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Health literacy in schools: prioritising health and well-being issues through the curriculum

Health literacy (HL) is a relatively new concept in health promotion and is concerned with empowering people through enhancing their knowledge of health issues and improving their ability to make choices about their health and well-being. Schools are seen increasingly as key settings for the dissemination of health messages through curricula and other on-site provision. However, such opportunities are amongst many demands being placed on educational providers and finding space in the school day to support the health agenda is a challenge. This practice-based, qualitative study examines the current practices in three schools in the UK. In total 34 pupils (n =16 from Year 9 and n =18 from Year 11) were interviewed in six focus groups (3 in each school), with up to 6 pupils in each focus group. School staff (n =8) were also interviewed individually. Findings suggest that pupils and staff have an understanding of health and a capacity for HL, though health education (via taught subjects) is not statutory across the four Key Stages of the National Curriculum. In order to engender health literate young people, with a view to reducing health inequalities, it is recommended that key health messages are delivered through an agenda that integrates current provision for health via the curriculum and other school-based practices, such as the Healthy Schools Programme.

Keywords: *National curriculum; Health literacy; Health promotion; Health inequalities; Physical activity*

Introduction

This paper presents a practice-based, empirically driven pilot study drawing on a qualitative data set. At its core is health literacy (HL) in adolescents, specifically their understandings of health and key public health messages with a view to lifelong learning for health. The research context is determined by school and the school curriculum; the nature of health-related messages provided to engender HL; the consistency and conciseness of these messages; and whether pupils (and teachers) deem them informative. Broadly, the paper aims to investigate the current dissemination of health-related messages within the schools and whether this is sufficient in developing HL in pupils. Underpinning this aim is the need to attend to health inequalities, and the call for all school-age children to have access to consistent and accurate public health messages pertinent to their health and well-being as adolescents (The Marmot Review, 2010). Starting from the premise that HL is an asset (Nutbeam, 2008), the study is informed by a health-oriented approach to health education in schools (Adams, 2003) which favours a constructive approach to health, aiming to ‘enhance positive health as well as to prevent ill health’ (Downie, Tannahill, & Tannahill, 1996, p. 42). In this sense HL, and being health literate, is actualised through empowerment, and the confidence to make informed decisions in regard to health. Moreover, this approach lends itself to the inclusion of health promotion and preventative public health agendas, ubiquitous in all sectors of society, within HL debates.

Positioning HL within health (education) promotion policy and practice

Improving the health of the British population has been an explicit policy aim of successive UK governments since the Conservative government of the early 1990s published the *Health of the Nation*, which identified the extent of social and health inequalities (Department of Health [DoH], 1992). The agenda was re-affirmed by the subsequent Labour government’s *Saving Lives: Our Healthier Nation* (DoH, 1999) and the White Paper *Choosing Health* (DoH, 2004). The latter suggested that health messages were plentiful but often ‘inconsistent, uncoordinated and out of step’ (DoH, 2004, p. 21), thus remained largely ineffective. Despite this, successive policies and programmes since 2004 have sought to reduce the health gap by encouraging individuals to lead healthier lifestyles, (DoH, 2005a, 2005b, 2008, 2010). However, any sense of a building momentum behind the promotion of health messages must be tempered by consideration of the political values underpinning the current crop of policies.

Health promotion *per se* focuses on being proactive in addressing the determinants of health whilst policy

is couched increasingly in the language of liberalism and the right of the individual to *choose* health. The right to health care, for example, as articulated through the notion of citizenship espoused by the architects of the post-war welfare state differs significantly from the rhetoric of personal responsibility which characterises the agendas of New Labour and the incumbent Coalition government. For example, the Foreword to *Choosing Health* noted that ‘Government cannot - and should not - pretend it can “make” the population healthy. But it can - and should - support people in making better choices for their health and the health of their families’ (DoH, 2004, p. 4). This shift from a ‘nanny state’ to ‘nudging’ individuals to adopt healthy behaviours represents a cultural as well as political shift and its effectiveness in the long term remains to be seen (Marteau, Ogilvie, Roland, & Suhreke, 2011). However, its impact on current health promotion practice in community and educational settings is becoming evident and is pertinent to any discussion on the positioning of HL in health policy. Intervention in childhood through to early adulthood is deemed particularly crucial to improving health outcomes through the life course (Philippas & Lo, 2005). Engaging young people through tailored public health policies is therefore critical to ensuring the maximum opportunity to promote healthy behaviours and raise awareness of the risks associated with poor health choices.

HL is a relatively new concept in health promotion and is defined as ‘the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health’ (WHO Commission on the Social Determinants of Health, 2007; Nutbeam, 2008, p. 2074). HL was concerned primarily with *literacy* or being able to read and understand medical information (Peerson & Saunders, 2009). More recently the concept has broadened to one which includes empowering people by enhancing their knowledge of health issues and improving their ability to make choices about their health and well-being. Through targeted educational messages, a health literate person develops skills and abilities that afford empowerment to make informed decisions regarding the attaining and maintenance of good health (Kickbusch, 2002; Nutbeam, 2000, 2008; Peerson & Saunders, 2009). Nutbeam (2008) captures the evolving nature of HL and its meaning, setting out two distinct pathways. First, HL as a ‘risk factor’ derives from clinical practice and is defined by an individual’s ability to follow medical-based instruction in the management of illness and disease. Alternatively, HL is a ‘(personal) asset’ viewed as a way in which individuals can develop ‘competencies for different forms of health action (personal, social and environmental)’ (Nutbeam, 2008, p. 2074). Evolving from public health, this particular conceptualisation forms the basis for understanding HL in this paper.

Being health literate as with any other competency is an ongoing process which develops over an individual’s lifetime. Its development comes from providing individuals with knowledge, life skills and support from policies and environments (Abrams, Klass, & Dryer, 2009; Edwards, Wood, Davies, & Edwards, 2012). Locating HL within the debate on health inequalities allows for consideration of how a person’s HL influences the extent to which they will benefit from campaigns, interventions and/or educational programmes designed to promote health. In scrutinising the current health inequalities in England, the Marmot Review (2010) presented six key policy objectives. Most connected to the notion of HL and the benefits this can bring to individuals; however, one which sought to ‘enable all children young people and adults to maximise their capabilities and have control over their lives’ (p. 9) resonates explicitly with the features of HL discussed here.

Historically, public health messages aiming to shape healthy lifestyle behaviours have been disseminated through various media, for example, advertising hoardings, radio, television and more recently the Internet (Robertson, 2008). Social marketing is a developing field with its roots embedded in social psychology and mass communication which focuses on the determinants of behaviour for the intended audience (Evans & Hastings, 2008; Ratzan, 2001). The White Paper, *Choosing Health* (DoH, 2004) highlighted the importance of using health-related social marketing to encourage positive health behaviours. Indeed, the *Change4Life* campaign (DoH, 2009), which targeted young people and families with children and young people, promoted the fundamentals of healthy lifestyle behaviours via social marketing strategies (including TV adverts, posters, leaflets and web-based information).

The current focus on young people’s health and an appreciation of how behavioural patterns in adolescence translate into behaviours in adulthood suggests that building levels of HL is fundamental to

promoting good health. Manganello (2007) argues that targeting young people will encourage HL, empowering them to be more engaged with their health choices and behaviour, which is then more likely to be sustained through the transition into adulthood (Borzekowski, 2009). That is not to say that an awareness of public health messages necessarily leads to the cessation of unhealthy behaviour. Indeed, 'knowledge of guidelines is not the only issue, with over 70% of adults saying they would like to do more physical activity, citing work commitments and a lack of leisure time as the most common barriers to this' (British Heart Foundation Health Promotion Research Group, 2012, p. 5). However, being physically active is just one of many health behaviours that are addressed in HL debates. The point here is this, if individuals have access to the opportunity to become health literate, it increases their ability to filter through the array of health-related messages and take steps to a healthier lifestyle as is determined by their personal circumstances at any given time.

Health literacy and schools

The childhood and adolescent years are pivotal in determining health through the lifecourse and as a result schools are seen increasingly as key settings for the dissemination of health messages through curricula and other on-site provision. To support this, the Marmot Review (2010), prioritised health via education and development in children and young people, emphasising that what happens in these years has a lifelong effect on a person's health and well-being. Schools can develop young people's HL through the curricula and the environments they provide. Contemporary school-based health education programmes should be designed to help motivate and support students to develop knowledge and skills (Department for Education [DfE], 2004, OFSTED, 2012). In line with existing health promotion guidance, schools are charged with both educating and encouraging young people to eat healthily and be physically active (DfE, 2011a). This includes policies relating to building layout and recreational spaces, catering (including vending machines) and the taught curriculum, including physical education (PE) (DfE, 2011b).

Current school provision that encompasses HL is Personal, Social and Health Education (PSHE), the Healthy Schools Programme (HSP) (DoH, 2005b) and to a lesser extent statutory subjects such as PE. PE contributes to public health and personal well-being through the learning and practice of fundamental movements and core skills that are the building blocks for the development of physical literacy for young people (DfE, 2011a; Haskins, 2011; Qualifications and Curriculum Authority, 2007a, 2007b). PE is also highlighted as a significant contributor in helping children and young people (5-16 years old) to achieve their required 60 minutes of physical activity per day, one of the key messages in lifestyle promotion and weight control (DoH, 2008). This notion of PE and specifically the performance aspect relating to the body has been critiqued recently by PE scholars for two reasons. First, if too much emphasis is placed on performance, assessment and regulation, the school setting is considered a 'totally pedagogised micro society' (Evans, Rich, Allwood, & Davies, 2008, p. 387). These authors are critical of how practices in PE place too much focus on aspects of the body, particularly in terms of weight and body size, which can create added pressure on children and adolescents. Second, this mantra associated with the performance and perfection of the body required, or instructed for healthy living in Western societies, is often associated with thinness. This can be a precursor to obsessions with the thinness 'ideal' and (unhealthy) controlled eating behaviours (Humberstone & Stan, 2011). These critiques are further supported by evidence suggesting that being thin/underweight and unfit is not a guarantee to being healthy, whereas being slightly overweight or obese but physically fit is more important. Evidence suggests that being fit offsets many of the risk factors associated with obesity, and 'fat but fit individuals have substantially lower mortality risk than normal-weight but unfit individual's' (McAuley & Blair, 2011, p. 778).

PSHE has been delivered in English schools since 2000 and more recently became Personal, Social, Health and Economic Education which 'is a planned programme to help children and young people develop fully as individuals and as members of families and social and economic communities' (OFSTED, 2010, p. 8). PSHE is non-statutory throughout Years 1-11 (Key Stages 1-4), and a central

component of PHSE is the premise of HL (DfE, 2011a; OFSTED, 2012, 2010). Currently the Department for Education's position is that PSHE remains a non-statutory subject within the National Curriculum, and it is not yet clear if it will become a statutory subject in the 2014 revisions. Adams (2003) presented a critique of this positioning, claiming that a dichotomy existed between statutory and non-statutory subjects, specifically when the development of key skills relating to health and well-being was an optional venture. In doing so he offered a health-oriented approach to health education, which is 'fluid in both interpretation of health issues and the approached used to dealing with health-related experiences' (Adams, 2003, p. 273).

It is not the intention of this paper to position HL in the ongoing debates around statutory and non-statutory subjects, rather it is to gain a sense of the nature and currency of health-related messages that are disseminated in schools. It is also not the intention to propose the creation of an examinable, assessed subject that serves to measure HL in pupils. The focus is on the effectiveness of current practices and exploring the nature of the health-related messages conveyed. In considering the debates around HL, and the critical offerings surrounding PE and PSHE, this paper examines HL and its relevance to promoting health and well-being within the school context. Specifically, the prospect of formalising the health agenda through schools' taught curriculum is explored.

Methods

Participants

The project draws primarily on empirical data from Stage 3 and Key Stage 4 pupils from three secondary, comprehensive schools in England (UK), 'Coterton High School', 'Woldham High School' and 'Tebston High School'. The school and participant names used in this paper are pseudonyms. Coterton High School is situated in a rural area of the West Midlands. The school accommodates pupils from Year 8 to Year 13 and achieved a 'good' result in their last OFSTED inspection in 2008 (OFSTED, 2012). Woldham High School is located in an urban area of the South West region, and the school accommodates pupils from Year 7 to Year 13. At the time of data collection, the school's OFSTED result was not known. Tebston High School achieved an 'outstanding' result in their last OFSTED inspection in 2010 (OFSTED, 2012), and is located in a rural area of the South West region, providing for Year 7 to Year 13 pupils. Initial access to the participating schools was gained via existing links between the lead researcher's university and members of staff at each school. In line with the aims of the research, Year 9 (13-14 years old) and Year 11 (15-16 years old) pupils were purposively sampled at each school. In order to gain school staff's perspectives of how health and HL is disseminated via the taught curriculum, staff at the three schools were also purposively sampled.

Procedure

The project was scrutinised and approved by the lead researcher's Faculty Research Ethics Panel. Owing to the target group of pupils being under the age of 18 years, parental consent was obtained, in addition to consent from each head teacher being given from the outset. In total 34 pupils ($n = 16$ from Year 9 and $n = 18$ from Year 11) were interviewed in six focus groups, with up to 6 pupils in each focus group. Thus two focus groups per school were conducted, one comprising Year 9 pupils and one comprising Year 11 pupils, and groups were heterogeneous in terms of gender. The primary aim of the focus groups was to investigate the pupils' level of understanding (capacity) of health and HL. The interviews included nine open-ended questions exploring the perception of the meaning of HL; age-specific messages of health and well-being; taught subjects that pupils felt were most appropriate for delivering key health messages; where students access health information; and relevance of health topics/messages. Staff from each school were interviewed individually ($n = 8$) including: head teachers, heads of PE department and heads of PSHE. Head teachers were invited to contextualise the school's plan for health and how this was

implemented, including evaluation strategies, OFSTED criteria and so on. As key subjects identified in the supporting evidence base, heads of PE/PSHE were asked about key health messages and their importance to that subject, as well as alternative health policies used in and by the departments within the school (DfE, 2004).

Semistructured interviewing methods were used in both the focus groups and individual interviews, to prompt and maintain flexible responses (Morse & Richards, 2007). Focus group interviews lasted between 50 and 80 minutes, with individual interviews lasting between 45 and 60 minutes. All participants were aware of the purpose of their involvement and were given a project brief detailing the nature of the study, as well as procedural processes, prior to confirming their involvement (Burns, 2000; Gratton & Jones, 2004; Marvasti, 2004). Upon agreement to the details provided in the brief, the participant (subject to parental consent) and researcher signed the voluntary consent form, which ensured that the pupils were willing to take part in the proceedings.

Analysis of interview data

All interviews were audio-recorded using a digital dictaphone and transcribed *verbatim* in order to analyse the collected data (Morse & Richards, 2007). The transcripts were subjected to thematic content analysis, which took the form of identifying key, recurring themes from the data and noting refined characteristics of these broader themes (Gratton & Jones, 2004). With only three schools participating from the same region of England, it should be noted that the findings cannot be generalised across the target population. Nevertheless, certain patterns highlighted in the data analysis are encouraging and may provide an insight into the HL capacity of adolescent pupils in the UK. The main, broad themes from both pupils and staff were curriculum and the importance of health and HL. There were expected nuances between pupil and staff data, but key connections were also noted and will be attended to in the following discussion.

Discussion

Curriculum

PE, PSHE, Food Technology and Science (specifically Biology) were identified by pupils and staff as the 'core' subjects for delivering key health messages through the taught curriculum. In terms of how these reinforced health messages, pupils provided explicit details of how the subjects attended to some key issues and highlighted links between the subjects:

Year 11s from Coterton spoke in relation to PSHE and PE:

I think a lot of it most people already know about but ... it was just re-assuring people about the effects and what, you know, drugs and smoking and that can do to your life 'cause I think every now and again you do need the reminder of what they can do to you so you don't drift off and go off the rails a bit. (Brandon)

[In core PE] Miss 'Teacher X' did a lesson on [drugs], I was in one of her lessons ... she links her dance to cocaine and it's one that's called ... 'My name is cocaine' and they do a dance about it (cocaine) like shooting through the body and that it symbolises, and then she did a lesson just researching cocaine on her laptop and telling us what it does to us, so it (PE and health) can link. (Leah)

In considering holistic views of health, which complements the concept engendered through the HSP, these core subjects embrace the various dimensions of health. For example, PE attends to the physical activity strand of health with a bias towards the physical aspects of health, whereas PSHE encompasses the social, emotional and cultural aspects of health and well-being. Food technology, not surprisingly, serves to develop pupils' knowledge of food groups and how this contributes to a healthy lifestyle, thus focusing on the diet and nutrition strand of health. Finally, (science) biology focuses on the workings of

the body and specifically the impact of lifestyle on the physiological and biological state of the body, hence reinforcing important messages of preventative health and supporting many of the physical health messages from the PE context. Thus, the taught curriculum does signpost pupils to the *milieu* of health messages, and this would in part contribute to levels of HL. However, this range of taught subjects is only available to pupils up to the end of Key Stage 3 (Year 9), so there is concern as to whether key health messages are reaching all pupils into Key Stage 4. Thus health messages pupils do receive in Key Stage 4 via the taught curriculum are shaped by their GCSE options (DfE, 2011a), which in terms of health and HL presents an inequitable scenario for school leavers. Moreover, whilst there is a programme for PSHE in Key Stage 4, it is non-statutory. Therefore, with the current emphasis on exam results (OFSTED, 2012), many schools are unlikely to deliver PSHE as a stand-alone subject (Adams, 2003).

Staff perceptions, to some degree, supported the notion that some core subjects encompassed health-related messages, but they aired different views surrounding the notion of a health 'agenda', its composition and its dissemination. For example, the head of PE at Coterton believed some links were established, but more was needed:

I think it's part of the Healthy School's policy. I mean I've had quite a few meetings with the Food Tec head... and it's how do we or can we put together a bid to gather a Healthy School's policy and stuff like this and yeah it's a cross curricular thing and diet's got to be taught through Food Tech - but it's covered in the new tutor programme. It's got a little section on obesity and things like that and I think it's something you've got to teach the whole school.

This underlines what many staff perceived as 'informal' communication between departments, dictated primarily by the HSP, as opposed to a comprehensive, embedded agenda. Yet the head teachers interviewed referred to the school's health agenda and how that was disseminated, in some cases through a variety of subjects within the taught curriculum:

I think the health agenda here, we would see as being reasonably broad ... the link with things in food technology, there's the work that goes on in science ... But, it even goes through to the Sixth Form where in terms of the mental health area we've got psychology which a huge number of Sixth Formers do as well. So, there is a very broad central PSE and tutor time provision, where we can obviously say that every youngster has that but there's then the audit of where things emerge in other curriculum areas, and indeed unexpected curriculum areas like religious studies for example. And, of course, you have the canteen! (head teacher at Woldham)

Interestingly, this latter excerpt presents a more holistic and fluid view of health than the previous excerpt that focused solely on diet and obesity, which reifies and reinforces the Western ideal of thinness (Evans et al., 2008; Humberstone & Stan, 2011).

Staff involved in the delivery of PE believed that the subject could be redefined and have more importance, particularly in relation to becoming compulsory to Year 11. There were calls for the subject to be broader and for this to be the subject centralising health in the school context, with direct, formal and explicit links to other subjects. Historically, PE was viewed as masculinised with a competitive, regimented focus, which in recent years has formed the focus of numerous critiques focused on adolescent disengagement from PE, particularly in relation to gender issues and inclusivity (Gard, 2003; Velija & Kumar, 2009; Women's Sport and Fitness Foundation, 2012). Evidence suggested that some PE staff were aware of these issues and, in response to adolescent disengagement from the subject in general, had taken steps to eradicate elitism from the delivery of the subject and provide equitable practices.

For example, at both Tebston and Woldham, PE was delivered via two groups, a sport group with a focus on performance, and a physical activity group with a suite of alternative sports and exercise activities. Pupils were assigned to groups based on either self-selection or staff knowledge of pupil preferences. That is, pupils in the physical activity group were already known to participate in sport, and regularly active in what would be termed alternative activities, e.g. horse riding, skate boarding, dance and so on. In spite of this attempt, by the PE department in both schools, to engender a more inclusive subject where all tastes and preferences were catered for, pupils lived experience of this practice

suggested that inclusion in the physical activity group was deemed to be the second level. For example:

Melissa (Year 9) from Tebston stated:

when I 'moved across' as the teachers, PE teachers put it, I said 'ah I'll move down to the activity group', but they said 'no it's moving across because we do the same things but in a different style'.

Samuel (Year 9), also from Tebston, provided more of an insight into the set-up of the PE groups:

I think the performance group is for the show-offs, the guys that can really do it but the guys that can't do it as well as everybody else, who may have difficulties with some sports, are in the activity group. I think that's really good though 'cause you get to set your own progression rate and don't feel under pressure from the show-offs!

Scott (Year 9) from Woldham highlighted:

sometimes you're doing one thing and then you've done it and you think you're going to be pulled in to do the thing above, like to make it better, but instead he's (the PE teacher) taken it a step lower so that the people who don't try, even though they obviously can do it 'cos they are in the top group but they don't try.

Overall, these excerpts provide an interesting insight into pupils' attitudes and perceptions regarding a practice introduced to bring inclusivity to the subject. The reasoning behind these views is not exactly clear, but the possible explanation is twofold. First, the perception created in other subjects where 'ability' sets are commonplace is one so engrained that it is translated into the PE context. Second, the cultural and historical connotations of masculinity and competitiveness (as demonstrated in Samuel's excerpt) embedded within the origins of PE as a subject, which remain evident in the contemporary context of PE (see for example, Kirk, 2002).

In direct response to questions relating to health and HL, most staff identified the HSP as the focal point for delivery of these messages. For example, frequent associations were drawn between the HSP and the *Every Child Matters* outcomes, specifically, 'being healthy' and 'staying safe' DfE (2004). All schools in the study referenced an established HSP as part of the school's ethos for a whole-school approach to health and well-being, which is to be commended; however, the extent to which this is dovetailed with the taught curriculum was not addressed explicitly. Ideally, scenarios where the HSP is seen merely as an adjunct or benefit to the school's reputation, image and PR engine should be avoided, particularly if there is an opportunity to promote consistent health-related messages through all the year groups via the curriculum.

Understanding health and HL

Pupils demonstrated a good understanding of health and the importance of being healthy, and many conceptualised HL accurately. It should be noted that the researcher did not provide pupils with a definition either prior to or during the group interview, as an overarching aim of the research was to gain an insight into pupils' perceptions of the concept and overall area. As the excerpts below demonstrate, pupils from both year groups were able to articulate a sound grasp of important health messages:

Simon (Year 9) from Woldham:

Is it about teaching about health? ... Health poetry! ... It is very important to me. I understand it very well, I believe that a healthy mind can lead to a healthy attitude, well gives you a healthy attitude and, it helps you along the way with many things, having a healthy, well-being.

Laura (Year 11), also from Woldham:

It's about being healthy and knowing what you need to do to stay healthy isn't it? All my friends know about it, you know what you need to eat, doing sports or the gym drinking lots of water, knowing what to do if you

aren't well.

Bex (Year 11) from Tebston:

Being healthy? Health affects the way you work ... like the stuff we do in PSHE

Scott (Year 9) Tebston:

I know enough about fitness at the moment, but I'd want to know like (sic) about the bones and how to keep them strong and stuff like that. And then, I'd want to know about food and stuff like that, 'cos now I just eat what my Mum like puts on for dinner for me, which is normally like, just healthy stuff, but when I'm like older I need to know like what foods to eat when they're not there.

This eclectic set of responses encapsulates the notion that perceptions of HL are conveyed as 'learning about health' and 'being able to discuss health' and adolescent pupils deemed friends, family and teachers to be the people they would most likely discuss their health with (Brown, Teufel, & Birch, 2007). Though many pupils were specific and prescribed in their meanings, there were noted themes relating to knowledge, the ways in which this knowledge was gained (e.g. via people and/or contexts) and an acknowledgement of how it would benefit them in the future. In short, certainly providing support for the notion of HL as 'an asset' (Nutbeam, 2008).

These key health messages, with links to HL, resonated with staff also, and while it was not always clear to staff the medium through which these messages were disseminated, a connection between what the school wanted to convey and what was interpreted by pupils was evident. Noteworthy differences were identified between all three schools in relation to a health 'agenda', however, specifically what constituted it, and even if one existed. When asked about the policies utilised by the school in relation to health and well-being the head of PSHE from Tebston responded:

I don't think, well we don't have a health policy so to speak but we do try and stick to the Healthy School agenda, so we've got the Healthy School kite mark, relative to Healthy Schools, and obviously we try to, this was set up before I came to the school, so they tried to set up practices that make sure we've got things in place that are um, in line with what Healthy Schools should be providing. What we basically use in terms of curriculum time in terms of Healthy School is, the PSHE 35 minutes period per week.

A plausible explanation for this is that a school health agenda is not compulsory; an ideology and discourse that stemmed from the HSP. As indicated previously, head teachers tended to outline a 'whole-school' approach to delivering health in the school. Key public health messages conveyed in contemporary policy (for example, DoH, 2004, 2005a, 2008, 2010), as well as the four areas outlined in the HSP meant that staff reported healthy eating, keeping fit and physically active, no smoking and no drinking, as the main health messages they engaged with. Staff voiced concern regarding obvious aspects of pupils' health that remained out of their control and expertise that of social health and well-being and, specifically, bullying. They believed that this was due largely to the dominance of technology and subsequent cyber bullying, via phones and computers, and access to the Internet and social networking sites, such as Facebook (DfE, 2012). An obvious tension presents here, as the medium through which key public health messages could be disseminated to adolescents (social media and networking sites) has purported downsides, such as cyber bullying, which can impact negatively on the well-being of its users.

Indeed, pupils alluded to 'pop-ups', advertising junk food and fizzy drinks they received on social networking sites as a result of being tagged to someone's site or 'friends' with someone on a given site. Others recalled the *Change4Life* adverts and similar health promotion campaigns, and their association to health and lifestyle, but claimed to not always understanding the relevance of the messages to them and their lives. Hayley (Year 9 from Tebston) tried to explain her thought process:

... it's like (sic) food for life, it's where there's a plasticine man and he's talking about when he was younger he used to be the right weight and now he's actually given up following food guidelines and stuff he's actually put on weight, he walks passed a window and he notices he has like (sic) tyres, as in rolls of fat and it's all about keeping healthy in those adverts and he says you can get free stuff to help with health, like there's a family section.

Health promotion via mass social marketing campaigns, as well as social networking sources, must be appropriate to the target audience or the message, along with the effectiveness of the campaign, may be lost. The Internet holds such command in contemporary society that it would be unwise to not use it to promote such messages, particularly to those who are most malleable, e.g. adolescents (Royal Society for Public Health Vision and Practice, 2011). Furthermore, some have suggested that, in order to maximise pupils' interest in key public health issues, schools should promote the internet as a key information source to accompany and complement the curriculum based content (Brown et al., 2007).

Pupils offered realistic and, in most cases, achievable recommendations for the future of health and HL in the school context. Their suggestions included an array of preventive health actions, including calls for a formalised and consistent programme, either through the taught curriculum or through other aspects of school life. Some suggested regular 'health events' where guest speakers delivered talks on contemporary and relevant topics, others asked for the school nurse to be available for longer time periods, while many raised the school canteen and the desire for healthier options to be readily available. Staff had a less optimistic view, most likely based on the reality of what is achievable during the school day, constraints of the timetable, and their current workload demands, though they did have some constructive suggestions. Most shared the pupil's views of the need to formalise health and HL, and a consistent programme of how this could be achieved, for example, via a health agenda. One member of staff (the head of PSHE Woldham) believed that the only way to formalise health and HL was through a test, exam or qualification:

In terms of the assessing the impact, my feeling has been if we introduce one of these new short course GCSE's in health or short course GCSE in Citizenship, I think it would have two benefits, one would be that we can see the impact or not through the results - and I wouldn't have much sleep the night before the results came out! the perception of the tutors are mirrored by the students certainly in KS4. It's not a GCSE it's not something they have to therefore worry about and they don't take it as seriously and their attitude in the lesson is sometimes not all it could be...so what I thought was if we introduce a public exam it would make the teachers realise they were going to be held more accountable [and] it would make the students think they had to take it more seriously.

This highlights the demands on schools for good or excellent exam results, defined by and pertinent to the population sample used within this study (13-14 and 15-16 years of age), means other 'peripheral' aspects of pupil experience, including health, are less of a priority than subjects which are formally examined (Adams, 2003). However, the introduction of another examination or test could increase pressure on pupils and staff, in addition to perpetuating the notion of a 'total pedagogised micro society' (Evans et al., 2008). The concern here is that if the messages are inaccurate and not evidence based and contemporary the programme could be counter-productive to long-term health and well-being.

Conclusion

The evidence presented in this paper provides some insight into adolescents' perceptions of health messages, health promotion and the importance of this in their lives. Pupils do see connections within curriculum content between statutory certain subjects, such as PE and food technology, that relate to important lifelong health and lifestyle messages. Moreover, their understanding of HL in the context of health and well-being is evident. School staff aired similar sentiments and, in most cases, demonstrated an awareness of the key features of good health education and the importance of this to the school context. These findings provide some useful foundations for future research into HL with this population (and primary school-age children), as well as for policy and practice.

Evidence here suggests the need for a comprehensive health agenda in schools that 'join up' all current provision for health via the curriculum and other school-based practices, such as the HSP. Both pupils and staff articulated the need for explicit links between the core subjects most closely related to key aspects of holistic health and other activities, which could all serve to improve the consistency with which health-related messages are conveyed. There is an opportunity to create a visible school-based programme for health, linking it with existing annual events, e.g. National Walk to School Week, which may lead to improvements in HL. This needs to be considered carefully, particularly in relation to the accuracy and

consistency of the messages and that must be informed by contemporary evidence. However, it need not be a complex venture and could be implemented by reinforcing and reifying existing links, as the findings here suggest.

Finally, these findings indicate the need for further research of this nature, both in different areas of the UK but also with different age groups of school pupils. First, to strengthen the evidence base, and second to explore, in more depth, potential differences in pupils' experiences of health, well-being and how being health literate shape those experiences. Third, there is potential to explore HL across all four Key Stages. The debate posed by Adams (2003) regarding the non-statutory status of PSHE focused solely on Key Stages 1 and 2. Thus in viewing HL as an asset the focus is on the developmental, ongoing processes across time, which would be possible if HL was explored between the ages of 5 and 16 or 18. It makes sense that, as well as links being made between subjects and activities, links are developed over the school years through a continuous pathway of consistent, contemporary and relevant messages to each Key Stage. Moreover, a major public health drive like *Change4Life* remaining active and visible four years into its launch reinforces the need for such a programme that supports a health agenda within the school setting for children and young people, which support their ability to interpret these key health messages. This is supported by the widely held belief that there are many aspects of an individual's personal and social skills that influence HL, specifically the ability to become health literate, that health professionals and the health system are unable to control (Peerson & Saunders, 2009). Any future research should consider the need for a greater focus on health, and HL, in the school context, which may over time serve to reduce health inequalities amongst all school-age children and young people.

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