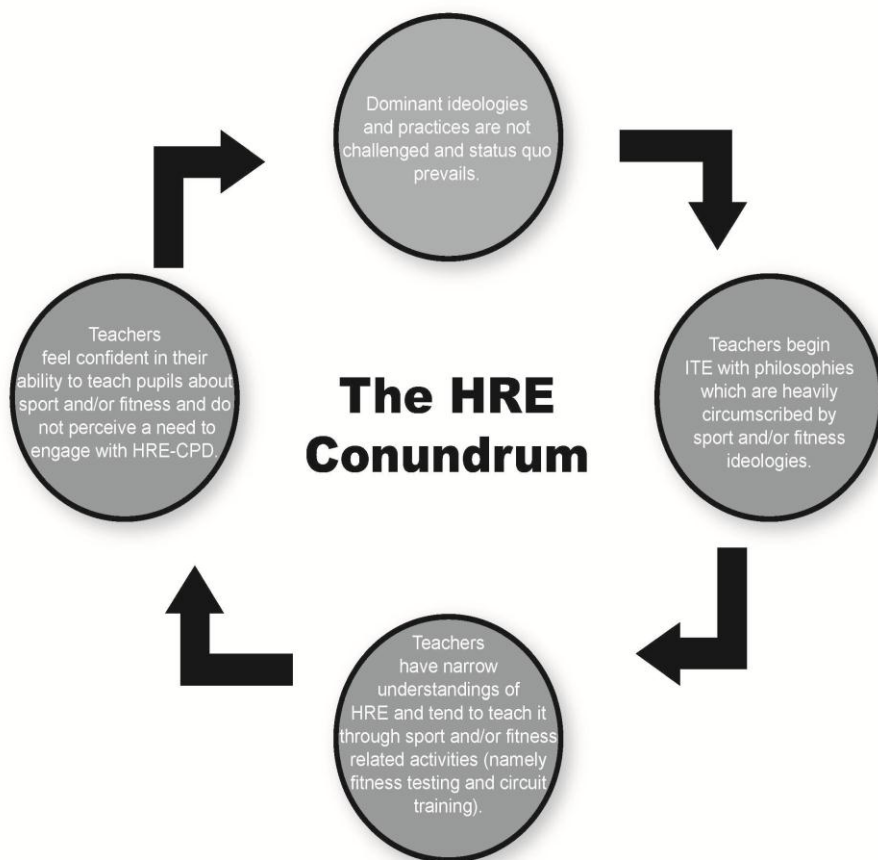
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1 Figure 1: The HRE Conundrum



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