

BMJ Open Who is responsible for keeping children healthy? A qualitative exploration of the views of children aged 8–10 years old

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ABSTRACT

Objective The issue of who is responsible for children's physical health is complex, with implications for targeting and developing strategies for health promotion and interventions to improve health. While there is evidence to suggest that children are able to construct notions of responsibility in relation to other areas of their lives, very little research has explored children's views of responsibility for their own health. The aim of this study was to explore children's views about who they feel is responsible for keeping them healthy.

Design Focus groups were used to gather qualitative data using a semistructured topic guide. Interpretative phenomenological analysis was used in an iterative, double hermeneutic approach to analyse the data.

Setting Focus groups took place in two UK primary schools in deprived inner city areas.

Participants 20 children aged 8–10 years took part in one of two focus groups (10 children in each group).

Results Three overarching themes were identified: (1) individual and collective responsibility, (2) marketing and conflict with taking responsibility, and (3) what people and organisations can do to help children to take responsibility. Children feel that they, parents, families, school staff, medical professionals, food producers, retail outlets, supermarkets, advertisers and the government are all responsible for their health and should thus demonstrate responsibility through their behaviours around children's health.

Conclusions and implications Children's views were consistent with constructs of responsibility as both a moral obligation and a set of behaviours, and with wider sociopolitical philosophies of individual and collective responsibility. These findings further support a focus on integrated, system-wide approaches to children's health.

INTRODUCTION

Globally, responsibility for children's physical and psychological health lies with adults or organisations controlled by adults.^{1 2} Adults are typically considered to be more responsible than children, and children are generally assigned lower responsibility and moral status, despite displaying moral competence in discourse around issues such as relationships, justice and fairness.³ Emerging research

Strengths and limitations of this study

- We have undertaken a unique exploration of the views of children attending schools in deprived inner city areas in the UK around who they feel is responsible for their health.
- Our findings provide insight into how children relate to adults and organisations viewed as responsible for their health and can inform the development of child health promotion policies and interventions.
- This study supports existing literature that calls for a whole system approach to child health, including targeting food manufacturers and retail organisations.
- A key limitation is that findings relate to this particular select cohort of children and should be viewed within the context and parameters of this study.
- Conducting further research based on theoretical models from health psychology and behavioural science may provide further insights into children's health behaviours.

suggests that, in order to be effective, strategies around child health should consider the roles adults play in a child's life, how children relate to health promotion and the adult protagonists delivering health-related messages.^{4–6} The issue of who is responsible for children's health is complex, and the aim of the present research was, for the first time, to provide insight into children's perspectives as to who is responsible for keeping them healthy. Identifying children's perspectives could help the design of more effective strategies and interventions to improve their health.

Adults, even those who assume responsibility for children (notably parents and teachers), are often unsure where responsibility for children's health lies. For example, many interventions to promote child health are delivered in schools, where teachers may assume (or be assumed to take) an 'in loco parentis' position of responsibility. However, a study exploring the views of head teachers found they did not wholly accept the moral

obligation for the health of their pupils, feeling too much responsibility is placed on schools and that child health interventions need to be better at integrating societal and family components if they are to have successful outcomes.⁷ Parents, particularly mothers, are blamed and held responsible for children in a variety of contexts, for example, physical and mental health and antisocial behaviour, when a variety of factors may be at play that impact on outcomes for children.^{8 9} Colls and Evans¹⁰ argue that the notion of responsibility can be construed as having both a moral quality (being responsible) and an action (acting responsibly). Similarly, Rake¹¹ describes contemporary viewpoints about modern parents as being responsible not just for the cause of issues affecting wider society (such as childhood obesity and teenage parenthood) but also targeted as potential agents for positive social change. If responsibility is seen as a continuum between the constructs of moral quality and taking action, it becomes more complex when applied to childhood. Relational processes between adults and children assign children certain moral characteristics that are dynamic and associated with children's cognitive and emotional development in addition to the age of the child.

To date, very little research has explored the views of children with regard to responsibility, and none in relation to health. One study into children's views of taking responsibility around the home found that responsibility is a meaningful component of children's lives that is relational in nature, deeply imbedded in interactions with adults, and can be rewarded through power, status and autonomy.¹² Children may have more sophisticated views around responsibility than has previously been assumed, and Such and Walker¹² conclude that their research could act as a starting point for further discussion around the link between rights and responsibility in relation to policy. The debate around child health is fraught with issues relating to adult responsibility, and a greater understanding of the ways in which children view responsibility for health and how they relate to adults and organisations in a context of health promotion may present opportunities to develop and improve interventions and programmes that focus on children's health. The aim of the present qualitative study was to explore children's views about who they feel is responsible for keeping them healthy, in order to provide insights into how best to target child health promotion strategies and determine who needs to be involved in designing effective interventions around improving children's health.

METHODS

The Consolidated criteria for Reporting Qualitative Research¹³ informed the study design, methods, analysis and reporting.

Sampling and recruitment

The analyses reported in the present study were part of a larger qualitative study involving seven primary schools in

the Manchester City Council area. Manchester is a major postindustrial city in the North West of England with an estimated population of 530 300 in 2016. The study focused on the views of children, parents and school staff participating in an implementation study of the 'Healthy Schools Manchester' initiative, which is a local area, primary school-based healthy lifestyle policy that comprises a number of components designed to improve diet and increase physical activity.

For the wider study, maximum variation sampling was used to identify schools participating in the Healthy Schools initiative, demonstrating various stages of implementation and serving a variety of geographical catchment areas in the North, South, East and West of the city. Schools were further selected with the assistance of the Healthy Schools Manchester team to be representative of the ethnic and social demographic make-up of the city's population, and two focus groups per school were carried out, one each for classes from UK key stage 1 (reception to year 2, children aged 4–8 years) and UK key stage 2 (years 3–6, children aged 8–11 years).

An introductory letter and participant information sheet were circulated to parents of all children in the school by school staff via usual school information sharing networks (shown on the school website, sent home with children in school bags, through text messaging systems). As the likelihood of a child being selected for a focus group is low and the risk associated with participation is low, an 'opt out' approach to participation and informed consent was adopted,¹⁴ where parents were asked to indicate if they did not consent for their child to be selected for a focus group. If a parent indicated that they did not wish their child to participate, that child was excluded from the study. We ensured that at least 14 days had passed between asking for parental opt-out consent and focus group selection to allow for family circumstances such as illness.

The following criteria were adopted in order to ensure that children were able to participate comfortably in a group discussion without compromising their ability to learn and succeed in the classroom: considered able to engage in and contribute to a 45 min focus group, have the ability and opportunity to catch up with any work they may have missed during absence from class, and a mix of male and female pupils and a mix of pupils having school dinners and bringing packed lunches (in order to gain a balanced perspective relating to parental vs school responsibility for lunches). We asked teachers to choose children from each class within the primary school for the focus groups, meaning the final stage of sampling was opportunistic and selective. Children from key stages 1 and 2 participated in separate groups as we wanted to capture a shared experience around gaining autonomy of choices that may differ between older and younger children. Class teachers further gave information to the children selected for focus groups using simple text and pictures, and children were given the opportunity to ask questions about the study and focus groups. The children

were told before the focus groups began that they could leave at any time.

Contact details were provided for members of the research team and regulatory authorities should parents have any question about the research.

The topic guide for the focus groups explored a number of constructs around acceptability and implementation of the 'Healthy Schools Manchester' programme, which is a local area, primary school-based healthy lifestyles policy. Children were first asked to discuss what being healthy meant to them, in order to establish a broad consensus based around the constitution of the WHO's definition of health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. The second question on the topic guide was 'who is responsible for keeping children healthy?' The latter question is the focus of the present paper and originated partly from researching comments entered by the public in response to online media articles about child health promotion interventions (eg, UK sugar tax and school food policies).

The present paper focuses on the responses from 20 children who took part in two of the focus groups (10 children in each group). Although we analysed data from all 14 focus groups, the accounts of these two groups were particularly rich and did not diverge from the other 12, meaning saturation was reached according to inductive thematic saturation for the purpose of analysis described by Saunders *et al.*¹⁵ This focus on the accounts of just two groups allowed us to conduct an interpretative phenomenological analysis (IPA) of the data, yielding more nuanced accounts of individual informants. Focus groups in paediatric healthcare research¹⁶ typically sample 8 children in the 8–11 years age group, but we asked for 10 children per group to be chosen to allow for potential dropouts. All children were aged 8–10 years and attended schools in the Manchester City Council area.

Focus group 1 included children attending a school based in an area comprising 40% of the most deprived neighbourhoods in the UK (based on the Index of Multiple Deprivation (IMD) scores for school postcodes obtained from a UK government website).¹⁷ The IMD ranks every small area in England from 1 (most deprived area) to 32844 (least deprived area). Three children were of white British background, three were from Pakistani background, two were from other Asian backgrounds and two were from unknown ethnic backgrounds. Children from focus group 1 attend a larger-than-average-sized primary school. Most pupils are from minority ethnic groups, and three-quarters of all pupils speak English as an additional language. The percentage of pupils known to be eligible for free school meals is average for state primary schools in the UK overall (9.6%). The percentage of pupils with special educational needs and/or disabilities supported at school action is above average, and the proportion of those having a statement of special educational needs is below average.

Focus group 2 comprised children from a school based within 10% of the most deprived neighbourhoods in the UK, of whom one was from a Pakistani background, four were from white British background, two were from black African background, one was mixed white British/Asian background and two were from unknown ethnic backgrounds. Each focus group was made up of an equal number of girls and boys. Children from focus group 2 attend a much larger-than-average-sized primary school. Staff members describe the proportion of pupils who are supported by the pupil premium as well above average (exact proportion is unknown). The pupil premium is additional funding for those pupils who are known to be eligible for free school meals and those children who are looked after by the local authority. The proportion of pupils from minority ethnic groups is also well above average. Pupils come from a wide variety of ethnic backgrounds. The proportion of pupils who speak English as an additional language is well above average. The proportion of disabled pupils and those with special educational needs supported through school action is above average.

Procedures

Focus groups took place in a private room in the schools and took 51 min (focus group 1) and 45 min (focus group 2). Two facilitators conducted the focus groups: one led the discussion and the other operated the digital audio recorder and helped to ensure all children were given the opportunity to speak. Focus groups were audio-recorded and transcribed by an independent company using an intelligent verbatim approach (transcription followed the verbatim responses of participants leaving out pauses and fillers such as 'um').

Analysis

IPA^{18 19} was used to analyse the data, incorporating the strategy suggested by Phillips *et al.*²⁰ for interpreting data from focus groups using IPA. An iterative approach was taken: the audio recordings were listened to and transcripts were read multiple times throughout the analysis, and notes were taken relating to observations and reflections on the data. The data were re-examined to explore issues relating to the group setting, such as defending and qualifying statements, hedging, complimenting and unexpected statements that diverged from group norms. Interactions highlighting individual experiences within the group setting were additionally noted. Observations of group interactions were further developed into themes relating to emerging relationships and clusters of concepts within the data. The 'double hermeneutic' process of IPA,^{18 21} where the researcher tries to interpret the meaning of the world as experienced and constructed by the participant, facilitated an understanding of the world from a child's perspective, consistent with the principle of participating in 'research with' rather than 'research on' children.²² Each child was given a pseudonym to protect their anonymity but to allow for consistency of voice within the quotes presented in the Findings

section. One researcher (JG) carried out the analysis, and the other authors (CA, TE, CK, RC) reviewed the themes against selected quotes to check for trustworthiness of findings.^{23 24}

Public and patient involvement

The question ‘Who is responsible for keeping children healthy?’ originated partly from researching comments entered by the public in response to online media articles about child health promotion interventions (eg, UK sugar tax and school food policies). The present paper was conceived as a result of the wonderfully rich and interesting responses to this question from the children who took part in these focus groups. We will disseminate our findings to staff and pupils at participating schools in the form of a one-page summary written in plain English and will offer to present our findings to participating schools.

FINDINGS

Three superordinate themes were identified in the analysis: (1) individual and collective responsibility, (2) marketing and conflict with taking responsibility, and (3) what people and organisations can do to help children to take responsibility.

Individual and collective responsibility

Children described authority figures who they felt were qualified to provide information about physical health-related issues. Medical professionals such as doctors and dentists were described as being acceptable and knowledgeable sources of advice. No specific examples of lifestyle advice being offered by doctors were given; however, dentists were cited as giving advice relating to individual behaviours such as teeth cleaning and keeping sugary snacks for mealtimes. Children were able to make a connection between this advice relating to preventative care and future health issues:

I think being healthy means that you clean your teeth so you can eat things and then you can live longer. Because if you don't have teeth, if your teeth fall out and then you'll need false teeth and I want to be different and I don't want false teeth. (Adam)

And if you don't [clean teeth] then doctors will come poking around putting metal things in your teeth and I don't like that. (Billie) (focus group 1)

It is notable that the children quoted above use the pronouns ‘you’ (colloquial substitute for ‘one’), which highlights a sense that individuals are responsible for teeth brushing, rather than, for example, parents or dentists. The use of the phrase “I want to be different” perhaps implies this child has seen the consequences of poor oral healthcare in others and wants to take responsibility in order to protect against similar ill effects.

Although doctors and dentists were seen as authoritative sources of advice, responsibility for acting on guidance relating to healthy lifestyles was seen as lying with

the children themselves through exercising appropriate preventative self-care:

Doctors [are in charge of keeping children healthy] ... because they tell you what to eat and what to do, eat healthy or get ill. (Naz)

I don't think they should have to tell you because you know yourself that you should be eating healthy food because those doctors say, ‘you shouldn't be eating that’ but some people don't care do they? They just want to get fat ... it's your fault if you're fat and it's your fault if you've done something to your teeth ... nobody will help you, even if the doctor has done it and you're doing it again so you have got to think of what you are eating before you put it in your mouth. (Rob)

Like [child 4] said, you're in charge of your own body, it's basically your responsibility, so it's your fault if you eat unhealthy, if you're not fit, if you're just lazy ... (Vic) (focus group 2)

The statement given by Rob represents a judgemental stance (“it's your fault if you're *fat*”) that perhaps reflects the views of some adults and certainly encompasses an approach that emphasises personal responsibility for one's own health. In contrast to the view that children are ultimately responsible for the choices they make, focus group 1 discussed the presence of a power structure in their society that can influence the opportunities children have to exercise personal choice. They paid attention to the fact that public health initiatives around keeping children healthy often have to be paid for and the way money is allocated affects who benefits from these initiatives:

It's the government's job, the government sort out all the money and stuff. So the school get a certain amount of money and then the school have to spend it wisely. So they spend it wisely on getting fruit and vegetables, so it's kind of the government who is in charge ... if they give the school less money, the school have to rely on, for trips and stuff, things that the parents and carers need to pay more money for ... and if they don't get that much money, they could go bankrupt. (Billie)

There is recognition by Billie of hierarchies relating to money and power; if the schools are not well funded by “the government” (those with responsibility for providing funding), they rely on contributions from other sources, such as parents and carers. If parents and carers cannot make up the shortfall, schools and pupils are ultimately disadvantaged. The group then went on to discuss the amount of money they think is given to the school by the government (the children estimating between £1000 and £1 000 000), suggesting there is an acknowledgement from the group that work done by schools is at least partly dependent on funding allocations.

Parameters placed on children's ability to make healthy choices in certain environments, such as visiting

restaurants and fast-food outlets, were highlighted by the continuation of the discussion taking place in focus group 2 in relation to children taking responsibility for their own health-related behaviours:

I'm kind of on edge [regarding attributing responsibility to children], because you are in charge of what goes in your mouth and what you eat, but sometimes, maybe you're getting take out or you're going to a restaurant and because usually in restaurant there's just junk food there and just food that makes you full, but if you eat salad and stuff ... but sometimes you might get tempted, so it's not really your fault if you get tempted by all the foods. (Milly)

The accessibility, convenience and relatively low price of fast food in comparison with the purchase, preparation and cooking of fresh ingredients had been observed. Although the following quote relates to a holiday situation, children were able to discuss the ways convenience and availability can influence individual's decision-making and ultimately impact on their health:

Like, in [holiday destination] you can just phone up and if you run out of something they can just come and bring it. So you can just phone up to McDonalds or KFC and they just come along and bring it to your hotel because it's easily available and cheap and people go for that and then that's why a lot of people are overweight. (Gina)

Schools were described as having responsibility for children's health, and it was within the context of discussing schools that children expressed knowledge relating to nutrition, exercise and an association with academic performance in school. This biopsychosocial model of health was articulated in relation to having a balanced, nutritious diet, and eating sufficient amounts of food to sustain children through the school day.

So, the school's responsibility is ... imagine that the school was unhealthy and we just ate sweets and all that, I will disagree with that because if we just had sweets and all that we will just be ill and you wouldn't be able to get your work done. (Cara)

It's the school's responsibility for children to also eat their food, because sometimes people don't want to eat food. (Fran)

What would happen then? (Facilitator)

Then, if you had a PE lesson they'd be very tired and their brain won't be working very well. (Fran) (focus group 1)

Although schools were viewed as having responsibility for their health, children could sometimes resist rules established with the aim of promoting healthy choices around food, and initiatives introduced by the school were more readily accepted when parents supported them. Although the school is able to introduce and enforce rules in school time, it seems parents have the

power to over-rule and influence children's acceptance of the school taking responsibility for their health. The following exchange contrasts two experiences relating to parental support and highlights how important the influence of parents is for acceptance and compliance with school healthy eating policies for both school dinners and packed lunches:

In the letter [from school] it said, 'Next September when we are back in school on Mondays to Thursday you've got to have yoghurt or fruit' [for school meal desserts]. I said I didn't like it and then I showed it to my dad and my dad said it was good for you, so now I like it and my dad said that if he were [teacher's name] he would say that whoever has got a treat in their packed lunch that you're not supposed to have, he would have took it off them and gave them fruit or something. (Will)

It sounds like your dad agrees with the school then. What does everyone else think about that? (Facilitator)

But Will said, 'my dad thinks that's good, or my mum think's that's fine', but then my dad, he ripped up the paper and said 'you're going on packed lunches, because I don't think that's suitable because you should be allowed to eat whatever you want to eat'. (Tim)

And what do you think about that? (Facilitator)

I think my dad's got a point but my mum has a point too. I am going on packed lunches but my mum said I'm only having a treat in my packed lunch two days a week. (Tim) (focus group 2)

Although children recognise the benefits of eating healthily, they also appear heavily influenced by their parents' opinions around acceptability of school rules in relation to food eaten at school, with Will having a complete change of mind around the policy once it was clear that the parent supported the school. Tim accepted the compromise that had been made in response to the parents' conflicting views: the father's objection to the change in policy regarding school desserts and the mother's wish to limit the number of treats in the packed lunch.

Marketing and conflict with taking responsibility

Children recognised that the aims of organisations such as supermarkets, food production corporations and fast-food outlets are primarily to make money and that these aims may conflict with the promotion of children's health. However, some children felt that these companies are responsible for children's health and should balance making profit with executing this responsibility. Children suggest this can be achieved through promoting healthy choices concurrently with moderating the marketing and advertising of junk food and sugary treats:

I think it's the supermarkets as well because they always try to draw you in with fast foods, 'Oh get this for half price, If you buy one get one free' ... and

also because they try to draw you in to trying to get, for example let's say McDonald's, buy one McFlurry get another McFlurry half price. They're going to ban those adverts too. (Billie)

Yeah, then they won't get a lot of customers. (Adam)

Advertise healthy food then. (Billie)

Yeah, but if you advertise healthy food, a lot of people who like to have a treat every now and again, like a KFC or a Burger King, every now and then, every once or twice, like in a school term, it's nice to have a treat ... then there's no point in going because it's just going to be healthy, healthy and no one's really going to go in ... you need to have a bit of a treat every now and then. (Harri) (focus group 1)

Billie acknowledges that there is a moderating role to be played by regulatory authorities such as governments and health services relating to the promotion of fast food through the use of 'they' as an encompassing reference to an authority figure ("They're going to ban those adverts"), who can influence organisations that act in ways seen as detrimental to the health of children. Adam recognises the aim of such companies is to draw in customers and ultimately make profit, which can conflict with the promotion of children's health. Harri however offers a viewpoint consistent with market demand and consumer choice philosophies, stating that "treat" food should be available based on children's wants ("it's nice to have a treat") and that children themselves should moderate their behaviour in relation to this temptation. The phrase "every now and then" is used in relation to junk food three times by Harri in the above extract, emphasising that this type of food is thought of as an occasional treat.

Although children described conflict between the need for companies to make money through promotion of unhealthy food and a perceived responsibility for children's health, marketing of products as having a positive influence on health could favourably influence their image of these items and ultimately increase consumption.

There's this advert on TV where this guy uses Listerine and he eats that really hard rib and he just crunches it and I watch that like over and over again and I use Listerine so I'll be able to do that. (Ollie) (focus group 2)

There are good discounts, like I went to a place called [name of retailer], which sells sports things and there were basketballs and you can get one for £5, it's like buy one, get one free and you can get two cheaper. So I think they're thinking about, if people need exercise, we should give them discounts because it helps people to be alive. (Joe) (focus group 1)

Discounted products associated with health promotion, such as sports equipment, were seen as virtuous ("good discounts") in contrast to the promotion of junk food, highlighted above. Furthermore, Joe attributed altruistic

values to this particular company, based on the low prices of their goods and their association with good health.

Children could identify however that companies can make an association with their products and promotion of good health as a marketing strategy even when health benefits are negligible or ambiguous. For example, the following discussion related to low sugar or diet products and the possibility of other health risks:

Some things, like Diet Coke, they've made it so that it doesn't have any sugar or calories. But actually it's going to have something else that's even more unhealthy ... (Fran)

That's not true. (Lana)

Yeah, because it's Diet Coke but it still has stuff to make it taste sweet. They call it diet, but it's ... (Gina)

Sweeteners, yeah, but it's still the same, it's not good for you. (Fran) (focus group 1)

Similarly, foods high in sugar such as cereal bars are marketed as healthy choices because some of the ingredients they contain, such as oats and dried fruit, have some positive nutritional value; however, the high sugar content can remain hidden behind the advertising:

It's horrible when adverts pretend foods are healthy. (Ruth)

What examples have you got? (Facilitator)

Sometimes, with food adverts, like my dad got one to try (cereal bar) and then when he got some more he said that he was getting a little bit fat, because he used to eat it every day because he thought it was healthy because he wasn't reading it and then he saw that it was too much stuff in it that wasn't good and then he put all the ones he had got in the bin because he knew it wasn't good, but before he didn't know. (Will) (focus group 2)

Taking responsibility: what people and organisations can do

Children offered a number of solutions and advice to combat perceived oversights by those considered responsible for their health and examples of relevant techniques they felt had been used successfully or could be used to promote health-related behaviours. Children considered their parents and family members to be particularly influential. The home environment was important and viewed as controlled by parents. Homes could be organised to promote the consumption of certain foods and make less healthy foods difficult to access. Although responsibility for moderating consumption was viewed as being with the child to an extent, individual food choices could be influenced by availability and access:

My dad said that I'm going to be nine soon and he said that I should be taking responsibility for what I eat and he said, 'if you get fat it's your fault, you shouldn't be eating it' So now every day I eat ... my dad always puts in the fridge for me, an orange, an apple and a pear or something, anyway I normally

eat it and then if I eat it, my dad gives me a small treat. (Paddy)

... my brother, he's only five so my dad, he hides the chocolate now but my brother, he knows where the chocolate is, so whenever my dad's not looking he eats all the chocolate and then yesterday I found out that he was eating it so my dad looked at his teeth and they were full of chocolate, so now my dad's going to hide it in a really high place. (Mac) (focus group 2)

The home was also considered a base in which children could be active and involved in health-promoting activities, in addition to being passive receivers of parents' or other family members' actions. For example, involvement in food preparation could be viewed as an enjoyable family activity that also promoted healthy eating. In this particular example, Gina described being actively involved in making home-cooked alternatives to favourite junk food, inspired by a book written by a popular health and fitness writer:

On the weekend, my mum and dad, we always do home cooking because on the weekend we had a fried chicken wrap but instead of frying the chicken we dipped it in oats so it's healthier and then we put salad in the wrap. And we have, instead of regular fries and chips we have sweet potato chips because they're healthier. So we're just trying to find healthy alternatives ... so you dip it in eggs, then breadcrumbs or oats and pan fry them ... we always make cool recipes on a weekend. (Gina) (focus group 1)

In addition, role-modelling healthy lifestyle behaviours was seen as helping to establish good habits that had longevity and connection to wider values. Examples set by adults of considering food choices in contexts additional to children's health were discussed, for example, environmental and animal welfare issues. Children were able to make a generational link between habits practised by parents, carers and family members and to understand how this might influence the ways in which they in turn might become good role models for future generations:

I think, my stepdad is not fat and he's not skinny, he is just in the middle and he is very healthy ... he does eat healthy food, like three times a week he's trying to be a vegan because he doesn't think it's good that we're eating animals and he tries to be really healthy and whenever I go to his we're doing things that will help our body improve and like meditating and stuff like that. That's how we like going to his because he makes me and my brothers feel healthier so that when we're old, we can do that for our kids as well (Ollie) (focus group 2)

The above quote depicts an adult in the family as providing a good example of parameters relating to healthy weights (*not fat, not skinny*) and modelling additional health-related behaviours such as meditation and exercise. Conversely, rules and parameters placed by

adults with regard to healthy lifestyle choices lacked credibility when their own behaviour was incongruent with the messages delivered.

In school, it's a healthy school but some of the teachers are eating unhealthy food. A few days ago, I saw two of the teachers; they were giving crisps to each other. And I don't think that's fair on us. (Lana)

Yeah, it's hypocrisy, isn't it? (Joe)

We used to have the best desserts and the best cookies ... so I think we should go back to that if they can have treats. (Gina) (focus group 1)

Children suggested ways in which corporations such as supermarkets and fast-food restaurants could make changes to their products through offering healthier versions of favourite meals or exercise responsible marketing through labelling fatty and sugary food as 'treat' food, for occasional consumption. As indicated above, children acknowledged that the primary aim of these organisations is to make money; however, they felt the pursuit of profit could be carried out in a manner that exercises some degree of responsibility towards younger consumers. The following discussion explores the children's ideas of various ways of amending the existing business models operated by fast-food restaurants into more responsible compromises, where children could still have junk food but marketed as treats only, while healthy alternatives are on offer for more frequent consumption.

You do need to have a bit of a treat every now and again. (Harri)

You're right, but I think they should still advertise healthy foods as well. They [fast food restaurants] should put, 'this is your treat every once in a while' ... I would say, 'Advertise foods that taste nice but are healthy'. (Gina)

So like, maybe they should reduce the sugar and fat in fast food restaurants so maybe like, make them a bit healthier. So you can still go in there, they won't all close down ... but it might just be a bit healthier. So you still have healthy food, and then you'll have a treat that's a bit more sugary or fatty. (Fran) (focus group 1)

Within this discussion regarding solutions for fast-food restaurants, there remained an acknowledgement that individual decision-making and behaviours were important in selecting the healthy choices offered by these hypothetical organisations. This is highlighted in particular by Adam's (below) emphasis on the diversion from the group's established discussion ("coming from me as a personal opinion") around how organisations might behave more responsibly, to one that highlights personal responsibility in the context of children's susceptibility to temptation:

This is coming from me as a personal opinion; lots of unhealthy things taste better than some healthy

things. I think it's really impossible that you would go into a shop and there's not one unhealthy item. So, say there was like a fast food place, I'd go into the one that hadn't reduced the fat and sugar. But I'd only go in there like, three or four times a year. And I would get a burger with like, tomato, lettuce and like healthy fries or something ... and I know it tastes good. (Adam)

I think that to encourage people to do bigger accomplishments or to achieve things, as a treat for achieving, they will go to the unhealthy one [restaurant] ... because as a treat the unhealthy one will taste a bit more sugary and sweet. So as a treat it would be better. (Lana)

That's interesting. So you think it would be more powerful as a treat to have something unhealthy? (Facilitator)

Yes. (group of children) (focus group 1)

DISCUSSION

There is a dearth of research that looks at the knowledge, attitudes and views of primary school-aged children around influences on making healthy choices. This study is unique in that it identifies children as active participants in considering responsibility and identifying ways of enhancing their own health. Participants were able to discriminate between many health-related messages and sources of information to construct an understanding of who has an obligation to protect their health and how this responsibility can be acted out. This is consistent with the construction of responsibility described by Colls and Evans¹⁰ as a dual notion of morality and action. It also extends the work of Such and Walker,¹² which found that children aged 9 and 10 years were able to construct an understanding of responsibility in relation to their day-to-day lives.

Discussions reflected arguments broadly consistent with political philosophies relating to individualism and collectivism and the global debate around who is responsible for health in developed societies.²⁵ Children were able to reflect on and articulate the notion of individual responsibility for one's own health in the context of limited choices children might have due to issues and influences outside their control. Opinions were expressed on a continuing spectrum of the views of children who felt that engaging in healthy behaviours is a personal responsibility and others who highlighted societal, cultural and organisational influences on the behaviour of individuals. Children felt that they could take responsibility for their own choices, but that organisations and adults such as parents, teachers and families influenced the ways in which they acted.

Children's views on responsibility for health focused mainly on physical health in relation to diet, which reflected the context of primary school-based health promotion interventions, which was the focus of the wider

study. Although children were prompted regarding the physical activity-related features of the intervention, they consistently returned to focus on dietary aspects. They had a good level of knowledge around the nutritional content and health benefits of food and believe a number of individuals and groups are responsible for keeping them healthy, including themselves, parents, families, school staff, medical professionals, food producers, retail environments, advertisers and the government. Limitations and influences on their ability to make choices were described. Parents and families were seen as having the most responsibility for (and therefore the most influence on) children's food-related choices and behaviour. For example, parents' views could affect the acceptability of and engagement with school-based interventions such as school lunch policies, suggesting interventions and policies targeting children's health should also focus on gaining acceptance from parents and carers. A further approach would be to consider children's health-promoting behaviours in the context of theories such as the capabilities, opportunities and motivations model ('COM-B'),²⁶ which suggests that individuals should have sufficient capability, opportunity and motivation in order to successfully bring about changes in behaviour. Although children had the capability (eg, knowledge around healthy eating), they may not have the opportunities (parents and other key adults providing the food and taking decisions on their behalf) and motivation (eg, parental approval) to make healthier choices in relation to food and physical activity.

Although the children in the present study may not have the opportunity or motivation to make healthier choices for themselves, they described ways in which parents and other family members helped. Typically this was demonstrated through the use of methods such as restructuring the home to promote the consumption of fruit and modelling healthy behaviours such as regular physical activity, techniques that appear in the behaviour change technique taxonomy (V.1).²⁷ Other responsible approaches cited by participants such as involving children in the preparation of food have been identified as effective food parenting techniques in interventions to prevent obesity that focus on parents and families.²⁸

Children felt that medical professionals, particularly dentists, were trusted sources of information, and children highlighted messages that specifically related to preventative oral health behaviours, such as tooth brushing. This suggests that there is potential for healthcare professionals to have an influential role through delivering information and behaviour change techniques related to health behaviours to children and families. Currently, healthcare professionals deliver opportunistic behaviour change techniques in only 50% of consultations where a need is perceived,²⁹ and this finding supports calls to improve relevant training and resources for this group of professionals.³⁰

Children also recognised that the main aim of retailers and food manufacturers was to make money; however,

they felt they should try to do this in a responsible way. Altruistic characteristics were attributed to companies promoting products associated with healthy lifestyles such as sports equipment, and negativity was expressed towards companies that were perceived as misrepresenting the health benefits of their products (diet drinks and sugary products disingenuously associated with fruit). This finding could represent an opportunity for companies to promote genuinely healthy brands in a positive light through framing them as responsible and health-promoting, supporting the position that companies that 'start competing on health' could reap commercial benefits in addition to protecting the health of children.³¹ Currently, public health and policy drives towards improving child health are delivered within a context of inconsistent and poorly articulated global regulation of the commercial promotion of food to children.^{1 32} However, there is potential for the interests of legislators and organisations such as fast-food restaurants and supermarkets to align. Developing products lower in sugar and fat, with higher nutritional value, and aligning commercial targets with taking a wider responsibility for the health of children may produce beneficial effects for both public health and businesses.³¹

Techniques used by adults to control children's consumption of food high in energy but low in nutritional value included the designation of sweets and junk food as 'treat' food, reserved for occasional consumption. However, there is some evidence to suggest that this approach may be associated with disordered eating and may undermine attempts to promote healthy eating in children.^{33 34} In comparison, children viewed more nutritionally rich, lower calorie 'healthy' food as appropriate for regular and frequent consumption. This furthermore offers an opportunity for companies to capitalise on the potential for healthier food to be purchased in greater and more frequent quantities.

Many health promotion activities are designed to impart knowledge, and the present findings show that more needs to be done than simply providing children with the capability or knowledge to make healthy choices, but also to motivate them and offer opportunities to take responsibility and have some control over their choices. Acceptable ways of doing this include allocating some food items as treats and restricting their consumption. Furthermore, children are aware to some extent that they are vulnerable to manipulation by advertising and marketing strategies. The targeting of individual responsibility and behaviours needs to be supported by wider regulation and national strategy such as restrictions on the advertising of junk food and addressing obesogenic aspects of the environment.

Limitations

Although the present research sheds light on a novel question, it is important to highlight some limitations. The most salient limitation is that the present research took place as part of a larger study, which included parents and

school staff, in addition to children. Consequently, there was a burden placed on participating schools that we wanted to minimise. As a result of this, the class teachers selected children who they felt would not be compromised by taking time away from the classroom. This resulted in a largely selective or opportunistic sample, which may consist of more articulate and academically able children. This may be reflected in the responses given by the children participating in these focus groups. Similarly, we chose, in this paper, to focus on the response to one question from groups from two out of a total of seven schools (data from all participant groups including children, parents and staff are currently being analysed to produce a complete account of the implementation of the Healthy Schools Manchester initiative). However, we feel that the selective, data-driven sample was appropriate for the method of analysis used as data saturation was reached according to the 'inductive thematic saturation' for the purpose of analysis described by Saunders *et al.*¹⁵ It is more complex to identify data saturation in qualitative approaches that are based on a biographical or narrative approach to analysis, or that more generally include a specific focus on accounts of individual informants (as in an IPA approach). In line with Brocki and Wearden's³⁵ review of the use of IPA in health psychology, our analysis tends to focus more on preservation of the richness of individual accounts.

CONCLUSION

Children were highly perceptive and considered a number of individuals and groups as responsible for keeping them healthy, including themselves, parents, families, school staff, medical professionals, food producers, retail outlets, supermarkets, advertisers and the government. They expected that those responsible for their health should behave in appropriate ways and have made a number of suggestions around how this can be carried out. Their views support a focus on integrated, system-wide approaches to child health, including public health campaigns and regulation within national and international policies, combined with a focus on behaviour change at an individual and family level.

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