

# Children's views of body size, shape and weight:

## Systematic review of UK qualitative evidence

Theo Lorenc, Helen Burchett, Rosa Mendizabal-Espinosa,  
Claire Stansfield, Katy Sutcliffe, Amanda Sowden

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## Abbreviations

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<b>BME</b>	Black and minority ethnic
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<b>BMI</b>	Body Mass Index
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<b>CASP</b>	Critical Appraisal Skills Programme
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<b>NCMP</b>	National Child Measurement Programme
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<b>PE</b>	Physical education
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<b>SES</b>	Socio-economic status
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## EXECUTIVE SUMMARY

### Background

This review was commissioned to inform the implementation of the National Child Measurement Programme in England. Our previous review of weight monitoring suggested that children's experiences may be shaped by their broader views and experiences of body weight.

### Methods

We searched 20 bibliographic databases and repositories and multiple scholarly search engines and websites during January and February 2025. We included qualitative studies from the UK published since 2008 which reported children's (4-12 years) views about body size, shape, weight, or obesity. We conducted a thematic synthesis of the data using an inductive approach.

### Findings

We included 34 studies. Children reported a range of perceived potential impacts of body weight, including health impacts, limitations on activities, bullying and teasing, which generated negative perceptions of overweight and fear of fatness. Ideas about body shape may be influenced by family members and by media or social media content. Children identified diet and physical activity as the main influences on body weight, and the idea of an energy balance between the two was widely understood. Some limited data from older children indicated differences in gender norms, and concern about weight was reported by both girls and boys. We found very little data on any differences relating to ethnicity or socioeconomic status. Children with overweight or obesity reported a pervasive experience of negative attitudes and bullying, which often formed a barrier to participating in social interaction or physical activity.

### Discussion

The findings identify three main drivers of negative views of overweight. First, there is a widespread sense that overweight is unhealthy. While this sometimes refers to specific health outcomes, it is much more often a broader linkage between lower body weight, being healthy in a general sense, and an appealing appearance; this linkage is already made by young children (under 7 years). Second, children perceive that overweight limits what one can do physically, and sometimes that it leads to social isolation and limitations on activity more broadly. Third, children recognise that overweight is likely to lead to bullying and negative perceptions by others; data from children with overweight show that this concern is a realistic one.

The central role of ideas of health in shaping perceptions about weight suggest that public health policies and messages, such as educational campaigns to reduce or prevent overweight, could sometimes contribute to weight stigma.

# 1 BACKGROUND

Overweight and obesity in children is a serious and growing public health concern. Data from the National Child Measurement Programme (NCMP) in England for the school year 2023-24 show a prevalence of obesity of 9.6% in the Reception year (age 4-5) and 22.1% in Year 6 (age 10-11) (NHS England 2024). Children with lower socioeconomic status have substantially higher rates of obesity and overweight, which contributes to health inequalities (NHS England 2024). The causes of obesity are complex, including genetic, behavioural, social and environmental factors. A wide range of interventions has been implemented to attempt to prevent childhood overweight, in schools, homes and community settings (Spiga et al. 2024).

The international research literature suggests that body dissatisfaction and disordered eating are widespread among children, including children as young as three years old (Tatangelo et al. 2016; López-Gil et al. 2023), and these issues are increasingly recognised as a serious public health problem in their own right (Pursey et al. 2021). Children also frequently report weight stigma, bias against people with overweight and weight-based bullying or teasing (Cheng et al. 2022; Mena et al. 2025). These social and interpersonal factors can have serious impacts on mental health and wellbeing, and may also contribute to overweight (Szwimer et al. 2020; Ma et al. 2021). It is challenging to design policies which can effectively address the health impacts of overweight without contributing to weight stigma and negative social impacts on children with overweight.

A substantial body of quantitative research examines the prevalence and causes of both overweight and weight stigma, and the effectiveness of interventions to reduce them. Qualitative data can complement this evidence base by understanding how people make sense of body size and weight. Behaviours and attitudes around weight are shaped by social and cultural factors, and by the ways in which people view body size, their narratives around the causes of weight gain, and the connotations and affects they associate with weight.

While the value of qualitative data is generally recognised for adults, at least those with obesity in clinical settings (Farrell et al. 2021), discussions of childhood overweight and obesity have often not taken account of the perspectives of children themselves. Children's views may differ in important ways from those of young people and adults, and need to be investigated separately from the views of parents and teachers. Evidence focusing on the views of children themselves can help to illuminate the distinctive features of children's understandings of weight and body size, and of their lived experiences. This data can also assist in planning and implementing interventions, for example, weight monitoring, obesity prevention, or programmes to address weight stigma.

This review was undertaken to inform policy development around the National Child Measurement Programme in England. Our previous review on this programme addressed children's views and impacts of weight measurement. It found that perceptions are complex and unpredictable, and are influenced both by specific features of implementation of interventions (e.g. privacy of measurement) and by prior views about weight and obesity (Lorenc et al. 2024). That review also found that perceptions vary between different subgroups of children: in particular, children living with overweight or obesity are more likely to have negative views or experiences of



weighing. These findings underline the need to address the broader context of children's experiences, how they understand issues around body weight, and what may influence their perceptions of people with overweight or obesity.

For these reasons, we decided to focus attention on data from children aged from 4 to 12 in the UK, looking broadly at views of obesity, weight and body size. To our knowledge, there has not been a focused systematic review of qualitative data on children's views of weight since the review published in 2009 by a team based at the EPPI Centre (Rees et al. 2009). That review is now several years old (searches were conducted in 2008). There is a need for an updated review, both because new research has been published and because changes in policy and in the broader culture mean that older evidence may now be less relevant.

## **2 METHODS**

The review question was:

- What is known from qualitative studies from the UK about how children aged 4-12 perceive body size, shape or weight?

The review protocol was registered on PROSPERO before starting work (CRD42025650306). EPPI-Reviewer 6 software was used to manage data (Thomas et al. 2023).

### **2.1 Searching**

Scoping searches and analyses from the previous EPPI Centre review (Rees et al. 2009) showed that the relevant literature would be sparsely dispersed across different information resources and from journal articles, doctoral theses and other grey literature. The searches were developed by an information specialist (CS) in conjunction with the lead reviewer (TL) and circulated to colleagues at the Department of Health and Social Care (DHSC) for feedback.

#### **2.1.1 Sources**

Searches were conducted in international and UK-focussed bibliographic databases across health, psychology, education and social science domains, and from websites, theses repositories, and library catalogues for research published outside of journal articles (grey literature).

The following bibliographic databases were searched:

Healthcare and nursing sources:

- CINAHL (EBSCO),
- EMBASE (OVID),
- MEDLINE (OVID)
- Health Management Information Consortium (OVID)

Education sources:

- British Education Index (EBSCO),
- ERIC (EBSCO).

Psychology:

- PsycINFO (OVID).

Social sciences:

- Social Science Citation Index and Emerging Sources Citation Index (Web of Science);
- ASSIA (ProQuest),
- International Bibliography of Social Sciences (ProQuest),
- Social Policy and Practice (OVID),
- NSPCC online library catalogue

Databases of theses:

- ProQuest dissertations and Theses,
- OpenDisserations (EBSCO),
- OATD.org,
- Theses Collection Wales.

Other grey literature:

- PolicyCommons
- Conference Proceeding Citation Index and Book Citation Index – Social Science (Web of Science).

The following websites were searched: Association for the Study of Obesity, Community and Health Research Unit, National Elf Service, Schools Health Education Unit, GOV.UK, Health Education Journal.

Focussed searches were conducted on the following academic search engines: BASE, Google Scholar, Lens.org, and OpenAlex to capture other grey literature and journal articles.

Forward citation searches, using Lens.org, OpenAlex and Scopus, were conducted on: (i) reports and journal articles relating to the systematic reviews by Rees et al. (Rees et al. 2009; 2013), on 3 February 2025; and (ii) 42 records which were considered eligible studies at full-text or their linked reports, on 26 March 2025. Reference list checking was undertaken for the eligible studies, and for relevant systematic reviews, at full-text.

An additional boolean search of OpenAlex was undertaken to yield 15,536 records. These results were ranked by relevance using a machine classifier that was trained on the manual screening decisions of the other search results, and of these, the 224 were manually screened (based on a threshold informed by testing three random samples of 75% training data and 25% test data).

### **2.1.2 Database search structure**

Searches were conducted during January and February 2025. Results were imported into EPPI-Reviewer and de-duplicated within this software. The search strategy from Medline (OVID) is presented in Appendix A and the strategies for the other databases are available on request. Database searches were structured around the following concepts:

- 1) Population: children aged 4-16 years
- 2) Phenomena: body size, body image, weight and height measurements, weight stigma, weight anxiety, weight satisfaction
- 3) Research focus: views, experiences, qualitative research design using open-ended responses
- 4) Country: UK (applied for the larger resources)
- 5) Limits: publication date from 2008, English language

Database search terms were developed to be sensitive and balanced with precision rather than fully exhaustive. The search terms were modified from those in Rees et al

(2013; 2009) and were informed from test searches and analysing terms within title and abstract records from previous EPPI Centre systematic reviews (500 records of research on people's views, of which over 150 focussed on obesity, weight management or body image). We drew on search filters for UK countries (Ayiku et al. 2017; Fulbright and Stansfield 2024). We limited publication date to 2008 to avoid overlap with studies included in the earlier review (Rees et al. 2009) and language to English, because the focus was on UK literature.

### **2.1.3 Changes from protocol**

Networked Digital Library of Theses and Dissertations (NDLTD) and OpenGrey (Archived version) were not searched owing to technical challenges in implementing the search. However, to enhance the sensitivity of the literature search, additional resources not specified in the original protocol were included. This included searching OpenDissertations (EBSCO) and OATD.org (as alternative sources of theses), and Lens.org and OpenAlex (which contain grey literature reports and theses, as well as other publication types). Searches also included academic search engines, websites and forward citation searches and reference-list checking.

## **2.2 Screening**

A random sample of 10% of titles and abstracts was screened by two reviewers independently and disagreements resolved by discussion. Agreement on inclusion for this sample was 95.2%, which was judged to be adequate. The remaining titles and abstracts were screened by one reviewer alone. All full-text references were screened by two reviewers independently.

The age criterion was initially set at 4-16 (criterion 2 below) as initial feedback from colleagues at DHSC indicated that there may be value in retaining records on older young people (13-16 years). However, in the event we did not include these records in the review as sufficient data was available from the younger age group. Thus, we adopted a further criterion (6 below) restricting inclusion to age 4-12.

The inclusion criteria were:

- 1) The study reports substantive primary qualitative data  
Exclude studies with very small amounts of qualitative data. Exclude document analysis / content analysis. Retain systematic reviews of qualitative studies for reference checking.
- 2) The study reports data from children or young people aged 4-16  
Include if either >50% of the population are children, or there is substantive identifiable data from children. Exclude studies only reporting parents' / teachers' views.
- 3) The study reports substantive data about body size, shape, weight or obesity, and/or the experiences of children with overweight or obesity  
Include studies of healthy eating / physical activity / general mental health only if there is substantive data on obesity / weight / body size or studies focus on children with obesity / overweight. Include studies of body image only if there is substantive data on obesity / weight / body size or studies focus on children with obesity / overweight.

Include studies focused on weight measurement interventions only if there is substantive data on obesity / weight / body size.

- 4) The study was published in 2008 or later
- 5) The study was conducted in the UK
- 6) The study reports data from children aged 4-12

As noted, we excluded studies from before 2008 (criterion 4) as these were included in the 2009 review. Although this review was not a formal update of Rees et al., since changes to available bibliographic sources meant it would have been impossible to re-run the exact search, we took the view that this would avoid duplication of effort.

## 2.3 Quality assessment, data extraction and synthesis

We assessed the quality of included studies using the CASP checklist for qualitative research (<https://casp-uk.net/casp-tools-checklists/qualitative-studies-checklist/>). Information from this assessment was used to characterise the quality of the evidence overall, but not to exclude studies. Using the results of the CASP quality assessment, we conducted a GRADE-Cerqual assessment of the main findings (<https://www.cerqual.org/>).

We extracted data on contextual and methodological features of the studies (research question, theoretical approach, sampling and recruitment methods, setting and context, sample size, sample characteristics, data collection methods, data analysis methods, and study limitations). These tasks were carried out by one reviewer and checked in detail by a second reviewer. Information from the data extraction was used to characterise the evidence base, to address questions about differences between studies (e.g. population subgroups), and to inform interpretations of the findings (e.g. limitations of the evidence base).

We extracted qualitative findings data using the line-by-line coding function in EPPI-Reviewer. Data was synthesised using a thematic synthesis method based on grounded-theory principles. We developed codes inductively, re-coding studies as new codes emerged. The coding framework which emerged had the following structure:

- Impacts of overweight (or weight gain/loss)
- Personal experiences / desires
- Attitudes of others
- Differences between groups
- Views of people with overweight
- Causes of overweight (or weight gain/loss)
- Experiences of children with overweight / obesity
- Other views

Where data were mixed in terms of the populations and/or topics covered, we only coded data corresponding to the review inclusion criteria. That is, we did not code data from participants outside the age range (4-12), or which did not address the topic focus of the review (e.g. views about healthy eating, unrelated to weight or body size). Within the studies the coding focused on direct quotes from participants, but we did also code study authors' summaries and characterisations of participants' views where these provided data over and above what could be extracted from direct quotes. We did not code study authors' broader interpretations or theories. Finally, we developed

third-order constructs based on overarching lines of argument across the evidence base; these are reported under ‘Discussion’, rather than ‘Findings’.

### 3 FINDINGS

The searches located 14,441 unique records. After screening, 34 studies (43 study reports) were included in the review (see appendix D for details). The flow of literature is shown in Figure 1. Where we located abstracts without a full text (e.g. in conference proceedings), we contacted authors to request data; where no data or full study report was available (or authors did not respond or could not be found), these are shown as ‘FT unavailable’ in Figure 1. The reasons for exclusion in Figure 1 refer to the inclusion criteria set out in section 2.2 above (see appendix E for details of those excluded at full text); ‘linked references’ refers to study reports presenting data from the same study as another included reference.

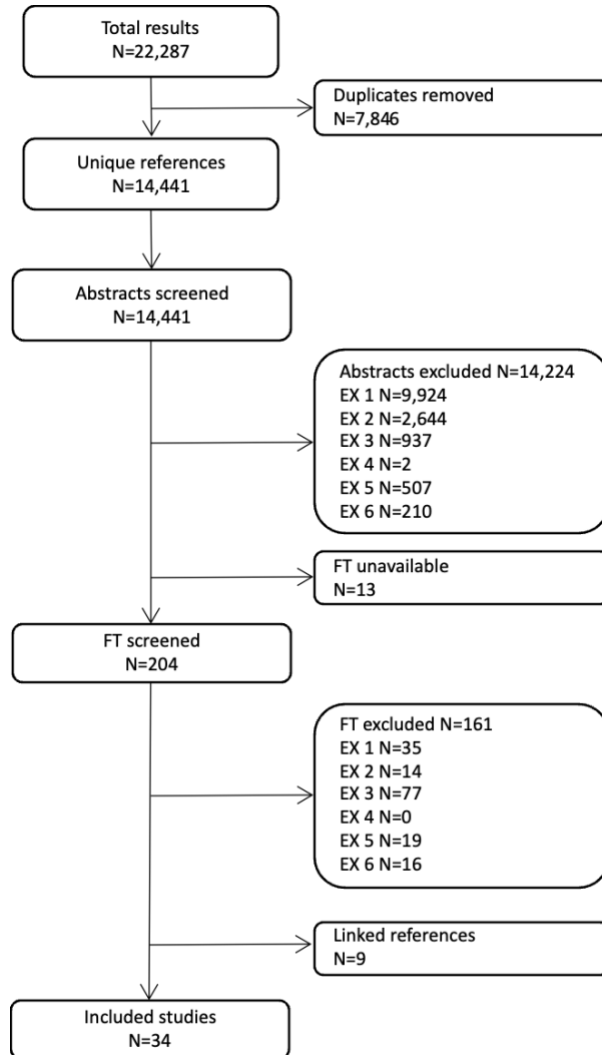


Figure 1. Flow of literature through the review

#### 3.1 Study characteristics

Some information on the characteristics of the studies is shown in Table 1. Table 1 shows the research question or focus, the age and sex of participants, and any further information on the demographics of the sample or the sampling frame. As per the inclusion criteria, we included studies where some participants were over 12, if either

the data on 4-12-year-olds could be distinguished, or 50% or more of the sample were within that range.

Table 1. Study characteristics

Reference	Study focus	Age	% female	Other information on sample
Baxter <b>(2013)</b> ; Baxter et al. <b>(2016)</b>	Understandings of weight change	4-6	38%	–
Bell et al. <b>(2021)</b>	Views of “fitspiration” content on social media	12-13	35%	Higher-SES school
Blood & Grogan <b>(2011)</b>	Experiences of school-based height and weight measurement	10-11	75%	75% BME sample
Bromfield <b>(2010)</b>	Implementation of National Healthy Schools Programme relating to obesity	9-11	NR	Lower-SES area
Charsley <b>(2016)</b> ; Charsley et al. <b>(2018)</b>	Perceptions of fatness and other physical differences	4-7	49%	39% BME sample
Clark <b>(2018;</b> <b>2020)</b>	Girls’ experiences of sport and physical activity	10-13	100%	–
Conway et al. <b>(2025)</b>	Views of food labelling and the NCMP	9-13	64%	61% BME, most lower-SES sample
Cowley <b>(2017)</b>	Attitudes to PE and physical activity	12-13	44%	Medium-SES school
Dearing <b>(2018)</b>	Pro-social behavioural intentions towards peers with obesity	4-6	35%	N=3 of 4 schools mostly White, N=1 approximately half BME
Fairbrother <b>(2013)</b>	Perceptions of food and relationship between food and health	9-10	NR	N=1 of 2 schools lower-SES, N=1 higher
Fielden et al. <b>(2011)</b>	Understandings of obesity and links to diet and physical activity	4-5, 10-11	NR	–
Gemmell <b>(2013)</b>	Overweight children’s perceptions and experiences relating to body size	8-12	67%	All overweight



Reference	Study focus	Age	% female	Other information on sample
Gillison et al. <b>(2023)</b>	Development of guidance for parents on talking to children about weight	9-11	63%	–
Goldthorpe et al. <b>(2019)</b>	Views about responsibility for health	8-10	50%	Lower-SES area; 56% BME sample
Hall <b>(2012)</b>	Experiences of children with overweight; experiences of weight-based victimisation	9-11	52%	Higher-SES area; 97% White sample
Harrold <b>(2017)</b>	Obesity stigma	4-7	54%	Lower-SES area; 98% White sample
Herbert et al. <b>(2025)</b>	Views of weight monitoring	8-12	48%	Mixed-SES schools
Hooper <b>(2018)</b>	Conceptions of health relating to physical education	11-12	NR	Between 5% and 77% BME schools; between 5% and 26% pupil premium schools
Kamal <b>(2015)</b>	Views about determinants of obesity and compensatory reasoning about health behaviours	5-10	55%	Higher-SES, mostly White school
Kesten <b>(2013)</b>	Influences on girls' obesity-related health behaviours	6-11	100%	92% White area. 14% of area children in poverty
Kumari <b>(2014)</b>	Views of young people with overweight	11-13	36%	54% BME sample. All overweight
Lewis et al. <b>(2014)</b>	Views of physical activity in children with overweight	6-16	50%	Lower-SES area. All overweight
Mansfield & Doutre <b>(2011)</b>	Views of childhood obesity	9-10	37%	Lower-SES area
Miller & Coverdale <b>(2010)</b>	Views on prevention of eating disorders	10-14	100%	–

Reference	Study focus	Age	% female	Other information on sample
Monaghan et al. (2022)	Views of body size and health	12-13	100%	Most White
Murphy et al. (2021)	Views of health, diet, physical activity and weight	9-10	58%	73% BME, most lower-SES sample
Newson et al. (2024)	Experiences of children with obesity; views of a weight management programme	7-13	56%	All overweight
Nnyanzi (2012; 2016)	Impact and implementation of the NCMP	10-11	67%	All white, most lower-SES (62% high area-level deprivation) sample
Ogden & Roy-Stanley (2020)	Choices about food	9-10	63%	All White sample
Paddock (2022); Paddock & Bell (2024)	Use of social media	11-14	52%	94% White sample; lower-SES area
Palmer (2015)	Understandings and experiences of the body	9-10	59%	N=1 state school in lower-SES area, N=1 private school in higher-SES area with mostly White pupils
Rich & Evans (2013); De Pian (2012); Evans et al. (2011); Wright et al. (2012)	NR	9-16	NR (most)	–
Willett (2008)	Girls' views about fashion and digital media	12-13	100%	Lower-SES, 75% BME school
Windram-Geddes (2013a; 2013b)	Girls' experiences of PE and physical activity	10-14	100%	–

Abbreviations: BME, black and minority ethnic; NR, not reported; PE, physical education; SES, socioeconomic status

As can be seen from Table 1, the topic foci of the studies were diverse. Some focused on views of obesity or body size, while others looked at views of diet, physical activity, or health in general (in the latter cases we only extracted data on views of body size). Five studies mainly or wholly included children with overweight or obesity. Most

studies included both girls and boys; seven studies focused mainly or wholly on girls, and no studies focused mainly or wholly on boys. Six studies reported that either the study sample or the sampling frame (school or community) was more than 50% Black or minority ethnic, and seven that either the sample or the sampling frame was mostly or wholly White. Ten studies reported that the sampling frame was of lower socioeconomic status, three of higher socioeconomic status (although this was often reported impressionistically, without full data). The full age range was represented in the studies, with four studies focusing on the youngest age group (4-6 years); in the synthesis below, we generally separate out the latter group towards the end of each subsection, although they are integrated where there are clear continuities.

The results of quality assessment are presented in Appendix B. Overall, the quality of the studies was reasonably high. The most common domains in which there were limitations were sampling and recruitment, and the relationship of researcher to participants. The results of the GRADE-Cerqual assessment are presented in Appendix C.

The synthesis of findings is presented in the following sections. The broad structure of the themes is set out in Table 2.

Table 2. Structure of themes

Perceptions	Impacts of weight
	Causes of weight
	Other aspects of body size
Experiences	Personal experiences and goals
	'Fat talk'
	Experiences of children with overweight and obesity
Differences between groups of children	

## 3.2 Perceived impacts of weight

Participants identified a number of potential impacts of overweight or obesity (and of underweight), and potential consequences of gaining or losing weight. As discussed under the subthemes below, the data was not all framed in terms of explicit causal narratives, and this section includes perceptions which might also be understood in terms of imagery or stereotypes, rather than impacts in a strict sense.

### 3.2.1 Health impacts

Participants identify issues relating to the health impacts of weight. Some participants identified specific health consequences of overweight, including heart disease, diabetes and musculoskeletal problems (Fairbrother 2013; Kumari 2014; Mansfield and Doutre 2011; Newson et al. 2024). These specific outcomes were more often mentioned by participants with overweight (Kumari 2014; Newson et al. 2024).

If you're really big and fat [...] then you go to the gym and work really hard it could like give you a heart attack and stuff like that. (participant, Fairbrother 2013, 9-10y)

You can die of fat, you know. It stops your heart working and makes your liver fatty, and it makes your joints ache. (participant, Newson et al. 2024, 12y)

However, relatively few participants mentioned specific health outcomes or problems such as these. Most participants who mentioned health impacts expressed these perceptions in a vague way, in terms of a broad concept of health in general. Two studies reported that participants thought that whether or not someone is healthy can be directly seen from their body shape (Evans et al. 2011; Hooper 2018).

If you look at a person, and they're bigger, well, fatter ... you can just tell that they're not healthy. (participant, Hooper 2018, 11-12y)

The perception of lower body weight as healthy was often associated with attractiveness, and higher weight with unattractiveness.

Because it's bad for you, because it looks bad. (participant, Fielden et al. 2011, Reception)

[I:] You said you want to be healthy, so what does having a healthy body mean to you?

[P:] I mean like, lovely and like, slim, and [makes downward hand gestures along the length of her body] (participant, Palmer 2015, 9-10y; parenthesis in study report)

Where researchers directly asked about health impacts, participants sometimes seemed less concerned about the specific health consequences of overweight than about the overall concept of 'being healthy', as in the following exchange (Palmer 2015).

[I:] So is it important to you not to get fat only because it might increase your risk of death?

[P:] Yes.

[I:] So would you get fat if you knew you definitely wouldn't die from it?

[P:] No.

[I:] No you wouldn't? Why wouldn't you?

[P:] Because I like to keep healthy when I can. (participant, Palmer 2015, 9-10y)

In several cases, participants' views on this theme seemed to be shaped by a focus on severe obesity rather than moderate overweight. Some participants referred to examples from the media of individuals with extreme obesity who had experienced serious health problems (this subtheme is discussed further under 'body image' below).

You know there's the fattest man in Britain! He can't even stand up and he has to stay in bed and he's bigger than his bed. (participant, Fairbrother 2013, 9-10y)

Guess what, I seen this film right the boy was fat right, his legs was right down to the bottom, he had a fat tummy, I was hiding cos I hated him, he was

horrible, he will have to go to hospital, he was fat. (participant, Fielden et al. 2011, Reception)

Studies of younger children (4-6 years) reported that many already saw overweight as harmful to health, even though children in this age group did not have any detailed understanding of the pathways involved (Baxter 2013; Charsley 2016). While the specific consequences envisaged may be unrealistic, the idea that overweight is unhealthy (or even fatal) appears to be well established from an early age. (Some participants in this age group also suggest that underweight may be harmful, as described below, but this appears to be much less common.) As with the data discussed above, a general concept of lower body weight as 'healthy' seems to play a large role.

You get diarrhoea. (participant, Baxter 2013, 4-6y)

He might explode. (participant, Baxter 2013, 4-6y)

They might have to open her tummy and get all the food out. (participant, Baxter 2013, 4-6y)

Fat people will die if they get more fatter. (participant, Charsley 2016, 4-7y)

I don't want to die. (participant, Charsley 2016, 4-7y)

Across the age range, a few participants express contrasting views. In three studies, some participants suggested that the likely impacts of weight on health were not great, or sought to decouple weight from health and argue that the latter is not reducible to body size (Fairbrother 2013; Gillison et al. 2023; Mansfield and Doutre 2011).

Well, it doesn't matter what you really look like, it's your health that matters. (participant, Fairbrother 2013, 9-10y)

Some participants also identified negative health impacts as a result of underweight, including some younger children (Baxter 2013), although these impacts were mentioned much less often, and sometimes qualified by observing that underweight is not as bad for health as overweight (Baxter 2013; Cowley 2017; Fairbrother 2013; Fielden et al. 2011; Hooper 2018; Monaghan et al. 2022). Participants in two studies mentioned the impacts of underweight in the context of intentional but excessive weight loss (Fairbrother 2013; Cowley 2017). As with the data above, the views relate to a broad concept of health which also draws in ideas about physical capacity (in the quotes below, 'strength' versus 'fragility').

If you get too thin you could die. (participant, Baxter 2013, 4-6y)

If you were a bit bigger so you're always try and keep slimmer, but some people can take that to the limits as well, which isn't great which makes them unhealthier than they may already be. (participant, Cowley 2017, 12-13y)

It's bad cos you're all bony and you can't do anything cos you're not strong enough, you're weak. (participant, Fielden et al. 2011, Year 6)

[...] if you're much thinner than you should actually be it will put you in like more harm, that you'll actual live less because your body's more fragile as it doesn't have like stuff on it. (participant, Monaghan et al. 2022, 12-13y)

### 3.2.2 Physical abilities

The idea of health was often linked to the ability to do things and participate in activities such as sports. Outside this context, participants also linked the impacts of weight to physical capacities more generally. In some cases they referred to specific individuals, such as peers or family members, who experienced limitations as a result of overweight.

There was [a] boy, I am not going to say his name, in swimming. Well, every time he stopped because we had to go all the way round. People would laugh at him, 'oh you are too fat you cannot swim'. So he stepped out. (participant, Bromfield 2010, 9-11y)

As with health impacts, though, these specific narratives seem to be less important than a general sense that people with overweight are somehow limited in their ability to do things. Participants mentioned everyday activities such as walking alongside sports and exercise (e.g. jogging).

[Of a character gaining weight] He wouldn't be able to play football. (participant, Baxter 2013, 4-6y)

If you eat lots and lots of junk food, and then you might be a bit fat, so when you run you might be a bit like [demonstrates running very slowly and with difficulty] and you might not, at the end of the day, you might not actually get a lot of running in. (participant, Fairbrother 2013, 9-10y; parenthesis in study report)

Because she's too fat and when you're fat you can't do exercise ... because if you're too wide then you find it difficult to walk ... (participant, Kamal 2015, 7y)

Some participants suggested that not participating in activities may limit children's social relationships by restricting participation in physical social activities, or reducing mobility (Mansfield and Doutre 2011; Murphy et al. 2021).

He do not like nothing because he's too big, he cannot sit nowhere, he has to sit on the floor. He's bored, cos got no friends ... he cannot get anywhere because he's too fat, so he has to go in his taxi car and things. (participant, Murphy et al. 2021, 10y)

For several participants, this sense of being restricted in physical activities appears to have been linked to a broader sense of limited participation. Beyond the perceived practical issues, overweight is seen to compromise the ability to live a 'normal' life or behave 'properly' in a broader sense, which links to views of people with overweight as unattractive or unhappy and of overweight as undesirable.

Because I don't want to be fat ... it's disgusting [...] You can't even walk properly. (participant, Palmer 2015, 9-10y)

Cause if you're too fat you could not be really fit and walk around as much as you normally do and it would be more unhealthy to be more fat than thin. I think it would be hard to exercise and I think I wouldn't really like it 'cause I would just like to be normal like everyone else. (participant, Rich and Evans 2013, age NR)

Participants in three studies, thinking about the impacts of overweight in their future adult lives, suggested that these limitations could restrict their ability to work (Fairbrother 2013; Fielden et al. 2011; Mansfield and Doutre 2011).

[...] cos when you're [...] a security guard for a park or something if you're fatter then you can't run. (participant, Fairbrother 2013, 9-10y)

Boys also identified other inconveniences related to [...] being unable to work and earn money. (authors, Mansfield and Doutre 2011)

The perception that overweight leads to limitations in physical capabilities was mentioned by several participants in studies of younger children, and appears to have been widespread among this age group (Baxter 2013; Charsley 2016; Dearing 2018). It is not always easy to tell what specific limitations these participants have in mind, and again the idea of being "able to do normal things" (participant, Baxter 2013) seems to be prior to any detailed perceptions. One study found that perceived physical limitations were the most common reason given for not wanting to be friends with a child with overweight, suggesting that this theme may play a large role in social stigmatisation for this age group (Charsley 2016).

[Of character gaining weight] He can't walk properly. (participant, Baxter 2013, 4-6y)

[Of character gaining weight] She won't be able to do normal things. (participant, Baxter 2013, 4-6y)

Similarly, participants expressed concerns that if they were to be fat then they would not be able to "run", would be "slow", "might fall" or "get stuck". (author, Charsley 2016, 4-7y)

Because Alfie has a big belly ... because if we were playing ... if we were running together ... if we were playing football Alfie would cover up the football. (participant, Dearing 2018, 4-6y)

Across the age range, a few participants suggested that increased weight may have advantages in terms of physical abilities. Younger children in one study suggested that a character who gained weight might be able to do more adult activities (Baxter 2013). A few male participants suggested that being heavier could have advantages related to (real or perceived) fighting ability (Baxter 2013; Mansfield and Doutre 2011; Evans et al. 2011).

[Of a character gaining weight] He can smash the baddies. (participant, Baxter 2013, 4-6y)

The boys mentioned weight advantages relating to strength and power, protection against attack and a useful avoidance strategy. (authors, Mansfield and Doutre 2011)

### **3.2.3 Social and emotional impacts**

Participants frequently described bullying and teasing of children with overweight. Authors of four studies reported that (real or anticipated) experiences of weight-based bullying were of central importance in determining children's views of overweight in general (Hall 2012; Hooper 2018; Mansfield and Doutre 2011; Murphy et al. 2021).

(Participants with overweight and obesity also reported extensive experiences of bullying; this data is covered in the ‘Children with overweight’ section below.)

Pupils were evidently concerned about being positioned as fat and how they might be treated by their peers. The most common concerns/fears were that they would be teased, taunted, harassed or bullied and, as a result, they would be made to feel sad and lonely. (authors, Hooper 2018)

Participants discussed the prominence of weight-related bullying which involved name calling, ‘taking the mick’ and excluding children from friendship groups and activities. (authors, Mansfield and Doutre 2011)

It was generally accepted that overweight children would be ridiculed by others, particularly at school, and this ridicule related to both physical appearance and personal attributes that people assigned to children who were overweight. (authors, Murphy et al. 2021)

These perceptions were also present in studies of younger children, where several participants thought that a character with a larger body size would be laughed at or called names (Baxter 2013; Charsley 2016).

[Of a character gaining weight] People will laugh at him. (participant, Baxter 2013, 4-6y)

People were saying ‘fatty, fatty, fatty’. (participant, Baxter 2013, 4-6y)

I don’t like somebody to be fat ... ‘cause somebody sees them and they be fat and they will laugh at them ... (participant, Charsley 2016, 4-7y)

Some participants felt that overweight could lead not only to episodic bullying but to a more serious difficulty in forming friendships. Participants in one study described a self-perpetuating dynamic where children were reluctant to be friends with peers with overweight for fear of the indirect stigma this might cause (Hall 2012). This finding was echoed in one of the studies of younger children, where some participants had a sense that ‘fat’ children were more likely to be friends with each other (Charsley 2016).

[B]ecause then we are all the same... the fat one has another fat friend and they two are friends. (participant, Charsley 2016, 4-7y)

I like normal people ... they be friends ... [fat people] don’t play with you ... because they don’t like normal people. (participant, Charsley 2016, 4-7y)

If you’re fat, you don’t really have any friends, you’re just all fat and on your own. (participant, Hooper 2018, 11-12y)

Well, if someone becomes friends with someone like that (an overweight person), well, because people talk about those people they might start talking about people who become friends with them. (participant, Hall 2012, 9-11y)

Children sometimes experienced weight-based bullying or teasing even if they were not overweight (Kesten 2013), and one participant suggested that bullying might persist if someone lost weight (Hall 2012). This may suggest that these experiences are not always related to measured weight status in a straightforward way.



And with the weight [...] they might like get teased and they might try to go on a diet but then it might be hard for them and people might still tease them even if they do get thinner. (participant, Hall 2012, 9-11y)

[a girl in their class] thinks she is fat because one of the boys calls her fat. And she thinks she is fat. (participant, Kesten 2013, 11y)

Few participants sought to provide an explanation of why children with overweight were bullied, and most seemed to see it as inevitable and self-evident. Some participants linked bullying to the idea of limitations in activity discussed above (Hooper 2018). (It may be relevant that, as discussed below, children with overweight themselves often associated bullying with physical activity and PE classes.)

People can tease you if you're fat, like they make fun of you for being bigger and slower than them. (participant, Hooper 2018, 11-12y)

Also, in one study participants reported bullying or teasing as a result of underweight (Nnyanzi 2012), and in another study as a result of being small or short (Palmer 2015) (see under 'Other experiences of body size' below). In one other study a participant reported hostile comments to the effect that they had an eating disorder (Clark 2018).

Participants described the potential for emotional impacts as a result of bullying.

Yeah, you don't want your children to get round or they'll get bullied or they won't feel very nice. (participant, Fairbrother 2013, 9-10y)

...he will be quite like upset and, and he will feel like... I need to do something about me because I'm so fat but he doesn't actually need to. (participant, Hall 2012, 9-11y)

Some participants also thought that overweight could have negative emotional effects in itself, not just as a result of others' attitudes or reactions (Mansfield and Doutre 2011; Rich and Evans 2013), including younger participants (Kamal 2015; Kesten 2013). These perceptions were mainly elicited for hypothetical cases, and participants seem to have been thinking of severe obesity rather than moderate overweight (as mentioned under 'Health impacts' above, this is often the case elsewhere in the data). There seem to be several different narratives here, including internalised self-blame and worry about health consequences of overweight, which again are not clearly distinguished from the general sense of overweight as undesirable.

Annoyed at their overweight and they might think ... I wish I lost weight coz I don't like my body ... why did I do this in the first place? (participant, Mansfield and Doutre 2011, 9-10y)

Will I die because I'm overweight and you won't get any sleep because you'll be thinking about will I die or not. Some people don't sleep at all because they think that they're going to die in their sleep because they're so obese. (participant, Rich and Evans 2013, age NR)

Participants had a range of views about how these social and emotional impacts could in turn relate to weight-related behaviours. Some children may be motivated to lose weight, while others could be demoralised and be less likely to lose weight. Some participants were also aware of the risk of disordered eating as a result of weight-based teasing.

Just because you don't want people making fun of you, that kind of stuff, if you were a bit bigger so you're always try and keep slimmer, but some people can take that to the limits as well, which isn't great which makes them unhealthier than they may already be. (participant, Cowley 2017, 12-13y)

It's hard for a fat child to get healthy because they are scared that everyone will be like, ha, ha, ha, look he's so fat and your belly jiggles and your legs jiggle, and you might feel really ashamed of your body and then it's really hard. (participant, Murphy et al. 2021, 10y)

Finally, some studies suggest a more general awareness of social norms around the discussion of weight as a topic which shape how children respond to questions. Some participants understand that the topic of weight is a sensitive one and appear embarrassed by the subject, or uncertain as to whether they are 'allowed' to talk about it (Bromfield 2010; Fielden et al. 2011). Older children often make a point of being inclusive or non-stigmatising about people with overweight, or state that they personally would not participate in weight-related bullying even if others would (Willett 2008; Hall 2012).

The stigma attached to being overweight is evident as participants often started giggling when talking about people being overweight. (authors, Fielden et al. 2011)

Participants demonstrated that they believed that fatness was to be judged negatively at the same time as describing their own non-judgemental and tolerant attitude towards overweight people. (authors, Hall 2012)

[As part of clothes design task] you don't want to reveal a lot if the person's big, you just have to think about people's feelings. (participant, Willett 2008, 12-13y)

### **3.2.4 Appearance**

Some participants also mentioned appearance as a consequence of weight and thought that people with overweight were physically unattractive. However, while several study authors report this as a substantial theme (Bell et al. 2021; Cowley 2017; Mansfield and Doutre 2011; Newson et al. 2024), relatively little data explore perceptions about appearance in depth. Younger children in Baxter's study mentioned a range of appearance-related rationales for a character wanting to lose (or avoid gaining) weight – "it looks funny", "so she looks a bit more pretty" (participants, Baxter 2013) – but a few also thought the larger body size would be more attractive (Baxter 2013). When appearance is mentioned, it is often in conjunction with other perceptions such as health consequences, rather than being a major determinant of perceptions on its own. Thus, the idea of overweight as 'bad looking' is immediately associated with unhealthiness or unfitness.

Because it's bad for you, because it looks bad. (participant, Fielden et al. 2011, Reception)

[B]eing overweight, is lazy, not the best looking, not fit. (participant, Newson et al. 2024, 9y)

In some cases this is linked to the sense described under ‘health impacts’ above that health is directly perceptible from body shape. In this context the link between health and attractiveness may be taken for granted, such that the one automatically implies the other.

Healthy people have a thinner body, like they’re not fat or anything, they’re just a good shape. (participant, Hooper 2018, 11-12y)

To be healthy is looking fresh, fit, you know what I mean, attractive, so you would say. Your body works perfectly. (participant, Newson et al. 2024, 11y)

### **3.3 Perceived causes of overweight**

The studies identified a range of factors which are seen to contribute to overweight (or weight gain or loss). Most of the data focus on individual behaviours around diet or physical activity; these subthemes are addressed first, followed by the smaller body of data on social factors and natural predispositions.

#### **3.3.1 Dietary behaviour**

Participants identified overeating as a main cause of overweight.

[N]o people have to be fat like her ... they eat lots of things. (participant, Charsley 2016, 4-7y)

... it’s just ... their fault ‘cos they’re like that ... because they eat too much. (participant, Kumari 2014, 11-13y)

Not all foods were seen as equal. Certain foods or nutrients (fat and sugar) were seen as contributing to overweight. Younger children tended to talk in terms of specific foods which are seen as bad or unhealthy such as chocolate, sweets and chips (as contrasted with fruit and vegetables, which help to lose weight) (Baxter 2013; Kamal 2015; Kesten 2013; Murphy et al. 2021). One participant suggested that drinking water could contribute to weight loss (Kamal 2015). Although some older children also named specific foods, or talked about ‘junk’ food in general terms, others made reference to macronutrients or food groups: fat and sugar were seen as the main problem (Fairbrother 2013; Gillison et al. 2023; Kumari 2014), and carbohydrates were also mentioned (Wright et al. 2012).

[Can someone change their weight?] Eat healthier ... More fruit and veg like me. (participant, Gillison et al. 2023, 11y)

It shows the woman ate too much and just eats chocolates and all that. And if you eat junk food and not exercise then you get really fat. (participant, Kamal 2015, 8y)

Eat quite a lot of veg... It would make your tummy grow smaller. (participant, Kamal 2015, 5y)

Several participants saw the role of diet in terms of energy balance and argued that physical activity could balance out food intake.

[I]f you do have the food you’re going to have to do more exercise because to burn that food off, so then you’re not really gaining you’re losing something cos

if you walk even more and run after a meal then you've actually got rid of that. (participant, Gemmell 2013, 10y)

Well, sometimes if you eat crisps and all of that, you will get fat and sometimes you have to go out and exercise because your body needs to burn it off. (participant, Kesten 2013, 8y)

In some cases the idea of energy balance was part of a deliberate strategy to allow oneself to eat 'bad' foods without becoming overweight. It could also be an explanation of why someone might not gain weight despite eating large amounts.

No, cos I do so much sport that it just runs off me. So I eat more each day. I think, so it doesn't matter. (participant, Clark 2020, 10-13y)

[I:] Ok, so why is it [exercise and fitness] important to you?

[P1:] So I can eat what I want and not get fat!

[I:] So what does 'what you want' mean? Does that mean lots of junk or not?

[P2:] No, just bigger portions than what I should have.

[P1:] Yeah, just a bunch of junk for me to be honest. (participant, Windram-Geddes 2013a, Secondary 2)

However, some participants were sceptical as to whether increasing physical activity could reduce or prevent overweight on its own. Some participants with overweight reported that they were physically active, and that the causes of overweight in their case were more to do with diet (Kumari 2014).

I think that the key to it is [...] exercising keeps you healthy but it won't really burn off much calories, so what you need to do is to eat healthily and stop eating chocolate so you won't have to burn the calories. (participant, Fairbrother 2013, 9-10y)

I am very active but it's not that that affects me, it's all the fats that I have cos I like a lot of crisps and everything! (participant, Kumari 2014, 11-13y)

Some participants described patterns of overeating in psychological terms as addictive or otherwise beyond the individual's control (Fairbrother 2013; Fielden et al. 2011; Mansfield and Doutre 2011; Wright et al. 2012). (This theme is also discussed in the section on children with overweight below.)

Cos my dad when he was young he was obese so he told me, but he's sort of addicted really. (participant, Fielden et al. 2011, Year 6)

[...] if you eat and eat and eat you get a brain problem where your brain's just telling you to keep eating. (participant, Wright et al. 2012, age NR)

More generally, the perception of people with overweight as 'greedy' was a factor in stigmatising attitudes among some younger children (Charsley 2016).

It's just I don't like fat people, they're greedy. (participant, Charsley 2016, 4-7y)

Participants felt that the impacts of diet on weight may not take effect immediately, but could extend into adulthood, if eating patterns are maintained over time (Cowley 2017; Fairbrother 2013).

It all mounts up. Like if you eat a chocolate bar each day then you maybe don't notice it, but like later on you can maybe notice how much weight you've put on from doing it. (participant, Cowley 2017, 12-13y)

### 3.3.2 Physical activity

Many participants also saw a lack of physical activity as an important cause of overweight, and increasing activity as a route to weight loss (Baxter 2013; Bell et al. 2021; Clark 2018; Fairbrother 2013; Fielden et al. 2011; Gemmell 2013; Gillison et al. 2023; Herbert et al. 2025; Hooper 2018; Kamal 2015; Kesten 2013; Mansfield and Doutre 2011; Windram-Geddes 2013a; Wright et al. 2012). As described above, across studies, several participants saw the determinants of weight in terms of a balance between energy intake and expenditure.

Exercise makes you more thin ... [like] playing football. (participant, Baxter 2013, 4-6y)

Exercise is the important thing for weight. (participant, Gillison et al. 2023, 9y)

... you could go for a run ... It would lose a bit of weight ... because it helps you, helps grind down the big meals that you've had ... when I say grind down I mean that it makes you lose more energy. (participant, Kamal 2015, 5y)

Physical activity was also thought to help prevent weight gain in the future.

It's good to be fit, because when you're older, you don't want to be fat and things. (participant, Bell et al. 2021, 12-13y)

Perceptions of the comparative importance of diet and physical activity were varied. As described above, in the context of views about energy balance, several participants thought that diet was more important. However, the authors of one study reported that participants were much more likely to refer to physical activity as a determinant of weight than to dietary behaviour, even though they mentioned diet more in relation to general health (Hooper 2018).

In one study participants argued that physical activity could sometimes lead to gaining weight due to changes in body composition (Fielden et al. 2011). One other participant in a study of younger children also suggested that exercise "makes you fat if you do too much" (participant, Baxter 2013).

Actually, you can put weight on running cos muscle weighs more than fat so you can put weight on. (participant, Fielden et al. 2011, Year 6)

One study reported more detailed data on younger children's (mean age 7) theories of how physical activity and diet cause weight change on a physical level (Kamal 2015). The data from this study reveal a diverse set of narratives and imagery, such as the idea of fat 'building up' as a result of physical inactivity, suggesting that the basic idea of energy balance often coexists with more complex narratives of bodily functioning. (The study author does not theorise as to what leads to children's understandings on this specific point; speculatively, they may derive from accounts of stroke or heart disease.)

[...] then she doesn't do a lot of exercise so then it just turns into fat and sticks on her body. (participant, Kamal 2015, 8y)

It burns ... Fat and weight ... [how] ... the blood in you goes round and that means that it stops like getting fat to places [...] It would un-clog it [fat], and it'd get a bit thinner ... It will just get a bit thin and go in a bit an there'll be a bit less fat ... (participant, Kamal 2015, 9y)

It should be added here that the specific causal link between physical activity and weight is often not clearly distinguished in the data from a broader set of connotations linking activity, fitness and lower body weight, often via a more general imagery of 'healthy' lifestyles and body types, as described under 'health impacts' above. Authors of two studies of older children (Bell et al. 2021; Clark 2018) expressly remark that participants "equated slimness with fitness" (authors, Bell et al. 2021).

This connection, and the idea that whether someone is 'healthy' or not can be directly inferred from their body shape, emerges from data in studies of younger children as well (Baxter 2013; Charsley 2016; Dearing 2018; Kamal 2015). However, in these studies it is particularly challenging to separate out perceptions that refer specifically to causation from this more general set of connections, and to tell whether participants have in mind the causes of overweight or the opposite causal narrative of overweight causing limitations in activity (discussed above).

Thin people, they're healthy. (participant, Baxter 2013, 4-6y)

Because they're really thin and healthy ... because, the fat ... when you run you get thinner, what means you're healthier, what means you can tell. (participant, Kamal 2015, 6y)

These connections may also be manifest as a broader, stereotyped view of people with overweight as 'lazy', which appears to be widespread in this age group.

Exercise will make her thin so no ... I think she's been lazing around and being lazy. (participant, Baxter 2013, 4-6y)

It's a person that doesn't bother about doing anything or trying to be healthy, just eat unhealthy snacks and sitting in front of the TV all day. (participant, Kamal 2015, 9y)

The perception that people with overweight are lazy is also sometimes present in older age groups as part of the link between physical activity and obesity (Hooper 2018). It may in some cases be implicit in the data discussed above, although this is arguable; two study authors reported that overweight was linked to laziness but did not specifically cite data supporting this (Clark 2018; Murphy et al. 2021).

If you're fat, it's because you're not doing enough exercise, so you are just kind of being lazy. (participant, Hooper 2018, 11-12y)

### **3.3.3 Social factors and locus of responsibility**

Few participants directly addressed social and environmental determinants of weight. In one study which focused specifically on questions of responsibility for overweight, a range of views were expressed, with some participants arguing that individuals are solely responsible and others identifying factors such as availability of fast food (Goldthorpe et al. 2019).

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. (participant, Goldthorpe et al. 2019, 8-10y)

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. (participant, Goldthorpe et al. 2019, 8-10y)

Several participants in other studies identified parents or families as playing a causal role (Fairbrother 2013; Kumari 2014; Mansfield and Doutre 2011).

Kids can be born thin but they can grow up to be big because they copy their parents. (participant, Fairbrother 2013, 9-10y)

If it was their parents like feeding them junk food and stuff, and if it's been that way since they were young and they've grown up with that and stuff. They're not gonna know of any different way, so it's not really their fault ... (participant, Kumari 2014, 11-13y)

The authors of several studies suggest in general terms that participants emphasised individualistic accounts of responsibility, but the data underlying this analysis is not always clear (Clark 2018; Hall 2012; Herbert et al. 2025; Kumari 2014; Mansfield and Doutre 2011).

### **3.3.4 Natural predispositions**

Participants in two studies suggested that overweight or underweight may be caused by natural or familial predispositions (Evans et al. 2011; Fairbrother 2013). This could be seen as referring to genetics as a causal factor, although that term is not specifically used in the data.

[S]ome people can't help but be big sometimes, it can run down the family. (participant, Evans et al. 2011, age NR)

[P1:] Some people just [...] don't get fat from eating junk food, they're naturally that way.

[P2:] Big boned. (participants, Fairbrother 2013, 9-10y)

## **3.4 Other aspects of body size**

A small number of studies report views about body size which do not primarily relate to weight or body composition. Some of the data in this theme relate explicitly to height, but much may be better understood in terms of a general concept of being 'big' or 'small' which is not reducible to either height or weight. As discussed below, two studies of weight monitoring found that some children were concerned about height measurement as well as weight measurement (Blood and Grogan 2011; Nnyanzi 2012).

One other study reported data on perceptions of height among 9- to 10-year olds, finding that children were concerned with rankings of height within school classes or peer groups, and that children associated being taller with greater responsibility or power, and being perceived by adults to be more capable (Palmer 2015). The author of this study talks about this data in terms of a "conceptual 'slipperiness' between age,

size and status” (author, Palmer 2015), capturing the sense that body size may not always function as a well-defined construct distinct from other aspects of how children perceive themselves and others.

I want to be taller because if anyone’s mean to me I can say, “Don’t say that”... like at home... I wasn’t very happy, well, I was just having a bad morning this morning and everyone was in a bad mood and I’d like to be taller because it would make me more powerful. (participant, Palmer 2015, 9-10y)

In the same study, some participants saw advantages to being smaller, sometimes for unexpected reasons.

I don’t like being tall ... I want to be really small ... Because then I can fit through that little mouse hole and hide from everyone. When I was younger I used to be able to fit through the cat flap. (participant, Palmer 2015, 9-10y)

The findings from this study recall data from Baxter’s study of younger children (4 to 6 years), where several participants gave reasons for a character wanting to gain weight, or advantages from gaining weight, involving capability or maturity (Baxter 2013). (This connection was not made in the other studies of the younger age group, perhaps because participants were asked differently framed questions.)

She wanted to be the oldest. (participant, Baxter 2013, 4-6y)

She wants to do things that are more grown-up. (participant, Baxter 2013, 4-6y)

He might be strong. (participant, Baxter 2013, 4-6y)

You get to learn things, big things. (participant, Baxter 2013, 4-6y)

More speculatively, this data may also relate to the findings about excessive thinness leading to weakness or fragility (section on ‘Health impacts’ above), to size as an advantage in fighting (‘Physical abilities’), or to the desire to be ‘big’ in order to project authority (‘Body ideals’). They suggest two patterns of association which may reinforce one another: one where being ‘bigger’, in the sense of older, relates to the ability (or permission) to do more things and act autonomously; and another, perhaps more salient for boys, which relates larger body size to self-assertion and the ability to command respect. As suggested above (‘Body ideals’), the data does not clearly link these perceptions to preferences for body composition (e.g. muscularity).

### **3.5 Personal experiences and goals**

#### **3.5.1 Body ideals and desires for weight**

Participants’ specifically expressed goals for themselves were varied. Some participants, mostly girls, expressed a desire to be thinner, or to control their weight (Clark 2018; Kesten 2013; Palmer 2015; Windram-Geddes 2013a). (The experiences of children with overweight, many of whom also aimed to lose weight, are discussed separately below.)

I don’t want to be really fat, so I am trying to get really thin. (participant, female, Kesten 2013, 7y)



However, male participants were more likely to focus on strength or muscularity, which was sometimes associated with a leaner body composition and sometimes explicitly with gaining weight (Cowley 2017; Fairbrother 2013; Palmer 2015).

I want to be healthy; I don't want to be thinner. I want to eat more to get bigger but not eat more chocolates. Because people say that you get bigger by eating chocolates but I mean like fatter, I don't want to get fatter, I want to be bigger and stronger. (participant, male, Fairbrother 2013, 9-10y)

I'll be ripped... When I'm in the future, I imagine myself: I'm er, like terrifying muscle. When I grow up I want to have a six pack I'll go to the gym every day, never give up on my dream. (participant, male, Palmer 2015, 9-10y)

One study links a participant's desire to gain weight to working-class male cultural values, suggesting that being 'big' may represent a broader ability to project agency and authority (Evans et al. 2011). In this case the ideal does not seem to have been clearly defined in terms of body composition, but was linked more to a desired social role and way of behaving. While these views were only expressed by one participant (in a study with generally low reliability), they may represent an alternative perspective on questions of body size.

In the masculine subculture of Charlie's working-class family and peers, size and weight meant power and authority, offering protection, a more secure presence amongst male peers. [...] Over the longer term it would provide the physical presence needed to fulfil his career aspirations of becoming a 'solicitor in criminal law': 'that's why I wanna be big as well' (Charlie), reflecting his interpretation of a character he had seen playing such a role on TV. (authors / participant, Evans et al. 2011)

When considering the 'ideal' body appearance more abstractly, participants (generally older girls) often expressed a view that it should be neither 'too fat' nor 'too thin' – in some cases it might be more accurate to say 'thin but not too thin' – and explicitly rejected body types seen as excessively underweight.

I want to stay like quite skinny but not like too skinny like size zero or anything like that. I think it would be good to be just like a normal size. (participant, female, Evans et al. 2011, age NR)

[...] it's every girl's dream to be not that skinny but quite skinny, yeah, not fat. (participant, female, Windram-Geddes 2013a, Primary 6)

Well, I don't want to be fat. I don't want to be thin either, I just want to be average size. (participant, female, Wright et al. 2012, age NR)

More broadly, some participants were critical of narratives around body dissatisfaction in general, suggesting that a focus on weight reflected deeper issues with self-esteem.

[P1:] [...] if you have good self-esteem then you shouldn't be worried. But then if you –

[P2:] If you don't, if you're not really happy with yourself, then you'll be one of those people who will force themselves to lose weight. (participants, Willett 2008, 12-13y)

Several studies discussed the role of media content in shaping body images, both social and online media (Bell et al. 2021; Conway et al. 2025; Herbert et al. 2025; Kesten 2013; Paddock 2022; Willett 2008), and traditional media such as television and magazines (Evans et al. 2011; Herbert et al. 2025; Kesten 2013; Kumari 2014; Miller and Coverdale 2010; Willett 2008). Participants were frequently critical of the unrealistic body standards presented in media and social media, and the promotion of unhealthy eating behaviours and body dissatisfaction.

Especially on like videos on TikTok and stuff, people like put on filters.  
(participant, Herbert et al. 2025, 8-12y)

The internet isn't very trustworthy because you get lots of lies and choice, so you don't know what to believe or not? (participant, Herbert et al. 2025, 8-12y)

The magazines portray being fat as wrong and ugly. (participant, Miller and Coverdale 2010, 10-14y)

In one study, children reported that they were widely exposed to social media content promoting unrealistic body standards, and in some cases potentially dangerous or extreme weight loss, although some participants argued social media could encourage healthier behaviours and body positivity (Conway et al. 2025). This study also suggested that while participants recognised that social media content was unrealistic, they still felt pressure to conform to the body ideals represented (Conway et al. 2025). In two studies, several participants reported being exposed to online advertising for weight loss products (Herbert et al. 2025; Conway et al. 2025).

One participant pointed out that these standards were sometimes perpetuated even by material explicitly aiming to increase body confidence (Monaghan et al. 2022).

On the like "I love my body" page, it's always a thin person saying "oh, I love my body". And it's like you love your body because you're thin! (participant, Monaghan et al. 2022, 12-13y)

Participants in two studies suggested that unrealistic body images may have negative emotional impacts and demotivate people from attempting to lose weight (Bell et al. 2021; Kumari 2014).

Cos if you see in the media that someone is completely opposite to you and only people who are completely opposite to you in the media, then that's gonna have a downside, but that might cause them to comfort eat and become more obese.  
(participant, Kumari 2014, 11-13y)

One study focused more specifically on older children's interactions on social media and how these relate to appearance (Paddock 2022). This study found strong expectations about how one should refer to one's own weight or appearance, particularly for girls (discussed under 'sex' below), and a sense that interaction pervasively involved enforcement of appearance norms.

[Y]eah it's just [referring to comments such as "fatty" or eww"] what you say to be mean or joke about like you're fat, you're ugly cause it's bad to be that, like in society goes against what people are supposed to look like. (participant, Paddock 2022, 11y)

As mentioned under ‘health impacts’ above, participants in several studies mentioned media content on people with very high BMI (Fairbrother 2013; Hall 2012; Kumari 2014; Mansfield and Doutre 2011; Rich and Evans 2013). One participant reported searching on Google for information about overweight and immediately being presented with images of people with extreme obesity (Kumari 2014). One study also reported that participants talked about fictional characters with overweight and how this is associated with negative character traits such as “greed and spitefulness” (authors), citing the character Dudley in the Harry Potter series (Herbert et al. 2025).

Fred, for example, talks about Fat Tony ‘that comic book guy that can’t get out of his car’ (School A) and Elizabeth (School B) talks about the popular television show *The Fattest Man in Britain*. (authors/participant, Fairbrother 2013)

Both Nicole and Marc had watched a particular programme portraying obesity, and Marc commented: ‘Like those people who can’t get out of bed and have to have people to help wash them and stuff.’ (authors/participant, Kumari 2014)

### **3.5.2 Experiences of weight loss**

Participants in several studies reported trying to lose weight (Blood and Grogan 2011; Clark 2018; Fairbrother 2013; Kesten 2013). (Again, this was also reported by participants with overweight; this data is discussed below.) Some reported potentially disordered eating behaviours such as skipping meals or excessive exercising (Blood and Grogan 2011; Clark 2018; Windram-Geddes 2013a), or dieting based on false perceptions of being overweight (Fairbrother 2013). The authors of one study, focusing on older girls, argued that dieting with the goal of losing weight was seen as shameful to admit to, but health or fitness could provide a more acceptable pretext (Clark 2018).

I think when I was doing it before [running] I was more doing it for health, fitness and just to keep myself in shape really. Because even though I was quite young, in year four I started getting concerned about my weight and stuff. (participant, Clark 2018, Year 7)

Yes, she wants to be a model so she starves herself, her mam gives her a big packed lunch and she puts most of it in the bin, she’s like that – skinny – then she walks out of the dinner hall. (participant, Fielden et al. 2011, Year 6)

Several other participants referred to peers who had developed disordered eating patterns, or talked about this as a potential risk in general terms (Evans et al. 2011; Miller and Coverdale 2010; Willett 2008). Authors of one study suggested that participants saw others as more at risk than themselves (the ‘third person effect’) (Willett 2008).

Most teenagers when they go on a diet they starve themselves. (participant, Willett 2008, 12-13y)

By contrast, in one study, several participants reported expressly aiming to gain weight, including both boys and girls (Fairbrother 2013).

Yeah, I like to eat too much fat because I wanna get fatter! (participant, Fairbrother 2013, 9-10y)

### 3.5.3 Experiences of weight monitoring

Four studies had a main focus on views of weight monitoring programmes such as the NCMP (Blood and Grogan 2011; Herbert et al. 2025; Conway et al. 2025; Nnyanzi 2012). Three studies found that participants felt that being informed of one's weight status could be upsetting (Conway et al. 2025; Herbert et al. 2025; Nnyanzi 2012). There was also some anxiety around the sharing of results and the potential for bullying as a result (Blood and Grogan 2011; Conway et al. 2025; Nnyanzi 2012). Participants expressed a strong preference for privacy of weight measurement (Blood and Grogan 2011; Gillison et al. 2023; Herbert et al. 2025; Nnyanzi 2012), and several were anxious about being found to be the 'wrong' weight (Blood and Grogan 2011; Gillison et al. 2023; Nnyanzi 2012).

A few participants linked disordered eating to weight monitoring in the NCMP. One participant described a peer who appears to have developed an eating disorder as a result of weight monitoring (Monaghan et al. 2022). One study of the NCMP found excessive weight concern in some participants (Nnyanzi 2012), and one further study identified disordered eating as a hypothetical consequence of weight monitoring (Conway et al. 2025).

In year 6 there was a girl and she wasn't medium, which is only a tiny bit [...] And they labelled her in capital letters in red, 'obese', and she went anorexic or something in less than two weeks, and that was year 6. (participant, Monaghan et al. 2022, 12-13y)

Two studies of the NCMP found that children had concerns about height measurement as well as weight measurement (Blood and Grogan 2011; Nnyanzi 2012). One of these studies reported that several participants were concerned about being teased for being short (Blood and Grogan 2011).

Because if you go to second school and you're not the right size everybody will take the mick out of you. (participant, Blood and Grogan 2011, 10-11y)

## 3.6 Talk about weight and size

Participants reported hearing attitudes about weight expressed by a range of other people, including parents, other family members and teachers. (They also heard talk about weight from peers; this is largely covered in the section on social and emotional impacts of weight above.) Parents were frequently mentioned; participants in three studies reported that their parents (usually mothers) commented on their weight or encouraged them to lose weight (Clark 2018; Kesten 2013; Palmer 2015), and in one case encouraged them to gain weight (Fairbrother 2013). It is not always easy to tell from the data how children viewed these comments from parents; while they seem to have caused annoyance in some cases, in others they were seen in more neutral terms.

[...] I've gone a bit fat and then she [her mother] goes 'you should lose weight and everything and do PE.' (participant, Clark 2018, Year 8)

My mum knows that I like dressing up... but she says it's getting hard to get you like clothes and stuff that I like, and she says you're not going to be able to fit into nice clothes and stuff if you keep eating junk and stuff. (participant, Palmer 2015, 9-10y)

Participants with overweight or obesity often reported that their parents encouraged them to attend weight management interventions (Gemmell 2013; Kumari 2014; Lewis et al. 2014; Newson et al. 2024).

[...] my Mum saw that I wasn't like I was being, I looked much heavier than my other friends and said that you should [...] start getting a little active and start doing something and instead of putting this weight on and then it might not affect you when you go to high school or something, you don't get bullied. (participant, Gemmell 2013, 10y)

Two studies specifically elicited views about hypothetical scenarios of parents talking to children about their weight status, in the context of weight monitoring programmes (Gillison et al. 2023; Herbert et al. 2025). Participants suggested that children might feel more comfortable hearing about issues with weight from parents than from others (Gillison et al. 2023; Herbert et al. 2025), and would appreciate them being honest (Herbert et al. 2025), but also thought that some parents might not want to have conversations about weight for fear of upsetting the child (Herbert et al. 2025).

More generally, children picked up on parents' and family members' issues or dissatisfaction with their own weight (Fairbrother 2013; Fielden et al. 2011; Herbert et al. 2025; Newson et al. 2024). This ambient talk about weight, often in conjunction with family members' experiences of unsuccessful attempts at weight loss, seems to have been a pervasive feature of several participants' experience. These comments were not generally directed at children, and some participants felt that conversations about weight did not concern them, but they were aware that the topic was being discussed and absorbed the general tenor of the discourse.

Well my mum always says she's, she's not very fat but my mum says 'Oh my God, I'm so fat' and she says [...] 'Oh, I'm not going to eat chocolate ever again', things like that. (participant, Fairbrother 2013, 9-10y)

When I go to [stay with] my family [...] lots of them are overweight and they say like "Oh my gosh I wanna lose weight so bad like I don't feel like right about my body" and stuff like that. (participant, Herbert et al. 2025, 8-12y)

A few participants also reported hearing anti-fat attitudes expressed by parents, or identified stigmatising attitudes in media content on people with overweight.

My dad's friend is fat. He has a fat tummy ... That's not funny, my dad says, but they laugh. (participant, Charsley 2016, 4-7y)

Well, my parents [...] watch this programme which is about people who are overweight and [...] people do laugh at them, on telly, teenagers like might just watch them for a laugh and just say look at these people who are really fat and I just don't think it is really very nice for people to watch it on telly. (participant, Hall 2012, 9-11y)

Well, I think that personally, because for example, my mum and dad are doctors, but I don't think they're very good counsellors because they're so rude [...] sometimes when I see people who are slightly larger or curvy at the beach they're like, my dad says, 'hippos,' to them. (participant, Monaghan et al. 2022, 12-13y)

Participants in one study had experienced anti-fat bias from teachers (participant, Monaghan et al. 2022).

### **3.7 Experiences of children with overweight or obesity**

Five studies focused wholly or mainly on the experiences of children with overweight or obesity (Gemmell 2013; Hall 2012; Kumari 2014; Lewis et al. 2014; Newson et al. 2024). While we have drawn on data from these studies in other sections, there is value in considering them as a separate section of the synthesis, to ensure that the perspectives of this group are captured adequately.

Most of this data come from the older end of the age group (10-12 years), although some younger children are included, with one study including participants from the age of seven (Newson et al. 2024). All but one (Hall 2012) of these studies recruited participants from weight management programmes, so the data reflects the views of children who are already involved with interventions, and may not generalise to the whole population of children with overweight or obesity.

#### **3.7.1 Views of one's own body shape**

Children with overweight or obesity reported a wide range of views about their own body shape or weight status. Several participants felt that they were only slightly overweight, while others expressed strongly negative self-perceptions. One study of weight monitoring suggests that weight feedback may have been valued for resolving uncertainty about whether one is really overweight (Nnyanzi 2012).

[...] participant 3 acknowledged that he was “kind of overweight” however later in the interview stated that he felt “that I’m dead skinny”. Participant 6 also recognised that she was overweight but never referred to herself as overweight and instead termed herself “just a little bit over average”. (author, Gemmell 2013)

Participant 2 described her weight as “atrocious” and stated she felt like a “big blob of jelly”. This very strong use of language appeared to reflect the derogatory view she held of herself, which at times verged on disgust. (author, Gemmell 2013)

I’m only a little bit on the chart, not really [overweight], not a big deal. My dad says I don’t need to come here, so I probably am quite healthy. (participant, Newson et al. 2024, 10y)

Perceptions of overweight in general were similar to those seen in the general-population studies, with a pervasive connotation of unattractiveness and unhealthiness, and a personal desire for a slimmer body shape. In some cases these very negative perceptions were cited as a motivation for participating in weight management programmes (Gemmell 2013).

[...] some people that are less weight, like, are better looking because [...] when people are much slimmer it makes them look better looking instead of like having to you know be really fat and it makes you feel [...] unloved. (participant, Gemmell 2013, 10y)

[B]eing overweight, is lazy, not the best looking, not fit. (participant, Newson et al. 2024, 9y)

However, for this group, these perceptions seem to have been strongly linked to others' reactions, with one study author reporting that participants' views of their own bodies were inseparable from their self-consciousness about the presence of others (Kumari 2014) – this theme is explored further below. Again, it should be borne in mind that these participants were already enrolled in interventions, implying a background history of awareness and discourse about weight which was probably largely absent in studies of children without overweight. This study (Kumari 2014) reported that most participants (eight of 11) had already attempted to lose weight, starting at young ages (under 11 years).

A number of participants indicated self-consciousness about their bodies, whether that be embarrassment about having to be weighed and to discuss this with other people, or having to exercise in front of others. (authors, Kumari 2014, 11-13y)

These narratives also include accounts of responsibility for weight status. Some participants argued that they were not mainly responsible for having overweight (Gemmell 2013; Hall 2012). Several reported loss of control around eating or emotional eating behaviour, in some cases reinforcing narratives of self-blame (Gemmell 2013) or fatalism about losing weight (Kumari 2014).

[...] there were things going through my mind telling me to stop, I was telling myself to stop but I [...] lost my mind and kept eating fatty foods. (participant, Gemmell 2013, 12y)

If someone's putting you down it'll make you just wanna eat more because you'll start thinking ... you'll just start getting upset ... or ... people putting you down could just make you think 'oh, can I be bothered to do this 'cos what's gonna happen, I'm not gonna be able to lose the fat.' (participant, Kumari 2014, 11-13y)

### **3.7.2 Attitudes of others**

Many participants reported weight-related bullying, which was sometimes serious and long-lasting. Several felt that bullying was an inevitable feature of life with overweight, and the data gives a sense that this is a pervasive feature of social interactions for this group.

It makes me upset, I sometimes go home and just think about it in my bedroom but other than that it's alright. I'm used to people calling me that but I don't like it. (participant, Gemmell 2013, 11y)

I was bullied at one point, which I think maybe, almost every person goes to a school may have experienced at one point. It's pretty much ... you can't avoid it forever. You'll get bullied at one point. (participant, Kumari 2014, 11-13y)

They make fat jokes about ya, and things like when you do PE and you're running, and say you have 'moobs' or something, they start on you and then they'll start saying you need to get a bra and stuff like that ... (participant, Kumari 2014, 11-13y)

In many cases bullying had substantially impacted on their mental health and wellbeing. Social relationships were also affected, with some participants reporting impaired confidence and a desire to avoid social situations because of bullying. One participant expressed a reluctance to report weight-based bullying to parents or teachers (Hall 2012).

It just makes me feel sad and not wanting to, like, stay anymore and just want to like go, go away. Like, it sometimes it makes me just wanna not want to be living anymore. (participant, Gemmell 2013, 10y)

I've tried to rebuild my confidence and I can because of things I've done like, people praise me and things so it gives you more confidence but then, they come back and knock you down, but then you get back up. (participant, Kumari 2014, 11-13y)

I get angry, no, not sure of the word when I don't know what to do, I get a bit cross, so I sometimes stay away from the others, and sometimes I try not to think about it and join in. (participant, Newson et al. 2024, 12y)

They were, in some cases, pessimistic about addressing bullying, even if they were successful in losing weight.

My nickname is 'Chubbs'; it means fatty, right? Thing is, even when I get thin, my nickname might still be 'Fatty Chubb Chubbs', and then I'm old, right, like thirty-something, maybe I will be still be called it, and if not, I will think back to when I was. (participant, Newson et al. 2024, 12y)

One study focused specifically on experiences of weight-based unkindness (Hall 2012). This study also found that name-calling and bullying were widespread. However, how these were experienced varied, with some instances perceived as more serious than others. This could depend on the perceived intention behind the behaviour, or whether it was sustained over time rather than just a one-off episode.

Well, that has happened to me once but I don't know, they did keep saying sorry, sorry, sorry, afterwards, so it's because they realise they had been mean. [...] They did look quite tired and I think before they hadn't had a good day I don't think and they hadn't thought ... (participant, Hall 2012, Year 5)

[...] if it was me and someone was teasing me once or twice and it was my friends and, like, one little joke and I wouldn't really like mind because I would know that they were just joking, but if it carried on then I would get quite angry. (participant, Hall 2012, Year 5)

Some participants also reported negative comments by parents, and being upset by this.

Well, I, my Mum saw that I wasn't like I was being, I looked much heavier than my other friends and said that you should, it's better that you go and start getting a like active and start doing something and instead of putting this weight on and then it might not affect you when you go to high school or something, you don't get bullied. (participant, Gemmell 2013, 10y)

The author of one study suggested that some participants suffered from pervasive low self-esteem as a result of internalising these negative messages from peers or others



(Gemmell 2013). As already noted, there is a sense in the data that children's self-perceptions cannot be separated from the responses of others.

Participants reported that experiencing bullying could lead to emotional eating and, as discussed further in the following subsection, be a barrier to participating in activities, leading to a self-reinforcing cycle.

Probably people teasing and putting them down, so they comfortably eating things, like, that food is a friend, they just eat the food so they get bigger and bigger. (participant, Kumari 2014, 11-13y)

Conversely, support from parents and peers was often felt to be an important motivator for persisting with behaviour change. Some participants also felt that involvement with weight management interventions had increased their social confidence with peers (Lewis et al. 2014).

Well, we both [participant and mother] wanted to lose a bit of weight so, so we thought we might start it. (participant, Gemmell 2013, 8y)

[S]he'll [best friend] try and encourage me to go on jogs with her and stuff [...] (participant, Kumari 2014, 11-13y)

A few participants did report more accepting attitudes in general.

Sometimes I'm a little worried about it because I might get teased, but then again I'm alright about it cos people at my school they're quite nice so mm they're not judgemental on anybody, so I'm alright with it. (participant, Gemmell 2013, 11y)

[...] what my friend says no matter what size you are no matter how big you are you're still a friend you're still here. (participant, Gemmell 2013, 11y)

### **3.7.3 Participation in activities**

Some participants with overweight described limitations on participating in activity.

I think it makes you tired in sports, which means you can't join in as much as you probably want to. (participant, Kumari 2014, 11-13y)

I'm not very fit; I don't do very good at PE [...] (participant, Newson et al. 2024, 8y)

To some extent, the perceptions of this group align with the data from the general-population studies (see the 'Physical abilities' section above). However, again, participants with overweight more strongly emphasised the social aspect of these limitations in terms of others' reactions, rather than any lack of inherent physical capacity, and some made clear that they were physically active (Gemmell 2013). Two studies reported weight-related bullying specifically in the context of PE lessons (Clark 2018; Kumari 2014), and the sense of how one appears to others seems to have been a main determinant in attitudes to activity (Newson et al. 2024).

Okey-dokey, so yes, I'm happy to do the games and play sports, you know, not really sports but the exercises while I'm at [programme], but defo not when I'm at school and no way would I do an afterschool club, I would look hashtag horrendous. (participant, Newson et al. 2024, 10y)

I definitely won't be going to any other clubs after school. I just will never fit in with them sorts. (participant, Newson et al. 2024, 10y)

Participants in one study of experiences of weight management interventions suggested that the sense of becoming better at activities can be a motivator to continue (Lewis et al. 2014).

It's aiming to teach me that I'm stronger and building my sports confidence ... The first time I came I wasn't confident, but the more times I came the more confident I got. (participant, Lewis et al. 2014, 8y)

### **3.8 Differences between groups**

Relatively little data was located directly addressing differences between children by sex, ethnicity or SES. Where differences were identified, the data was often bound up with study authors' theoretically informed interpretations in a way which makes synthesis of the data more challenging.

#### **3.8.1 Gender**

Seven studies focused mainly or wholly on girls' views (Clark 2018; Kesten 2013; Miller and Coverdale 2010; Monaghan et al. 2022; Rich and Evans 2013; Willett 2008; Windram-Geddes 2013a); no studies focused primarily on boys. Two studies of younger children reported substantially lower participation rates for girls rather than boys, due to parents withholding consent, and the study authors suggested this may be because the sensitivity of the topic is perceived to be more of an issue for them (Baxter 2013; Dearing 2018). This information is not available for most other studies, but, among studies which sampled both boys and girls, proportions seem close to equal on average, albeit with some variation (Table 1). However, the possibility of differential recruitment bias should be borne in mind in interpreting data on gender.<sup>1</sup>

As already mentioned, some data indicates that girls and boys have different body ideals, with boys preferring a more muscular body shape and girls a slimmer one.

[I] think it's more skinny for girls, but it's like bulky [for boys] ... [boys want] more muscle. (participant, male, Cowley 2017, 12-13y)

Nonetheless, negative views of fatness were expressed widely by both boys and girls. The findings on the 'thin but not too thin' ideal mentioned above ('Body ideals and desires for weight') is also largely based on data from older girls, with one study finding that this perception was more widespread among older girls within the study sample (Fielden et al. 2011). (It should be noted that studies which specifically asked about body image mostly focused on older girls. Also, some data suggests that this group were aware of discourse around problems with body image and disordered eating, which may influence their reported perceptions.)

The question of whether girls are generally more concerned about weight than boys was rarely addressed directly in the studies, although there is a pervasive assumption that they are (reflected in the lack of studies focusing on boys' views). Boys in two

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<sup>1</sup> We use the term 'gender' rather than 'sex' as this is most commonly used by primary study authors.

studies suggested that girls cared more about weight (or appearance in general) because they wanted to look like models or celebrities (Fielden et al. 2011; Paddock 2022).

[P1:] Girls care more about their appearance because they all want to look like famous celebrities and have certain hair colour certain body weight.

[P2:] I think girls deffo care more about their appearance than boys.

[P3:] Boys don't really care as much. (participants, male, Paddock 2022, 11-12y)

One study addressed gender differences in responses to weight-related teasing, with some participants (whose gender is not reported) feeling that boys were as or more likely to be emotionally affected, but would try to hide the fact (Bromfield 2010). Some participants in this study suggested that the norm against fatness might actually be stronger for boys, with one suggesting that girls with higher body weight might sometimes be seen as attractive, but that this was not true of boys.

Boys feel bad but are just not showing it. (participant, Bromfield 2010, 9-11y)

But I think the boys must be getting get more teased than the girls. (participant, Bromfield 2010, 9-11y)

No. I think if you are obese boy the girls 'nah, I don't like you'. But some obese girls? Some guys might like them. (participant, Bromfield 2010, 9-11y)

One study focusing on social media found gender differences in how children talked about their own body size (and appearance in general), with girls more likely to make self-deprecating comments and boys using a more humorous tone (Paddock 2022). Along with the data above, this may suggest a gender norm where low body confidence is more normalised for girls, but boys are expected to treat comments about weight as joking or banter.

[male P1:] Boys are a lot more laugh-y about it the girls are more serious, the boys joke about feeling fat but girls are like "no, I'm fat, you're skinny"

[female P2:] Yeah, girls diss themselves all the time

[male P3:] Yeah, I feel like I know that boys and girls all have self-image issues but girls talk about it more, boys just have a laugh. (participants, Paddock 2022, 11-12y)

Another study focusing on girls found that there were strong gender norms for girls which stigmatised both overweight and weight control behaviours, creating a no-win situation which served to perpetuate gender inequality (Clark 2018). However, the evidence underlying this analysis is unclear.

Accusations that girls were either 'fat' or 'anorexic' were coupled with rampant yet normalised sexual harassment and this contributed to the girls' vigilant caution around the way both their bodies and their eating habits were viewed by others. (authors, Clark 2018)

### **3.8.2 Ethnicity**

Few studies addressed differences between ethnic groups; several studies did report that either the study sample or the sampling frame (school or community) was more than 50% Black or minority ethnic (Blood and Grogan 2011; Goldthorpe et al. 2019; Kumari 2014; Conway et al. 2025; Murphy et al. 2021; Willett 2008), but there were

no obvious patterns in the data from these studies as against others. One Muslim female participant in one study reported not wearing a headscarf because she felt it made her look fat (Palmer 2015).

[P1:] I look fat when I wear a scarf! [...] That's why I don't wear it in school I look fat.

[P2:] They're not gonna make a mickey out of you.

[P1:] They will. (participant, Palmer 2015, 9-10y)

### **3.8.3 Socio-economic status**

Again, little data directly addresses differences by socio-economic status. As already described under 'Body ideals', one study linked one male participant's desire to gain weight to working-class gender norms around being 'big' (Evans et al. 2011). Another study which focused on girls reported that concern about weight was more marked in lower-SES groups (Kesten 2013).

## 4 DISCUSSION

### 4.1 Summary of findings

Children express a range of negative views about overweight, seeing it as harmful to health, as a limitation on activity and as socially stigmatised. However, causal narratives about the impacts of weight seem less important than the overall sense of overweight as bad and undesirable. Health is strongly linked to lower body weight, and often assumed to be directly visible as such. Studies which elicit preferences generally find that participants prefer a body type which is slim but not excessively thin, although a few boys report aiming for an extremely muscular shape. A few participants report positive perceptions of larger body sizes as linked to maturity or strength.

Bullying and teasing are widely reported by children with overweight. In many cases this has serious social and emotional impacts, and can be a serious barrier to participating in activities. Children without overweight largely agree that weight-based bullying is a serious problem. This perception contributes to the fear of becoming overweight, and is already widespread at young ages.

Children's narratives about the causes of over- or underweight focus on diet and physical activity, and the idea of an energy balance between the two is widely understood. Views about physical activity often shade into a sense that lower body weight is correlated with fitness (and that both are clearly visible).

There may be differences in gender norms and preferred body shapes between girls and boys, although the data on this is not very clear. Older girls may be more aware of body image issues and more likely to consciously reject extreme body ideals. Both boys and girls report concern about weight and weight-based bullying. There is limited data on any other differences between groups of children.

### 4.2 Implications

The findings suggest three types of view which can contribute to negative views of overweight. First, there is a widespread sense that overweight is unhealthy. Second, there is a perception that overweight is a limitation on what one can do physically, and perhaps also socially. Third, there is a concern that overweight will lead to bullying and social exclusion, which is largely confirmed by data from children with overweight.

#### 4.2.1 Health

A clear implication of the findings is that children's views of weight and body size are closely bound up with narratives about health. In some cases this link is supported by awareness of specific health consequences of overweight, but this is not generally the case.<sup>2</sup> Rather, thinness, health, fitness and attractiveness form a constellation of imagery and affective responses, alongside cognitive understandings of the links,

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<sup>2</sup> Our coding frame was initially structured around the categories 'impacts of weight' and 'causes of weight', i.e. in terms of linear causal narratives, but the analysis shows that this is a very partial representation of the data.

which shapes how children interpret messages about health. That is, the idea of being 'healthy' draws with it an association with lower (but not extremely low) body weight, with physical activity, and with 'looking good'. When children learn about health outcomes, even in contexts where these connotations are not explicitly present, the knowledge they gain is likely to be fitted into this prior framework of understanding.

This framework appears to form an important driver of stigmatisation of overweight. Participants were much more likely to cite health impacts than appearance as a reason for negative perceptions of overweight. Where appearance concerns were cited, it was often alongside health or social impacts and rarely as purely aesthetic preferences. This might reflect a degree of social desirability bias in older age groups, with health concerns acting as a pretext for enforcing appearance norms (Clark 2018). Arguably, though, the fact that this pretext is available underlines that the view that overweight is 'unhealthy' is a major factor in negative views more generally.

Young children (4-6 years) already believe that overweight has potentially severe health consequences, before they have any clear idea why ("he might explode" (participant, Baxter 2013)). Views about weight also tend to draw in broader messages, for example recommendations about eating fruit and vegetables, or the identification of certain foods as 'junk'. This suggests that weight can become a focal point for understandings of health in general.

It should be recognised that the data is not always clear on this point, and in some studies it is debatable how far the link between weight and health is being made by participants rather than by study authors. Some participants also seek to separate weight and health, and argue that weight in itself is of limited importance, or draw attention to the health impacts of underweight. However, this is a relatively minor theme, and may sometimes be driven by awareness of discourse about positive body image and disordered eating.

The importance of this theme is not a new finding, and ideas about health are identified as central by several study authors, who note pervasive associations between weight, health and/or attractiveness. Some authors seek to critically interrogate these links, observing that they are not securely grounded in evidence about the health impacts of weight. What our analysis brings out more clearly is that the perception of overweight as 'unhealthy', in a broad sense which is rarely explicitly justified, may often be an important factor in negative perceptions more generally.

These findings raise the concern that public health messaging, and the broader culture (e.g. advertising and social media) may be contributing to weight stigma in a broad and diffuse way which is difficult to mitigate. The role of communication about weight specifically may only be a small part of this, if messages about health are being implicitly linked to body weight in other contexts. Discourse about positive body image does have some impact on older children, as noted, but this must be seen against a background of a culture which implicitly equates health with thinness, and which shapes views about health from an early age.

There is a wider body of data on children's concepts of health, and their views of food and physical activity, both in the included studies and in other research, which we did not extract for this review. Reviews of these studies could help to understand the conceptual frameworks within which children think about weight.

#### 4.2.2 Physical ability and social agency

Another set of themes, linked to but distinct from the idea of health, centres on the idea of overweight as physically limiting. Reduced ability to be active, and participate in physical activity and sport, is frequently cited as a reason for negative perceptions of overweight. As with the themes around health, this view largely does not seem to be based on direct experience, although some children do talk about peers or adults who experience limitations. Again, these perceptions are widespread among young children, suggesting that they precede detailed causal understandings of the impacts of weight. Where these causal narratives are described by children in the middle and older age groups, they often seem secondary to a broader association between overweight and physical inactivity in which the two directions of causality (i.e. limited activity as a cause, and as a consequence, of weight) are not clearly distinguished.

The sense of specifically physical limitations seems to inform a broader sense of restricted participation in social life. To some extent, particularly for younger children, this may be because physical play has a central role in social interaction: the perception of physical limitations is an important driver of social stigma around overweight in this age group. Beyond this, there is a sense that overweight is a barrier to having a 'normal' life and friendships – not just in childhood but into adulthood as well, as with the perception that overweight is a barrier to employment. These views go beyond a narrow interpretation of physical ability and suggest that a broader sense of agency is in play, although they may also relate to the desire to feel included and not to 'stick out', a theme found in data from older young people (Rees et al. 2014).

The prominence of these themes also suggests that we should be cautious about framing children's views of weight in terms of concerns about body image. While views about physical abilities link to the themes around health and attractiveness discussed above, via the general concept of fitness, they do not seem closely bound up with ideas about appearance. The self-directed sense of one's ability to act in the world may be as important as the other-directed sense of how one looks, or one's internalised expectations about others' perceptions. While these perceptions generally drive negative valuations of overweight, exceptions do emerge. As suggested in the findings ('Other aspects of body size'), the theme of agency can sometimes (particularly for boys) be linked to more positive views of larger body sizes as correlated with strength, power or autonomy.

These views mainly come from children without overweight, which contrast markedly with the views of children with overweight. While the latter occasionally describe limitations in physical ability, this appears to be at most a minor concern, and the link between this and the broader concept of social restriction is largely absent. Rather, concerns about physical activities are focused on others' perceptions and reactions, and on the likelihood that activity will become an occasion for weight-based bullying. The contrast draws out the sense that, for children without overweight, negative perceptions of weight are linked to views about what one can do as much as about how one appears, and to a sense of impaired agency which is located within the individual. Children with overweight implicitly reject this and do not experience their agency as inherently restricted, but only compromised by the negative views of others, even if these views are deeply internalised in some cases.

On a more practical level, this data is also a concern insofar as it suggests that experiences of (and the fear of) weight-based teasing and bullying, as well as its broader impacts on wellbeing, may be a substantial barrier for children with overweight participating in physical activity. This aligns with data on weight management interventions showing that a supportive and safe environment is an important factor (Sutcliffe et al. 2016). Several participants identified a self-reinforcing cycle of overweight, bullying and reduced physical activity. This issue is well-documented in research on older young people (Skogen et al. 2022), and the findings of this review indicate it may often start in childhood.

The theme of agency and restricted activity, unlike ideas about health, is not generally thematised in the primary study analyses, but our analysis suggests that it may also be an important driver of perceptions of weight across the age range covered in this review. This theme is also striking because it is not obvious where children's ideas are coming from. Again, this contrasts with the health theme: although little data directly addresses the point, it is intuitively easy to see how children learn to associate lower body weight with health (and with other positive traits such as attractiveness and popularity). This link is taken for granted across much of the culture, constantly reiterated by media content and advertising at the level of pure imagery as well as verbal content, and reinforced by pervasive talk about weight in families. By contrast, it is harder to see where children learn the link between weight and agency. Media representations of people with extreme obesity which seriously limits mobility, which are mentioned in several studies and appear to make a marked impact on some children, may play a role in some cases, but this is unlikely to be the main driver.

#### **4.2.3 Bullying and weight stigma**

On the prevalence of weight-related bullying and teasing, children with and without overweight are largely in accord. The former report extensive experiences of bullying, while the latter largely assume that it will occur and cite it as a reason to avoid overweight, and these perceptions appear to be widespread in early childhood. The fear of bullying and social exclusion can be a major part of negative perceptions of overweight, and is often well grounded in reality.

It is difficult to pin down what drives the prevalence of weight-related bullying, particularly in younger children. The other data explored above provides some possible reasons, but no conclusive explanations. As suggested above, while some study authors explain it in terms of perceptions about unattractiveness or quasi-moral stereotypes about character ('lazy', 'greedy'), there is limited data providing direct support for this narrative, and in some cases the connection appears to be made more by researchers than participants. The broader culture – the messages children receive from their families or the media, including a widely shared awareness of adult 'fat talk' – must also play some role, although again, these connections are generally not explicit in the data. Some data suggests that losing weight (or not having overweight at all) may not lessen bullying, and one study author suggests that shaming for weight control behaviours may be part of the same overall dynamic (Clark 2018). Some findings also indicate that weight stigma may somehow transfer to friends of children with overweight.

These findings make it challenging to know how weight stigma might be addressed in children. The data does indicate that many children are aware, in one form or another,



that the topic of body weight is a sensitive one. On one level, this underlines the importance of the findings around bullying, since social desirability bias might be expected to lead participants to minimise the topic. It may also suggest there is scope to address weight-related bullying directly in this age group, although this will be extremely challenging, and explicitly naming weight stigma as an issue may risk exacerbating the problem. (Existing anti-bullying policies in secondary schools in the UK generally do not explicitly address weight-related bullying (Hughes et al. 2025); it is unclear whether this is also true for primary schools.)

#### **4.2.4 Implications for weight monitoring**

The findings of this review are broadly consistent with those of our previous review focusing on weight monitoring programmes (Lorenc et al. 2024). Like this one, that review found concern about weight-related bullying and disordered eating, particularly for children with overweight or obesity (although actual experiences of bullying were a less prominent theme).

That review also found that participating in weight monitoring programmes did not generally have negative psychosocial impacts. This may be unexpected, given that the current review found widespread negative perceptions of overweight. One reason may be that the complexity of children's views enables a wide repertoire of strategies of self-positioning with respect to discourses about weight. The link between overweight and physical or social limitations, for example, contributes to weight stigma, but may mean that children who do not feel that they suffer from such limitations are less likely to view their weight as relevant.

If so, then 'objective' assessment of weight or BMI may cut across these self-positionings in unexpected ways. It is not just that children with overweight and their parents are often unaware of the fact, but that the assessment of weight (and information on the health impacts of overweight) brings with it a network of associations which may conflict with children's sense of their place in the world more broadly. Because weight forms a focus for a broad range of other concerns – and often an emotionally charged focus – how children respond to information about weight may be difficult to predict. As mentioned in the findings, it is a limitation of our data that studies of children with overweight or obesity almost all recruited participants from weight management programmes (and that other studies rarely report data from children with overweight). This makes it hard to understand the views of children with overweight without a history of participating in interventions, who are arguably the key group with respect to this question.

That said, the complexity of children's views about weight and their embeddedness in broader structures of perception also suggest that the impact of weight monitoring as a discrete intervention may be limited. As noted above, the importance of the weight-health link in shaping perceptions of weight gives some support to concerns that weight stigma may be inadvertently reinforced by public health messaging (about obesity, but also more generally). It is also true that these concerns have largely focused on constructs of body image derived from the experiences of young people and adults which, we have argued, may not fully capture children's ideas about weight. There is a need to understand more clearly how children understand and respond to messages about health, and how these messages interact with the broader modes of understanding explored in this review. In particular, how weight feedback to parents

may impact on children is not well understood, and our findings ('Talk about weight and size' above) suggest that this should be set in the context of children's awareness of parental concerns about weight more generally.

There is also a question about how experiences evolve over the lifecourse, from childhood into adolescence and early adulthood, especially with reference to the emergence of disordered eating or excessive concerns about weight. Fully addressing this question would require going beyond the data in this review (both because we only included children, and because complex questions of the causation of disorders cannot be addressed by qualitative data alone). We can say that negative views of weight, fear of fatness, and an understanding of 'bad' foods as drivers of overweight are already unmistakably present among young children. However, there seem to be some shifts towards the upper end of our age range. Concern about appearance in the narrow sense may become more salient for some children, along with explicit body ideals and goals for weight. At the same time, stronger gender norms, which are much less apparent in younger and middle age groups, start to emerge. There is sometimes a more distanced and critical attitude to messages about weight and health (including, in a few cases, those coming from weight monitoring programmes), to representations of body ideals in the broader culture, and to the peer norms underlying weight stigma and bullying.

There are also some signs that these later understandings build on the ideas formed at younger ages. Concerns about fitness in older groups are arguably set within the broader idea of agency which is formed early on, and views about the causes and health impacts of weight may become more specific and well-informed without fundamentally changing the associative links which make them plausible and compelling. If so, then these ideas – that health can be directly seen in the form of body shape, or that people with overweight are restricted in what they can do – may play some role in the development of problems with eating behaviour or body image in adolescence. However, these implications are very speculative, and would need more detailed attention to the extensive literature on the latter to substantiate them.

Another, also very tentative, implication might be that the emphasis in some discussion of eating disorders on media representations of extremely thin (or extremely muscular) body shapes is misplaced. Where these are cited in our data it is almost always critically (although this is not to say they have no influence), and body dissatisfaction may be driven at least as much by goals framed in terms of health or fitness, and by the 'thin but not too thin' ideal. The pervasiveness of imagery which equates health, moderate thinness and attractiveness is arguably a more consequential aspect of the cultural environment than representations of extreme underweight. However, it has received less attention in the discourse, perhaps because the body shapes represented are not highly unrealistic or dangerous. While we found limited data on social media in this age group, this may also have an influence, and some children report exposure to problematic content online. However, the data suggests that social media should be seen as a domain of peer interaction, and the interpersonal enforcement of appearance norms, not purely as a source of imagery.

#### **4.2.5 Comparison with Rees et al. (2009)**

While, as noted above, this review was not a formal update of the 2009 review, it is sufficiently close to allow comparison. There are some clear continuities in the

findings. In particular, the prevalence of bullying and teasing, and generally negative views of overweight, are a strong theme in the 2009 review, consistent with this review. The views about causes of weight are also very similar. The findings on preferred body sizes are also much the same, with a preference for thin but not too thin bodies among girls, and more muscular shapes among boys, suggesting that there has not been major change in body size ideals in recent years.

The main divergence between the two reviews is in views of health. The 2009 review found that health consequences were of very limited importance in children's views of weight, and does not report data on broader links between weight and health. This contrasts markedly with our analysis, which found that views about health are of central importance; as noted, the authors of several studies explicitly emphasise this theme. This may indicate that messages about weight and health have become more widely understood or more salient in the intervening period.

## **4.3 Strengths and limitations**

### **4.3.1 Strengths and limitations of the review**

This review used fully systematic methods, with highly sensitive searches and screening of records against pre-specified inclusion criteria to minimise bias. As with any review of qualitative evidence, the drawing of topic boundaries is somewhat arbitrary at the margins. Studies about views of diet or physical activity were particularly challenging; we included several of these where they presented data on body weight, but in some cases this data was limited. Also, as already suggested, data on children's broader views of health was largely not covered and could form an important context for the views discussed here; engaging with this data could help to illuminate some of the links suggested in the review. We focused on studies from the UK to ensure relevance, but there is similar data available from other countries. As with any review, we were reliant on the data reported in the primary studies, and the availability of data may be shaped by study authors' particular concerns and foci.

The review focused on children aged from 4 to 12, and we did not extract data from young people over 12. This was partly due to the policy context of the work (relating to the NCMP, which includes children in Reception and Year 6), and more broadly a view that there is value in focusing attention on children and excluding the larger body of data on older young people (13 years and older). We would suggest that the findings bear this out, in that the findings do diverge from what is known about young people's and adults' views in potentially illuminating ways (and, of course, there are substantial differences between younger and older children within the range covered).

### **4.3.2 Strengths and limitations of the primary studies**

The quality of the primary studies is fairly high overall. As shown in the GRADE-Cerqual assessment (Appendix C), there is relatively high confidence on the core findings around impacts of and influences on body weight. There are some limitations in the findings on appearance, body ideals and experiences of weight loss.

The studies represent a range of methodological approaches; this is partly due to the need for different approaches for different age groups, so the study methods are correlated with age in ways which may influence the interpretation of results. The studies of the youngest children form a distinct and interrelated group (Baxter 2013;

Charsley 2016; Dearing 2018; Harrold 2017). All of these studies were conducted as dissertations within the same department at the University of Leeds. They use similar methodologies: researchers read illustrated stories featuring characters of different weights, and collected data on views of the characters using specific prompts, to bring out differences in perceptions either of overweight and non-overweight characters (Charsley 2016; Dearing 2018; Harrold 2017) or of change in body weight over time (Baxter 2013). Thus, these methods tend to elicit general perceptions, based on the fictional characters, rather than specific real-life experiences. Also, the analyses in all these studies are partly quantitative and this data was not extracted for this review. By contrast, studies of older children often, although not universally, used more open-ended methods with less directive prompts. Studies of 11- and 12-year-olds sometimes used ethnographic or participant-observation methods (Clark 2018; Willett 2008) which would be more challenging to apply with younger age groups. These methodological differences make it challenging to directly compare data across age groups, despite some striking continuities in the themes.

One area in which the studies were weak overall is sampling and recruitment. This raises questions about recruitment bias, particularly due to the sensitivity of the topic. Response rates appear to often be low and were frequently not reported. As noted in the findings, the authors of two studies raise a concern about differential response rates by sex as a result of parents withholding consent at higher rates for girls (Baxter 2013; Dearing 2018), and this may be true in other studies. Most studies were also limited in the relation of researcher to participant; several studies mentioned that the researchers' own body weight, sex and/or ethnicity may influence the expression of participants' views.

A related concern is that children with overweight might be under-sampled in those studies not specifically focusing on them, due to either children or parents being less likely to consent. The weight status of participants was often not recorded in the studies (sometimes as an explicit choice by study authors, for ethical reasons and/or to avoid bias in data collection), so it is hard to know how serious a limitation this actually is. However, there is a reasonable body of data on children with overweight, although little data from younger children in this group or, as noted, on children who have not participated in weight management interventions.

The lack of data investigating differences between groups of children, particularly by ethnicity and socio-economic status, is a limitation. The study samples appear reasonably diverse overall with respect to both these dimensions (albeit with a lack of detailed information). However, the analyses generally do not investigate differences in depth, or report sufficient detail on individual participants to allow them to be brought out in the synthesis.

## **4.4 Conclusion**

Children's views of weight and body size are complex. There is a clearly predominant, although not unanimous, negative perception of overweight. Bullying and negative reactions are a pervasive feature of the experiences of children with overweight. Overweight is commonly linked to being 'unhealthy', in ways which suggest that more attention is needed to how children receive and understand messages about obesity and health. While children's views evolve and become more sophisticated over the life course, many of these themes can already be seen in data from young children,

suggesting that they may form a cognitive and affective structure which shapes perceptions from an early age.

## 5 REFERENCES

- Ayiku, Lynda, Paul Levay, Tom Hudson, et al. 2017. 'The Medline UK Filter: Development and Validation of a Geographic Search Filter to Retrieve Research about the UK from OVID Medline'. *Health Information & Libraries Journal* 34 (3): 200–216. <https://doi.org/10.1111/hir.12187>.
- Baxter, Sarah. 2013. 'Young Children's Understanding of Weight Change'. D. Clin. Psychol., University of Leeds.
- Baxter, Sarah, S Collins, and A Hill. 2016. "'Thin People ... They're Healthy": Young Children's Understanding of Body Weight Change.' *Pediatric Obesity* (England) 11 (5): 418–24. <https://doi.org/10.1111/ijpo.12081>.
- Bell, B T, N Deighton-Smith, and M Hurst. 2021. "'When You Think of Exercising, You Don't Really Want to Think of Puking, Tears, and Pain": Young Adolescents' Understanding of Fitness and #fitspiration'. *Journal of Health Psychology* (United Kingdom) 26 (7): 1046–60. <https://doi.org/10.1177/1359105319869798>.
- Blood, Emma, and Sarah Grogan. 2011. 'Children's Perspectives on Height and Weight Screenings'. *British Journal of School Nursing* 6 (10): 482–88. <https://doi.org/10.12968/bjsn.2011.6.10.482>.
- Bromfield, Pauline. 2010. "'Healthy Schools" and Childhood Obesity : Provision and Perspectives within an Extended Services Cluster on Psychosocial Outcomes for Children and Young People Who Are Overweight or Obese'. D. Ed. Psy., University of Birmingham.
- Charsley, Joanna. 2016. 'Young Children's Perceptions of Peer Obesity in the Context of Other Visible Differences'. D. Clin. Psychol., University of Leeds.
- Charsley, Joanna, S Collins, and A Hill. 2018. 'The Bigger Picture: Young Children's Perception of Fatness in the Context of Other Physical Differences.' *Pediatric Obesity* (England) 13 (9): 558–66. <https://doi.org/10.1111/ijpo.12280>.
- Cheng, Sixiang, Atipatsa Chiwanda Kaminga, Qianwen Liu, et al. 2022. 'Association between Weight Status and Bullying Experiences among Children and Adolescents in Schools: An Updated Meta-Analysis'. *Child Abuse & Neglect* 134 (December): 105833. <https://doi.org/10.1016/j.chiabu.2022.105833>.
- Clark, Sheryl. 2018. 'Fitness, Fatness and Healthism Discourse: Girls Constructing 'healthy' Identities in School'. *Gender and Education* 30 (4): 477–93. <https://doi.org/10.1080/09540253.2016.1216953>.
- Clark, Sheryl. 2020. 'Responsible Girlhood and "Healthy" Anxieties in Britain: Girls' Bodily Learning in School Sport'. In *Discourses of Anxiety about Childhood and Youth Across Cultures*, edited by L Tsaliki and Despina Chronaki. Palgrave Macmillan.
- Conway, Rana E, Tiffany Denning, Ivonne P M Derks, et al. 2025. 'Children's and Adolescents' Responses to Public Health Obesity Policies and Weight Monitoring in England: A Qualitative Study'. *Submitted*.
- Cowley, Joseph. 2017. 'Mind the Gap : Exploring the Decline in Physical Activity at the Transition Stage of Adolescence in Glasgow Youth'. Professional Doctorate, University of Central Lancashire.

De Pian, L. 2012. “‘Emboldened Bodies’: Social Class, School Health Policy and Obesity Discourse’. *Discourse: Studies in the Cultural Politics of Education* 33 (5): 655–72. <https://doi.org/10.1080/01596306.2012.696499>.

Dearing, Gemma. 2018. ‘Young Children’s pro-Social Behavioural Intentions towards Obese Peers’. D. Clin. Psychol., University of Leeds.

Evans, John, Laura De Pian, Emma Rich, and Brian Davies. 2011. ‘Health Imperatives, Policy and the Corporeal Device: Schools, Subjectivity and Children’s Health’. *Policy Futures in Education* 9 (3): 328–40. <https://doi.org/10.2304/pfie.2011.9.3.328>.

Fairbrother, Hannah. 2013. ‘Food and Health in Everyday Life: A Qualitative Study with Children from Contrasting Backgrounds’. PhD, University of Sheffield.

Farrell, Emma, Eva Hollmann, Carel W. le Roux, Marta Bustillo, Joe Nadglowski, and Deirdre McGillicuddy. 2021. ‘The Lived Experience of Patients with Obesity: A Systematic Review and Qualitative Synthesis’. *Obesity Reviews* 22 (12): e13334. <https://doi.org/10.1111/obr.13334>.

Fielden, Amy L, Elizabeth Sillence, and Linda Little. 2011. ‘Children’s Understandings’ of Obesity, a Thematic Analysis.’ *International Journal of Qualitative Studies on Health and Well-Being* (United States) 6. <https://doi.org/10.3402/qhw.v6i3.7170>.

Fulbright, Helen A., and Claire Stansfield. 2024. ‘Understanding the Performance of Geographic Limits on Web of Science Core Collection Databases, Using the United Kingdom as an Example’. *Journal of the Medical Library Association : JMLA* 112 (4): 332–40. <https://doi.org/10.5195/jmla.2024.1669>.

Gemmell, Tracy. 2013. ‘Childhood Obesity: The Perceptions and Experiences of Overweight Children and Their Parents’. D.Clin.Psychol., University of Manchester.

Gillison, Fiona B, Elisabeth B Grey, Fran Baber, Angel Chater, Lou Atkinson, and Alison Gahagan. 2023. ‘The Systematic Development of Guidance for Parents on Talking to Children of Primary School Age about Weight.’ *BMC Public Health* (England) 23 (1): 1704. <https://doi.org/10.1186/s12889-023-16527-5>.

Goldthorpe, J, T Epton, C Keyworth, R Calam, and C Armitage. 2019. ‘Who Is Responsible for Keeping Children Healthy? A Qualitative Exploration of the Views of Children Aged 8-10 Years Old’. *BMJ Open* 9 (5). <https://doi.org/10.1136/bmjopen-2018-025245>.

Hall, Karen. 2012. ‘The Effects of Being Perceived as Overweight on Children’s Social Relationships: What Do Young People and Teachers Think about “the Overweight Child”?’ D. Ed. Ch. Psych., University of Exeter.

Harrold, Louise. 2017. ‘Exploring Young Children’s Obesity Stigma in a Story Completion Task’. D. Clin. Psychol., University of Leeds.

Herbert, Robert, Fiona Gillison, Elisabeth Grey, et al. 2025. ‘Children’s Views on Weight Measurement and Talking about Weight’. *BMC Public Health* 25 (1). <https://doi.org/10.1186/s12889-025-22354-7>.

Hooper, Oliver. 2018. ‘Health(y) Talk: Pupils’ Conceptions of Health within Physical Education’. PhD, Loughborough University.

Hughes, Amanda, Elisabeth Grey, Alice Haigherty, et al. 2025. 'Weight-Related Bullying in Schools: A Review of School Anti-Bullying Policies'. *BMC Public Health* 25 (1): 2006. <https://doi.org/10.1186/s12889-025-23170-9>.

Kamal, Atiya. 2015. 'Children's Compensatory Health Beliefs: An Exploration of Capacity, Context, Scope and Measurement'. PhD, University of Derby.

Kesten, Joanna M. 2013. 'The Role of Community Readiness in the Prevention of Overweight and Obesity in Pre-Adolescent Girls'. PhD, Loughborough University.

Kumari, Nikala. 2014. 'Exploring Weight-Related Attitudes and Experiences'. D. Clin. Psychol., University of Warwick.

Lewis, Kiara, Clare Fraser, and Martin Manby. 2014. "Is It Worth It?" A Qualitative Study of the Beliefs of Overweight and Obese Physically Active Children.' *Journal of Physical Activity & Health* (United States) 11 (6): 1219–24. <https://doi.org/10.1123/jpah.2012-0295>.

López-Gil, José Francisco, Antonio García-Hermoso, Lee Smith, et al. 2023. 'Global Proportion of Disordered Eating in Children and Adolescents: A Systematic Review and Meta-Analysis'. *JAMA Pediatrics* 177 (4): 363–72. <https://doi.org/10.1001/jamapediatrics.2022.5848>.

Lorenc, Theo, Helen Burchett, Preethy D'Souza, et al. 2024. *Psychosocial Consequences of Weight Monitoring in Children: Systematic Review and Policy Mapping*. EPPI Centre, Social Science Research Unit, UCL Institute of Education, University College London. <https://eppi.ioe.ac.uk/CMS/Portals/O/NCMP%20systematic%20review%20LO-141124.pdf>.

Ma, Lu, Meng Chu, Yixuan Li, et al. 2021. 'Bidirectional Relationships between Weight Stigma and Pediatric Obesity: A Systematic Review and Meta-Analysis'. *Obesity Reviews* 22 (6): e13178. <https://doi.org/10.1111/obr.13178>.

Mansfield, Debbie, and Georgina Doutre. 2011. 'Food for Thought: Children's Views on the Psychological Aspects of Childhood Obesity'. *Educational and Child Psychology* (United Kingdom) 28 (4): 23–36.

Mena, Sara Concepción Maury, Lucia Lomba Portela, Juan Carlos Marín Escobar, et al. 2025. 'Social Stigma of Overweight and Obesity in Primary School Children: A Systematic Review'. *Revista de Investigación e Innovación En Ciencias de La Salud* 7 (1). <https://doi.org/10.46634/riics.268>.

Miller, K, and G Coverdale. 2010. 'Exploring Views on Primary Prevention of Eating Disorders.' *British Journal of School Nursing* 5 (9): 441–48. <https://doi.org/10.12968/bjsn.2010.5.9.79780>.

Monaghan, Lee F, Emma Rich, and Andrea E Bombak. 2022. 'Exploring Fat Pedagogy and Critical Health Education with Schoolgirls: Rethinking "Britain's Child Obesity Disgrace"'. In *Rethinking Obesity: Critical Perspectives in Crisis Times*. Rethinking Obesity: Critical Perspectives in Crisis Times. Taylor and Francis. <https://doi.org/10.4324/9781315658087>.

Murphy, Marie, Felicity Boardman, Wendy Robertson, and Rebecca Johnson. 2021. 'Children's Perspectives and Experiences of Health, Diet, Physical Activity and Weight



in an Urban, Multi-ethnic UK Population: A Qualitative Study'. *Child: Care, Health and Development* 47 (5): 597–607. <https://doi.org/10.1111/cch.12867>.

Newson, Lisa, Nicola Sides, and Amineh Rashidi. 2024. 'The Psychosocial Beliefs, Experiences and Expectations of Children Living with Obesity'. *Health Expectations* 27 (1): e13973. <https://doi.org/10.1111/hex.13973>.

NHS England. 2024. *National Child Measurement Programme, England, 2023/24 School Year*. <https://digital.nhs.uk/data-and-information/publications/statistical/national-child-measurement-programme/2023-24-school-year>.

Nnyanzi, Lawrence Achilles. 2012. 'The National Child Measurement Programme: Its Value and Impact'. PhD, Teesside University.

Nnyanzi, Lawrence Achilles. 2016. 'Combating Childhood Obesity: Reactions of Children Aged 10–11 Years towards the National Child Measurement Programme'. *Journal of Child Health Care* 20 (4): 464–72. <https://doi.org/10.1177/1367493515604493>.

Ogden, Jane, and Catherine Roy-Stanley. 2020. 'How Do Children Make Food Choices? Using a Think-Aloud Method to Explore the Role of Internal and External Factors on Eating Behaviour.' *Appetite* (England) 147: 104551. <https://doi.org/10.1016/j.appet.2019.104551>.

Paddock, Danielle. 2022. 'Understanding Adolescents' Appearance-Related Interactions with Peers on Highly Visual Social Media Platforms'. PhD, York St John University.

Paddock, Danielle, and Beth Bell. 2024. "'It's Better Saying I Look Fat Instead of Saying You Look Fat": A Qualitative Study of UK Adolescents' Understanding of Appearance-Related Interactions on Social Media'. *Journal of Adolescent Research* 39 (2): 243–71. <https://doi.org/10.1177/07435584211034875>.

Palmer, Alice. 2015. 'Embodied Childhoods: An Ethnographic Study of How Children Come to Know about the Body'. PhD, University of Sheffield.

Pursey, Kirrilly M., Tracy L. Burrows, Daniel Barker, Melissa Hart, and Susan J. Paxton. 2021. 'Disordered Eating, Body Image Concerns, and Weight Control Behaviors in Primary School Aged Children: A Systematic Review and Meta-Analysis of Universal–Selective Prevention Interventions'. *International Journal of Eating Disorders* 54 (10): 1730–65. <https://doi.org/10.1002/eat.23571>.

Rees, Rebecca, Jenny Caird, Kelly Dickson, Carol Vigurs, and James Thomas. 2013. *The Views of Young People in the UK about Obesity, Body Size, Shape and Weight: A Systematic Review*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Rees, Rebecca, Kathryn Oliver, Jenny Woodman, and James Thomas. 2009. *Children's Views about Obesity, Body Size, Shape and Weight: A Systematic Review*. EPPI-Centre, Social Science Research Unit, Institute of Education, University of London. <https://eppi.ioe.ac.uk/cms/Portals/o/Obesity%20Views%20Children%20R2009Rees.pdf?ver=2010-12-22-121209-040>.

Rees, Rebecca W., Jenny Caird, Kelly Dickson, Carol Vigurs, and James Thomas. 2014. "'It's on Your Conscience All the Time": A Systematic Review of Qualitative Studies

Examining Views on Obesity among Young People Aged 12–18 Years in the UK’. Qualitative Research. *BMJ Open* 4 (4): e004404. <https://doi.org/10.1136/bmjopen-2013-004404>.

Rich, Emma, and John Evans. 2013. ‘Changing Times, Future Bodies? The Significance of Health in Young Women’s Imagined Futures’. *Pedagogy, Culture and Society* 21 (1): 5–22. <https://doi.org/10.1080/14681366.2012.748680>.

Skogen, Ingeborg B., Finn Ove Båtevik, Rune Johan Krumsvik, and Kjetil L. Høydal. 2022. ‘Weight-Based Victimization and Physical Activity Among Adolescents With Overweight or Obesity: A Scoping Review of Quantitative and Qualitative Evidence’. *Frontiers in Sports and Active Living* 4 (January). <https://doi.org/10.3389/fspor.2022.732737>.

Spiga, Francesca, Annabel L Davies, Eve Tomlinson, et al. 2024. ‘Interventions to Prevent Obesity in Children Aged 5 to 11 Years Old’. *Cochrane Database of Systematic Reviews* 2024 (7). <https://doi.org/10.1002/14651858.CD015328.pub2>.

Sutcliffe, Katy, Helen Burchett, Rebecca Rees, G. J. Melendez-Torres, Claire Stansfield, and James Thomas. 2016. *What Are the Critical Features of Successful Tier 2 Lifestyle Weight Management Programmes for Children Aged 0-11 Years? A Systematic Review to Identify the Programme Characteristics, and Combinations of Characteristics Associated with Successful Outcomes*. EPPI Centre, Social Science Research Unit, Institute of Education, University College London.

Szwimer, Erica, Fatima Mougharbel, Gary S. Goldfield, and Angela S. Alberga. 2020. ‘The Association Between Weight-Based Teasing from Peers and Family in Childhood and Depressive Symptoms in Childhood and Adulthood: A Systematic Review’. *Current Obesity Reports* 9 (1): 15–29. <https://doi.org/10.1007/s13679-020-00367-0>.

Tatangelo, Gemma, Marita McCabe, David Mellor, and Alex Mealey. 2016. ‘A Systematic Review of Body Dissatisfaction and Sociocultural Messages Related to the Body among Preschool Children’. *Body Image* 18 (September): 86–95. <https://doi.org/10.1016/j.bodyim.2016.06.003>.

Thomas, James, S. Graziosi, J. Brunton, et al. 2023. *EPPI-Reviewer: Advanced Software for Systematic Reviews, Maps and Evidence Synthesis*. Report. EPPI Centre, UCL Social Research Institute, University College London.

Willett, R. 2008. “‘What You Wear Tells a Lot about You’: Girls Dress up Online’. *Gender and Education* 20 (5): 421–34. <https://doi.org/10.1080/09540250701797242>.

Windram-Geddes, Morgan. 2013a. ‘Everyday Geographies of Girls’ Experiences of Physical Activity: Gender, Health and Bodies’. PhD, University of Dundee.

Windram-Geddes, Morgan. 2013b. ‘Fearing Fatness and Feeling Fat: Encountering Affective Spaces of Physical Activity’. *Emotion, Space and Society* 9: 42–49. <https://doi.org/10.1016/j.emospa.2013.06.006>.

Wright, Jan, Lisette Burrows, and Emma Rich. 2012. ‘Health Imperatives in Primary Schools across Three Countries: Intersections of Class, Culture and Subjectivity’. *Discourse: Studies in the Cultural Politics of Education* 33 (5): 673–91. <https://doi.org/10.1080/01596306.2012.696500>.

## 6 APPENDIX A. MEDLINE SEARCH STRATEGY

Database: Ovid MEDLINE(R) ALL <1946 to January 30, 2025>

Search Strategy:

- 1 ("young people\*" or adolescent\* or youth or pubertal or pubescent or "pre adolescent" or "Pre pubescent" or "pre pubertal" or teen\* or preteen\* or tweens or tweenage\* or youth or youths or schoolboy\* or schoolgirl\* or "school aged" or "young person\*" or juvenile\* or "Boy" or "boys" or "child" or "children\*" or "child's" or "Girl" or "girls" or "Minors" or "preadolescent" or "Prepubescent" or "schoolchild\*" or pubescent or "early adolescent\*").ti,ab,kf,ot,jw. (2192224)
- 2 exp Minors/ or exp child/ or exp Adolescent/ (3509687)
- 3 ((child\* or adolescence\*) not childbirth\*).jw. (198483)
- 4 1 or 2 or 3 (4215243)
- 5 (Weight not "birth weight").ti. (109030)
- 6 ("anti-fat" or bodyweight or "obese" or "obesity" or "overweight" or "skinny" or "fatness" or "thinness" or "body image" or "body hatred" or "body positive" or "thin ideal\*" or "fat ideal\*").ti,ab,kf,ot. (474406)
- 7 ("body esteem" and ("weight" or height or fat or thin)).ti,ab,kf,ot. (278)
- 8 ((body adj2 ideal\*) or (body adj2 shape) or (body adj2 shapes) or (body adj1 size)).ti,ab,kf,ot. (36277)
- 9 ((body adj10 weight) not (body adj10 "birth weight")).ti,ab,kf,ot. (295776)
- 10 ("underweight" not "birth weight").ti,ab,kf,ot. (15908)
- 11 ((weight adj1 bias) or (weight adj1 biases)).ti,ab,kf,ot. (825)
- 12 ("weight change" or "weight changes" or (weight adj2 gain\*) or (weight adj2 loss) or "lose weight" or "losing weight" or (weight adj1 (reduc\* or manage\* or control\*))).ti,ab,kf,ot. (236658)
- 13 ("weight adj1 measurement\*" or "height adj1 measurement\*").ti,ab,kf,ot. (0)
- 14 ("healthy weight" or "unhealthy weight" or "weight adj5 monitor\*" or "height adj5 monitor\*").ti,ab,kf,ot. (4949)
- 15 ("being measured" and ("weight" or weighing or height)).ti,ab,kf,ot. (139)
- 16 (weighing adj3 experiences).ti,ab,kf,ot. (7)
- 17 (weight screening\* or height screening\*).ti,ab,kf,ot. (67)
- 18 ("being fat" or "being weighed" or "Being thin" or "Being tall" or "Being short").ti,ab,kf,ot. (690)
- 19 ((stereotype or stereotypes or Stigma or stigmati\* or ideals or ideal or discriminate\* or discrimination or "peer pressure" or prejudice\* or bully\* or teasing or cyberbull\* or bullied) adj5 ("fat" or weight or thin or height or tall or short or muscle\* or muscular\* or body)).ti,ab,kf,ot. (12664)
- 20 ((fat or weight or thin or body or height or muscle or muscular\*) adj5 (acceptability or satisfaction or satisfied or dissatisfaction or dissatisfied or anxiety or anxious or angst or peer pressure or feelings or worries or worry or concern or concerns or "over concern" or emotions or emotion or concerns or "self-worth" or "self esteem" or esteem or "self-concept" or "self-identification" or "pre-occupation" or "preoccupation" or "acceptability" or perceiv\* or understand\* or perception\* or internalis\* or attitud\*)).ti,ab,kf,ot. (41040)
- 21 (Body adj1 (dysmorph\* or dismorph\*)).ti,ab,kf,ot. (1717)
- 22 (Muscle adj1 (dysmorph\* or dismorph\*)).ti,ab,kf,ot. (291)
- 23 ((body or fat or thin or height or weight) adj3 (shame or phobia\*)).ti,ab,kf,ot. (580)
- 24 ((weight adj2 muscle) or "excess weight").ti,ab,kf,ot. (11054)

25 ((weight adj3 appearance) or (height adj3 appearance)).ti,ab,kf,ot. (907)

26 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 (924493)

27 Body Dysmorphic Disorders/ or Weight Prejudice/ or “body size”/ or “body weight”/ or exp “ideal body weight”/ or “obesity”/ or “overweight”/ or exp “thinness”/ (454755)

28 body height/ (38739)

29 27 or 28 (473493)

30 26 or 29 (1089571)

31 4 and 30 (208890)

32 “attitude to health”/ or “comprehension”/ or “ethnopsychology”/ or “Focus Groups”/ or “Interviews as Topic”/ or Qualitative Research/ or “attitude”/ or Personal Narrative/ (327649)

33 ((Girls or Boys or Child\* or teen\* or adolescen\* or “young people\*” or schoolchild\* or pupil\* or student\*) adj2 (“perspective\*” or “experience\*” or “lived experience\*” or “attitude” or “attitudes” or “attitudinal” or “belief” or “beliefs” or “discourse” or “discourses” or “life-world” or “opinions” or “standpoint” or “standpoints” or “understanding” or “understandings” or “viewpoint” or “viewpoints” or “views” or “voice” or “voices” or discussed or described\* or drawings or drew)).ab. (74275)

34 (“audiorecording” or “ethnograph\*” or “ethnolog\*” or “ethnopsycholog\*” or “ethno psycholog\*” or “Focus Groups” or “Focus Group” or “repertory grid\*” or “stories” or “audio record” or “audio recorded” or “audio recorder” or “audio recording” or “audio recordings” or “audio records” or “thematic analysis” or “phenomenol\*” or “grounded theory” or “grounded studies” or “grounded research” or “purposive sampling” or “biographical method” or “theoretical sampl\*” or “conversation analysis” or “theoretical saturation” or “thematic analyses” or “mixed design” or “mixed method” or “mixed methods” or “qualitative” or “interviewed” or “interviewing” or “interviewer” or “interviews” or “interview” or “narratives” or “Diary entries” or “diary study” or Diaries or journalling or (Questions\* adj5 (semi-structured, or in-depth or open or “open ended”)) or “Group discussion\*”).ti,ab,kf,ot. (864508)

35 (“experiences” or “lived experience\*” or “perceptions” or “perspective” or “perspectives” or “experience” or “attitude” or “attitudes” or “attitudinal” or “belief” or “beliefs” or “discourse” or “discourses” or “life-world” or “opinions” or “perceived” or “perception” or “standpoint” or “standpoints” or “understanding” or “understandings” or “viewpoint” or “viewpoints” or “views” or “voice” or “voices” or talk\*).ti,ot,kf. (952566)

36 32 or 33 or 34 or 35 (1812166)

37 4 and 30 and 36 (20780)

38 exp United Kingdom/ (402174)

39 (England not “New England”).ti,ab,kf,ot,in,jw. (160806)

40 (“district council” or “local council” or “local authorities” or “NHS Trust” or “primary care trust” or “borough council” or “county council” or “local authority” or “district councils” or “local councils” or “NHS Trusts” or “primary care trusts” or “borough councils” or “county councils” or “Social Care Trust”).ti,ab,ot,kf,in. (111776)

41 (“United Kingdom” or UK or “U.K.” or Britain or GB or (British not “British Columbia”)).ti,ab,ot,kf,in,jw. (2487990)

42 (Welsh or Scottish or “northern Irish” or Wales or Scotland or “northern Ireland”).ti,ab,ot,kf,in,jw. (319223)

43 (national health service\* or nhs\*).ti,ab,in. (307965)

- 44 (english not ((published or publication\* or translat\* or written or language\* or speak\* or literature or citation\*) adj5 english)).ti,ab. (139395)
- 45 (bath or "bath's" or ((birmingham not alabama\*) or ("birmingham's" not alabama\*) or bradford or "bradford's" or brighton or "brighton's" or bristol or "bristol's" or carlisle\* or "carlisle's" or (cambridge not (massachusetts\* or boston\* or harvard\*)) or ("cambridge's" not (massachusetts\* or boston\* or harvard\*)) or (canterbury not zealand\*) or ("canterbury's" not zealand\*) or chelmsford or "chelmsford's" or chester or "chester's" or chichester or "chichester's" or coventry or "coventry's" or derby or "derby's" or (durham not (carolina\* or nc)) or ("durham's" not (carolina\* or nc)) or ely or "ely's" or exeter or "exeter's" or gloucester or "gloucester's" or hereford or "hereford's" or hull or "hull's" or lancaster or "lancaster's" or leeds\* or leicester or "leicester's" or (lincoln not nebraska\*) or ("lincoln's" not nebraska\*) or (liverpool not (new south wales\* or nsw)) or ("liverpool's" not (new south wales\* or nsw)) or ((london not (ontario\* or ont or toronto\*)) or ("london's" not (ontario\* or ont or toronto\*)) or manchester or "manchester's" or (newcastle not (new south wales\* or nsw)) or ("newcastle's" not (new south wales\* or nsw)) or norwich or "norwich's" or nottingham or "nottingham's" or oxford or "oxford's" or peterborough or "peterborough's" or plymouth or "plymouth's" or portsmouth or "portsmouth's" or preston or "preston's" or ripon or "ripon's" or salford or "salford's" or salisbury or "salisbury's" or sheffield or "sheffield's" or southampton or "southampton's" or st albans or stoke or "stoke's" or sunderland or "sunderland's" or truro or "truro's" or wakefield or "wakefield's" or wells or westminster or "westminster's" or winchester or "winchester's" or wolverhampton or "wolverhampton's" or (worcester not (massachusetts\* or boston\* or harvard\*)) or ("worcester's" not (massachusetts\* or boston\* or harvard\*)) or (york not ("new york\*" or ny or ontario\* or ont or toronto\*)) or ("york's" not ("new york\*" or ny or ontario\* or ont or toronto\*)))).ti,ab,in. (1914200)
- 46 (aberdeen or "aberdeen's" or dundee or "dundee's" or edinburgh or "edinburgh's" or glasgow or "glasgow's" or inverness or (perth not australia\*) or ("perth's" not australia\*) or stirling or "stirling's").ti,ab,in. (281610)
- 47 (armagh or "armagh's" or belfast or "belfast's" or lisburn or "lisburn's" or londonderry or "londonderry's" or derry or "derry's" or newry or "newry's").ti,ab,in. (37724)
- 48 ("South Holland" or Aldershot or Ashfield or Barking or Barnet or Barnsley or Bedfordshire or Bexley or Birkenhead or Blackburn or Blackpool or Bolton or Bournemouth or Brent or Bridgend or Bromley or Bromwich or Buckinghamshire or Burnley or Camberwell or Cambridgeshire or Camden or Chelsea or Chelsea or Cheshire or Cleveland or Colchester or Cornwall or Crawley or Croydon or Cumbria or Dagenham or Dartford or Derbyshire or Devon or Doncaster or Dorset or Dudley or Ealing or Ealing or Eastbourne or Enfield or Essex or Farnborough or Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucestershire or Gravesham or Greenwich or Grimsby or Guildford or Hackney or Hamlets or Hammersmith or Hampshire or Haringey or Haringey or Harrow or Hartlepool or Harwell or Hastings or Havering or Helens or Hertfordshire or Highland or Hillingdon or Hounslow or Hounslow or Hove or Huddersfield or Humber or Ipswich or Islington or Kensington or Kent or Kingston or Kirklees or Knowsley or Lambeth or Lancashire or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Loughborough or Luton or Lynn or Mansfield or Merseyside or Merton or Middlesbrough or Midlands or Milton Keynes or Newcastle or Newham or Norfolk or Northampton or

Northamptonshire or Northumberland or Nottinghamshire or Oadby or Oldham or Oxfordshire or Poole or Portsmouth or Reading or Redbridge or Redcar or Richmond or Rochdale or Rotherham or Rushmoor or Sandwell or Scarborough or Scilly or Shropshire or Slough or Solihull or Somerset or Southampton or Southend or Southwark or Staffordshire or Stockport or Stockton or Suffolk or Surrey or Sussex or Sutton or Swindon or Teesside or Telford or Thurrock or Tower Hamlets or Tyne or Tyneside or Walsall or Waltham or Wandsworth or Warrington or Warwickshire or Watford or Wigan or Wight or Wigston or Wiltshire or Wirral or Woking or Worcestershire or Worthing or Yorkshire).ti,ab,kf,ot,in. (1301438)

49 ("Isle of Man" or "Channel Islands" or "Guernsey").ti,ab,kf,ot,in. (1477)

50 (bangor or "bangor's" or cardiff or "cardiff's" or newport or "newport's" or "st asaph" or "st asaph's" or "st davids" or swansea or "swansea's").ti,ab,in. (77715)

51 38 or 39 or 40 or 41 or 42 or 43 or 44 or 45 or 46 or 47 or 48 or 49 or 50 (4089151)

52 (exp africa/ or exp americas/ or exp antarctic regions/ or exp arctic regions/ or exp asia/ or exp australia/ or exp oceania/ or developing countries/) not (exp United Kingdom/ or europe/) (3559746)

53 51 not 52 (3762338)

54 37 and 53 (2883)

55 limit 54 to yr="2008 -Current" (2264)

## 7 APPENDIX B. RESULTS OF QUALITY ASSESSMENT

CASP checklist (see detailed guidance at <https://casp-uk.net/casp-tools-checklists/qualitative-studies-checklist/>):

1. Was there a clear statement of the aims of the research?
2. Is a qualitative methodology appropriate?
3. Was the research design appropriate to address the aims of the research?
4. Was the recruitment strategy appropriate to the aims of the research?
5. Was the data collected in a way that addressed the research issue?
6. Has the relationship between researcher and participants been adequately considered?
7. Have ethical issues been taken into consideration?
8. Was the data analysis sufficiently rigorous?
9. Is there a clear statement of findings?
10. How valuable is the research?

Study identifier	1. Aims	2. Quals appropriate?	3. Design	4. Recruitment	5. Data collection	6. Relationship	7. Ethics	8. Analysis	9. Findings	10. Value
Baxter	Yes	Yes	CT	Yes	Yes	Yes	Yes	CT	CT	CT
Bell	Yes	Yes	Yes	Yes	Yes	Yes	CT	Yes	Yes	Yes
Blood	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	CT	Yes
Bromfield	Yes	Yes	Yes	CT	Yes	Yes	Yes	Yes	CT	Yes

Study identifier	1. Aims	2. Quals appropriate?	3. Design	4. Recruitment	5. Data collection	6. Relationship	7. Ethics	8. Analysis	9. Findings	10. Value
Charsley	Yes	Yes	CT	Yes	Yes	No	Yes	CT	CT	Yes
Clark	CT	Yes	Yes	CT	CT	CT	CT	CT	Yes	CT
Conway	Yes	CT	Yes	CT	CT	CT	CT	Yes	Yes	CT
Cowley	Yes	Yes	Yes	CT	Yes	CT	CT	Yes	Yes	Yes
Dearing	Yes	Yes	Yes	Yes	Yes	CT	Yes	Yes	Yes	Yes
Fairbrother	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fielden	Yes	Yes	Yes	CT	Yes	CT	CT	CT	CT	Yes
Gemmell	Yes	Yes	Yes	CT	Yes	CT	Yes	Yes	Yes	Yes
Gillison	Yes	Yes	Yes	CT	Yes	CT	Yes	CT	No	CT
Goldthorpe	Yes	Yes	Yes	No	CT	No	CT	Yes	Yes	CT
Hall	Yes	Yes	CT	CT	CT	Yes	Yes	CT	CT	CT
Harrold	Yes	CT	CT	CT	CT	CT	CT	Yes	CT	Yes



Study identifier	1. Aims	2. Quals appropriate?	3. Design	4. Recruitment	5. Data collection	6. Relationship	7. Ethics	8. Analysis	9. Findings	10. Value
Herbert	Yes	Yes	Yes	CT	Yes	CT	Yes	Yes	Yes	Yes
Hooper	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kamal	Yes	Yes	Yes	CT	Yes	CT	Yes	Yes	Yes	Yes
Kesten	Yes	Yes	Yes	Yes	Yes	CT	Yes	Yes	Yes	Yes
Kumari	Yes	Yes	Yes	Yes	CT	CT	Yes	Yes	Yes	Yes
Lewis	Yes	Yes	Yes	Yes	Yes	CT	CT	Yes	Yes	Yes
Mansfield	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	CT	Yes
Miller	Yes	Yes	Yes	CT	Yes	CT	CT	CT	Yes	CT
Monaghan	No	Yes	CT	No	CT	No	CT	Yes	CT	No
Murphy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Newson	CT	Yes	Yes	CT	Yes	CT	CT	Yes	CT	Yes
Nnyanzi	Yes	Yes	Yes	CT	Yes	Yes	CT	Yes	Yes	Yes

Study identifier	1. Aims	2. Quals appropriate?	3. Design	4. Recruitment	5. Data collection	6. Relationship	7. Ethics	8. Analysis	9. Findings	10. Value
Ogden	Yes	Yes	Yes	Yes	Yes	CT	CT	Yes	Yes	Yes
Paddock	Yes	Yes	Yes	CT	Yes	Yes	CT	Yes	Yes	Yes
Palmer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rich	CT	Yes	Yes	CT	CT	CT	CT	CT	Yes	CT
Willett	CT	Yes	Yes	CT	CT	Yes	CT	CT	Yes	CT
Windram-Geddes	Yes	Yes	Yes	No	Yes	Yes	Yes	CT	Yes	Yes

abbreviation: CT, “can’t tell”

## 8 APPENDIX C. GRADE-CERQUAL ASSESSMENT

	Review finding	Studies contributing to the review finding	Methodological Limitations	Adequacy of Data	Coherence	Relevance	CERQual Assessment	Explanation of confidence in the evidence assessment
1	Health impacts of weight. Children see overweight and obesity as 'unhealthy' in a general sense, and identify specific poorer health outcomes.	Baxter, Charsley, Fairbrother, Fielden, Hooper, Kumari, Mansfield, Newson, Palmer, Rich	Minor concerns around ethics (3 studies), data analysis (4 studies) and findings (4 studies)	No or very minor concerns. Data comes from a range of populations (age, weight status)	Minor concerns. While there are different views underlying the link, the main finding is the link itself rather than participants' causal theories of health outcomes (which are often vague or absent)	Minor concerns. Data on general concepts of health was outside the scope of this review.	High	Minor concerns on methodology, adequacy and coherence but no major limitations
2	Appearance. Children feel that overweight	Baxter, Bell, Cowley, Hooper,	No or very minor concerns	Major concerns. There is a disproportion between the	Moderate concerns. The findings are not unidirectional	No or very minor concerns	Low	Concerns around adequacy and coherence, and

	'looks bad' or is less attractive.	Mansfield, Newson		sparse data directly addressing this theme, and the focus on it by several study authors.	and it is unclear how far appearance is an independent driver of perceptions			in general limited data
3	Health impacts of weight. Children think that underweight can also have negative health impacts.	Baxter, Cowley, Fairbrother, Fielden, Hooper, Monaghan	Minor concerns around sampling and recruitment (3 studies), ethics (3 studies) and findings (3 studies)	Moderate concerns. Data is relatively sparse and appears to come from only one or two participants per study	Moderate concerns as there appear to be a range of different perceptions underlying this finding	No or very minor concerns	Low	Concerns around adequacy and coherence, and in general limited data
4	Physical abilities. Children without overweight think that people with overweight and obesity have limited capacities to	Baxter, Bromfield, Charsley, Dearing, Fairbrother, Kamal, Mansfield, Murphy, Palmer, Rich	Minor concerns around sampling and recruitment (3 studies), data analysis (3 studies) and	Minor concerns. Data comes from across the age range. The theme is mostly not explicitly a focus for primary study authors but the data is rich	No or very minor concerns. Perceptions appear reasonably consistent	No or very minor concerns	High	Minor concerns on methodology, adequacy and coherence but no major limitations

	engage in physical activity or sport, and more generally to participate in 'normal' life.		findings (3 studies)					
5	Social and emotional impacts. Children without overweight think that those with overweight are likely to be teased, bullied or called names, and sometimes to be excluded from social activities.	Baxter, Charsley, Clark, Cowley, Fairbrother, Gillison, Hall, Hooper, Kesten, Mansfield, Murphy	Minor concerns around sampling and recruitment (4 studies), data analysis (5 studies) and findings (4 studies)	No or very minor concerns. Data comes from across the age range. Data is rich and refers to specific experiences. Participants recognise prevalence of bullying even when personally rejecting it	No or very minor concerns. The finding is consistent with the data from children with overweight or obesity (finding 12).	No or very minor concerns	High	Minor concerns on methodology, adequacy and coherence but no major limitations
6	Causes - dietary. Children see overeating as a main cause of overweight.	Baxter, Charsley, Cowley, Fairbrother, Fielden, Gemmell,	Moderate concerns around sampling and recruitment	Minor concerns. Data is not very rich but that is the nature of the theme, and comes from a	Minor concerns. Findings are generally consistent although	Minor concerns. Data on diet as such was outside the	Moderate	Some concerns around methodology, but only minor limitations otherwise

		Gillison, Kamal, Kesten, Kumari, Mansfield, Murphy, Rich, Windram-Geddes	(7 studies), ethics (3 studies), data analysis (6 studies) and findings (4 studies)	range of populations	different food types are mentioned.	scope of this review		
7	Causes - physical activity. Children see the lack of physical activity as a cause of overweight.	Baxter, Bell, Clark, Fairbrother, Fielden, Gemmell, Gillison, Herbert, Hooper, Kamal, Kesten, Mansfield, Rich, Windram-Geddes	Moderate concerns around sampling and recruitment (8 studies), data analysis (6 studies) and findings (3 studies)	Minor concerns. Data is reasonably rich. Only one study explores underlying theories in detail, but that is not the main point of the finding	Minor concerns. There is sometimes unclarity as to whether participants are referring to lack of activity as a cause or a consequence of overweight, but this is a finding in itself	Minor concerns. Data on physical activity as such was outside the scope of this review	Moderate	Some concerns around methodology, but only minor limitations otherwise
8	Body ideals. Some children want to lose weight or become more muscular, but most reject	Clark, Fairbrother, Kesten, Monaghan, Palmer, Rich,	Moderate concerns around sampling and recruitment (4 studies),	Major concerns. Most of the data comes from older girls, and some data raises concerns about social	Moderate concerns. Expressed ideals are somewhat varied (outside the studies	No or very minor concerns	Low	Concerns around methodology, adequacy and coherence

	extremely underweight body shapes.	Windram-Geddes	data collection (3 studies), ethics (3 studies) and data analysis (3 studies)	desirability bias and/or researchers' self-positioning (in studies with an explicit focus on this theme)	explicitly focusing on this theme) and may depend on context, and it is unclear how far participants subscribe to specific body ideals			
9	Experiences of weight loss. Children report trying to lose weight, sometimes leading to disordered eating (either for themselves or for peers).	Blood, Clark, Fairbrother, Kesten, Miller, Monaghan, Nnyanzi, Rich, Willett, Windram-Geddes	Moderate concerns around sampling and recruitment (7 studies), data collection (4 studies), ethics (7 studies) and data analysis (5 studies)	Moderate concerns. Data is fairly sparse and not explored in depth.	Moderate concerns. Some data suggests disparity between reports of participants' own behaviour and their perceptions of others' (this is arguably a finding in itself). A few participants report aiming to gain weight.	Moderate concerns. Data on disordered eating as such was outside the scope of this review	Low	Concerns around methodology, adequacy and coherence

10	Body ideals. Media and social media present body ideals which are sometimes unrealistic, promote weight loss, and also represent extreme obesity in a sensationalistic way.	Bell, Conway, Fairbrother, Hall, Herbert, Kesten, Kumari, Mansfield, Miller, Monaghan, Paddock, Rich, Willett	Moderate concerns around sampling and recruitment (8 studies), data collection (6 studies), ethics (5 studies) and data analysis (4 studies)	Moderate concerns. Data is fairly sparse and not explored in depth, or related to specific experiences. Data mostly comes from older children	Moderate concerns. Participants were referring to a range of different types of content, and data which reports experiences in more depth diverge from generic high-level perceptions	No or very minor concerns	Low	Concerns around methodology, adequacy and coherence
11	Talk about weight. Children report parents encouraging them to lose (or gain) weight. They observe that adults around them are often dissatisfied with their body shape, or have negative attitudes to	Charsley, Clark, Fairbrother, Fielden, Gemmell, Herbert, Kesten, Kumari, Lewis, Monaghan, Newson, Palmer	Moderate concerns around sampling and recruitment (6 studies), data collection (3 studies), ethics (4 studies), data analysis (3 studies) and	Minor concerns. Data is reasonably rich and comes from a range of populations	Minor concerns. Findings are generally consistent. A few participants report being encouraged to gain weight.	No or very minor concerns	Moderate	Some concerns around methodology, but only minor limitations otherwise



	overweight generally.		findings (3 studies)					
12	Experiences of weight-related bullying. Children with overweight or obesity report extensive experiences of weight-related bullying, sometimes with serious impacts on wellbeing.	Gemmell, Hall, Kumari, Newson	Moderate concerns around sampling and recruitment (3 studies)	Minor concerns. Data is rich and refers to specific experiences. The studies all recruited from community-based weight management interventions. Most data concerns older children	No or very minor concerns. This finding is consistent with the data from children without overweight (finding 5).	No or very minor concerns	Moderate	Some concerns around methodology, but only minor limitations otherwise
13	Experiences of physical activity. Children with overweight or obesity report that others' attitudes can be a barrier to participating in activities.	Gemmell, Hall, Kumari, Newson	Moderate concerns around sampling and recruitment (3 studies)	Moderate concerns. The data is fairly sparse but comes from observations as well as interviews. Issues with sampling and population as for finding 12	Moderate concerns. Participants' experiences were variable.	No or very minor concerns	Low	Concerns around methodology, adequacy and coherence

## 9 APPENDIX D. EVIDENCE TABLES

Study identifier	Baxter
Research question / study focus	Children's understandings of causes and consequences of weight change
Theoretical approach	NR
Sampling and recruitment methods	Sampling of schools NR. All parents of children in Reception / Year 1 approached for consent, and all participated if [parental] consent obtained; 100 children participated of a total of 220.
Setting / context / location	West Yorkshire; 2 schools.
Sample size	100
Sample characteristics	Mean age 5.2 (range 4:0-6:9); 62 M, 38 F; ethnicity "diverse", but not fully reported
Year data collected	NR (published 2013)
Data collection methods	Data collection based on picture storybook used in previous research studies. Researcher presented participants with pictures of the central character at average weight and overweight and asked, "This is Alfie/Alfina from the story when he/she is 5 years old [...] and this is still Alfie/Alfina but he/she is a little bit older" and asked about their perceptions of the change. Data collection tools were piloted with two participants before being used in the study. Children interviewed individually at "quiet" location in school.
Data analysis methods	Data transcribed by lead researcher; thematic analysis including coding based on the specific aims of the research followed by thematic mapping [%s of different responses reported]
Limitations identified by author	Fewer girls than boys participated (due to difference in rates of parental consent); data on ethnicity, SES and weight not collected; differences in schools and timing of data collection may have led to differences in understanding
Limitations identified by reviewer	Limited information on sample or context. The research design is partly quantitative, and the aims and methods are narrowly focused, with limited exploration of children's perceptions on a broader level.

Study identifier	Bell
Research question / study focus	Views of “fitspiration” content on social media
Theoretical approach	NR
Sampling and recruitment methods	Sampling of school NR. For individuals: implicitly, all pupils in selected year group in selected school invited to participate; participation rate 100%
Setting / context / location	Northern England; “fee-paying, co-educational school”; probably higher-SES population
Sample size	77
Sample characteristics	Age 12-13 (mean 12.49); 27 F, 50 M; described as “predominantly white [and] physically active” (p1056), but data NR
Year data collected	NR (published 2019)
Data collection methods	Focus groups with 5-7 participants, 20-28 minutes, held on university campus; self-selected groups; run by trained facilitators; some single-gender, some mixed. Questions focused on views of fitness generally and “fitspiration” content; visual prompts used
Data analysis methods	Reflexive thematic coding by three coders independently; inductive development of themes; themes verified by rechecking against transcripts
Limitations identified by author	Findings may not be generalisable, especially to ethnically diverse and lower-SES populations. All facilitators were female, which may have limited participation by male participants. Potential social desirability bias.
Limitations identified by reviewer	Some unclarity in sampling and recruitment.

Study identifier	Blood
Research question / study focus	Children’s experiences of school-based height and weight measurement
Theoretical approach	NR
Sampling and recruitment methods	“[O]ppportunity sampling based on their desire to take part and because they returned completed parental consent forms” p482; Year 6 selected as they had participated in measurement; no further information

Setting / context / location	NR
Sample size	12
Sample characteristics	Age 10-11; 3 M, 9 F; 9 Asian, 3 white
Year data collected	NR (published 2011)
Data collection methods	Questions focused on experiences and views of height and weight screening in schools; piloted with 1 participant; carried out in separate room in school. All participants did both an individual interview (6-10 mins) and participated in 1 of 2 focus groups (around 11 mins).
Data analysis methods	Thematic analysis; coding carried out by two researchers and only reported where fully concordant
Limitations identified by author	Small sample size. Convenience sample. Some children expressed different views in interviews and focus groups, possibly because of social desirability bias [this isn't explored in the analysis]
Limitations identified by reviewer	Data is fairly limited. The study focuses on a specific question and does not go into broader views about weight or body size.

Study identifier	Bromfield
Research question / study focus	Implementation of National Healthy Schools Programme relating to child obesity, and potential harmful effects
Theoretical approach	NR
Sampling and recruitment methods	Schools sampled from a 'services cluster' on the basis of existing relationships and because the cluster had an obesity strategy (p117). Sampling of individual schools unclear (two primary schools were approached but one declined to participate p151). For the focus groups, Year 5-6 children were targeted on advice from the study advisory group. Children were 'selected' by school staff and 4 returned consent forms, with a further 2 drawn from the advisory group; NR how children were selected or what the participation rate was. (Sampling for the advisory group is not considered here as they do not appear to provide data, but had a PPI / piloting role.)
Setting / context / location	Location NR; "inner city" and "one of the most economically and socially deprived in the city" (p118), but no detail reported

Sample size	6 for the relevant section of the study (the primary school focus groups)
Sample characteristics	Years 5-6 (age 9-11); no information on sample. [Note data from the secondary school groups is not extracted here as their ages are NR]
Year data collected	2009
Data collection methods	One focus group with 6 participants. Focus group questions focused on Healthy School activities and perceptions of body weight (Appx 4.18); based on piloting / consultation with advisory group. Limited information on process.
Data analysis methods	Thematic analysis (drawing together all the data sources in the study).
Limitations identified by author	Children selected by school staff. Researcher is obese and this may have inhibited participation due to social desirability bias. Small sample size.
Limitations identified by reviewer	Very limited description of methods and sample. The data relevant to this review are only a small part of the overall project.

Study identifier	Charsley
Research question / study focus	Children's perceptions of fatness and other physical differences in their peers and their own self-image
Theoretical approach	Personal Construct Theory
Sampling and recruitment methods	Sampling of schools not clearly reported, but aimed for "primary schools based in two geographical areas associated with different levels of affluence" (thesis p72). All parents sent consent form for all children in selected year groups (Reception, Year 1 & Year 2); all with parental consent (90/450) were included unless they did not consent (n=1) or could not complete the task (n=4).
Setting / context / location	Leeds; "One primary school was an inner-city community state school and the other an academy in a town towards the outskirts of Leeds"
Sample size	85

Sample characteristics	Mean age 5:8 (range 4:3 - 7:1); 42 F, 43 M; 61% White, 31% Asian, 5% Black, 3% Other; “[n]one of the participants had any visible physical disabilities” (p30)
Year data collected	2015-16
Data collection methods	Individual interviews in “quiet” area of school. Interview based on picture cards showing children of different weights, genders and disabilities; children were asked specifically about perceptions of similarities and differences, and also which they would prefer to have as a friend. Data collection piloted with n=6 participants before main study.
Data analysis methods	Thematic coding by single researcher; no other information
Limitations identified by author	Data on children’s body size only visually estimated. Opportunity sampling. SES of individual children not recorded. Differences between schools or subgroups of pupils (e.g. ethnicity) not investigated. Relatively low participation rate (23%) which may introduce bias.
Limitations identified by reviewer	The research design is partly quantitative, and the aims and methods are narrowly focused, with limited exploration of children’s perceptions on a broader level.

Study identifier	Clark
Research question / study focus	Girls’ experiences of sport and physical activity
Theoretical approach	Feminism; theories of “body pedagogies”
Sampling and recruitment methods	NR. (Participants are described as “sporty girls” but unclear if this was a goal of sampling.)
Setting / context / location	London. Mix of school populations, some more White and middle class, others more ethnically mixed and lower-SES, but detail NR
Sample size	16 (including the original sample of 6 and 10 friends, but not parents, teachers etc. (for which Ns are NR))
Sample characteristics	Age 10-13. All female (for the original sample, unclear if this is also true for the friends). No further information (individuals’ ethnicity and SES (unclear how measured) are

	appended to the quotes, but not given for the sample as a whole)
Year data collected	NR (earlier paper submitted 2015; data collection was longitudinal over approx. 3 years)
Data collection methods	Individual and group interviews with the same sample over approx. 3 years twice-yearly (total 25 interviews). Interviews focused on gender and sport participation. Also interviewed “friends, family members, teachers and coaches” (2018 p480), but no further information for these and unclear if any data is reported. Also observations (n=45) at school PE lessons and sports clubs.
Data analysis methods	“[I]nductive, emergent coding” (2020 p8); no further information
Limitations identified by author	NR
Limitations identified by reviewer	Very limited description of methods or sample. Some of the findings sections mix together data and interpretation.

Study identifier	Conway
Research question / study focus	Views of food labelling and the NCMP
Theoretical approach	NR
Sampling and recruitment methods	Schools sampled for diversity in SES. Sampling of individuals unclear.
Setting / context / location	SE England. The schools had between 12% and 44% of pupils eligible for free school meals.
Sample size	80
Sample characteristics	Age 9-13 (mean 10.99). 51 F, 29 M. 39% White, 16% Black, 20% Asian, 12% mixed, 7% other, 5% unknown. IMD quintile of home address 19% 1 (most deprived), 31% 2, 5% 3, 5% 4, 5% 5, 35% unknown. BMI 2% underweight, 59% healthy weight, 30% overweight, 9% unknown

Year data collected	2023-24
Data collection methods	Focus groups (5 children each); mean 37 minutes. [Interview questions are not available in the version available at time of review.]
Data analysis methods	Framework analysis; primary themes created deductively based on study aims, secondary themes inductively within this framework.
Limitations identified by author	Children with concerns about food or weight may not have wanted to discuss these topics. Limited range of topics covered.
Limitations identified by reviewer	Some unclarity in sampling.

Study identifier	Cowley
Research question / study focus	Attitudes to PE and physical activity
Theoretical approach	Self-determination theory
Sampling and recruitment methods	Schools “purposively sampled based on socioeconomic factors and characteristics of the school to provide a diverse sample of participants” (p115), but details NR. Sampling of individuals NR.
Setting / context / location	Glasgow. Schools generally close to average wrt free school meal eligibility and attainment (p118).
Sample size	39
Sample characteristics	Age 12-13 (mean 12.56). 17 F, 22 M.
Year data collected	NR
Data collection methods	Focus groups, 55 minutes. Limited information



Data analysis methods	Thematic analysis by a single researcher
Limitations identified by author	Small sample size
Limitations identified by reviewer	Limited description of methods or sample. Study focus only partly overlaps with this review.

Study identifier	Dearing
Research question / study focus	Pro-social behavioural intentions towards peers with obesity
Theoretical approach	Draws on psychological theories of empathy and pro-social behaviour
Sampling and recruitment methods	Schools sampled from local authority list purposively for being “broadly average” wrt % of pupils receiving pupil premium (p44). 35 schools contacted of which 2 recruited; a further 2 recruited through researcher contacts (unclear whether they were on the original list). Parental consent letter sent to parents of (all?) children in selected year groups, response rate 29%.
Setting / context / location	Leeds area. 3 schools in suburban area, 1 rural. Three had below-average levels of pupils with English as a second language and mostly White British ethnicity; one had above-average levels of English as a second language and was approximately one-half White British and one-third Pakistani or Indian.
Sample size	72
Sample characteristics	Age 4-6 (reception - Year 1). 25 F, 47 M
Year data collected	NR (submitted 2018)
Data collection methods	Data collection based on reading a story book with characters of different weights. Children were asked about which character would be more likely to be chosen in various positive / negative scenarios (helping, sharing,

	comforting and stealing). Individual interviews in school outside classroom.
Data analysis methods	Thematic analysis without prior framework. The whole data set was analysed together, rather than separating the four scenarios. Analysis by one researcher, checked by thesis supervisors at thematic mapping stage (and (all?) coding checked independently by them).
Limitations identified by author	Children may have been talking about classmates with the same names rather than the story characters, and may have been thinking about differences other than body shape. Low proportion of girls participated due to parental consent being withheld. Findings may not be transferable to real-world social behaviour.
Limitations identified by reviewer	Limited information on sample. Analysis is partly quantitative and only limited qualitative data are reported.

Study identifier	Fairbrother
Research question / study focus	Children's perceptions of food and relationship between food and health
Theoretical approach	"Subtle realism"
Sampling and recruitment methods	Sampling of schools for diversity in SES (based on data on free school meal eligibility). Sampling of individuals for even gender balance but not for ethnicity. Children sampled from one selected class in each school; all who consented were included (participation rate NR). For the individual interviews (phase 2), theoretical sampling based on findings from the initial phase.
Setting / context / location	Northern England. One school was in a more deprived area and one in a more affluent area (measured in terms of house prices, but full SES data NR), one school population lower-SES (in terms of free school meal eligibility) and lower attainment (Ofsted results), one higher.
Sample size	53
Sample characteristics	Age 9-10; n=4 minority ethnic, all others white; n=17 special educational needs
Year data collected	2010-11
Data collection methods	Phase 1: group interviews in friendship groups (each interviewed twice) at school. Prompts included food picture cards and statements like "chocolate is bad for you" for debate. Phase 2: individual interviews with children and

	parents (separately) at home. Activity prompts designed around perceptions of food and health.
Data analysis methods	Initial analysis to provide feedback to children in the form of an in-school activity. Detailed analysis using ‘thematic networks’ at 3 levels, followed by exploration of relationships between themes. Analysis carried out by one researcher (implicitly).
Limitations identified by author	Small sample size. Sample demographics meant the intersection of ethnicity and SES could not be explored.
Limitations identified by reviewer	No major limitations. The focus of the study is broad and only a small proportion of the data is relevant for this review.

Study identifier	Fielden
Research question / study focus	Children’s understandings of “some of the causes and consequences of obesity, and its links to diet and physical activity” p3
Theoretical approach	NR
Sampling and recruitment methods	Sampling of school NR. Individual participants “selected through liaising with the school and class teachers” (p3); no further information. Children who may have been uncomfortable with the topic (as judged by teachers) were not sampled. Sampled Reception and Year 6 as NCMP data is reported for these years. Sampling for diversity wrt ethnicity and (implicitly) even split of gender (but not for BMI / weight status). Parental consent obtained after letter and phone call (in parents’ first language)
Setting / context / location	NR
Sample size	12
Sample characteristics	Age 4-5 and 10-11; no other information
Year data collected	NR (published 2011)

Data collection methods	Focus groups; participants sampled so that “children selected to be in the same focus groups were comfortable with each other” (p3); single sex groups (mentioned in the discussion but not in the methods). 20-30 minute sessions. Interview guide focused on experiences of food and physical activity (using replica food and picture cards as prompts for the first session, and colouring pens after that) and also on broader concepts of what is healthy.
Data analysis methods	Focus groups recorded; recordings transcribed and re-read by principal investigator. Initial coding and thematic mapping followed by more detailed analysis.
Limitations identified by author	Limited participation by younger age group. Some participants were more forthcoming than others.
Limitations identified by reviewer	Limited information on recruitment, sample characteristics or context. The research question is broad and arguably not well-defined, and only partly overlaps with the focus of this review. Analysis appears to mix findings and interpretation.

Study identifier	Gemmell
Research question / study focus	Overweight children’s perceptions and experiences relating to body size
Theoretical approach	NR
Sampling and recruitment methods	Recruited from a community-based health promotion intervention for children with overweight. Sites sampled for “their history of providing high quality groups and their stable funding provision” (p66). Written information distributed by intervention providers and presentation made by the researcher. For individuals, criteria were age 7-13, overweight (BMI $\geq$ 91st percentile) without medical cause, able to understand English. No further information on sampling or recruitment process for individuals (the response rate is stated to be low but details NR).
Setting / context / location	SW Scotland / NW England. Both areas of higher deprivation (top 5% of deprivation in Scotland, top 50 local authorities in England).
Sample size	6

Sample characteristics	Age 8-12. 4 F, 2 M. 3 overweight (BMI $\geq$ 91st percentile), 3 obese (BMI $\geq$ 98th percentile). 4 White British, 2 British Asian.
Year data collected	NR (submitted 2013)
Data collection methods	Individual interviews in children's homes, at or just after the end of the (10-week) intervention; 13-56 minutes, average 30 minutes. Questions focused on experiences of the intervention and attitudes to weight.
Data analysis methods	Interpretive Phenomenological Analysis. Initial inductive thematic coding followed by deeper coding of detail. Analysis conducted by one researcher with one transcript each coded by 2 further researchers and validated.
Limitations identified by author	Participants may be different from those not attending a weight management intervention and may have been influenced by the intervention content. Individual SES not measured.
Limitations identified by reviewer	Unclarity around sampling

Study identifier	Gillison
Research question / study focus	Development of guidance for parents on talking to children about weight
Theoretical approach	NR
Sampling and recruitment methods	"[C]onvenience sampling" based on adverts in local media and online; children eligible regardless of weight status; no further information
Setting / context / location	NR
Sample size	11
Sample characteristics	Age 9-11; 7 F, 4 M

Year data collected	2020
Data collection methods	Individual interviews via Zoom (parents were present but were asked not to speak for the child); illustrated story cards (about school-based weight measurement) used as prompts
Data analysis methods	NR
Limitations identified by author	NR (limitations relate to the guidance rather than the research)
Limitations identified by reviewer	Very limited description of methods or sample. The qualitative component is only one part of a broader project with a specific goal, and limited data is reported.

Study identifier	Goldthorpe
Research question / study focus	“[C]hildren’s views about who they feel is responsible for keeping them healthy” (abstract)
Theoretical approach	NR
Sampling and recruitment methods	Schools participating in a Healthy Schools programme were sampled for diversity in stage of implementation in the programme and in geographical area within the city, and further selected to be representative of population demographics. Individual participants were chosen on a convenience basis by teachers; aimed to select a balance of male and female and those who had school dinners vs packed lunches. The analysis reported focuses on two groups out of 14, chosen for richness of data based on thematic saturation, but it is unclear how this choice was made.
Setting / context / location	Manchester; one school in area in 40% of most deprived neighbourhoods, one in 10% (Index of Multiple Deprivation); both higher proportions of BME pupils than average; higher proportions of special educational needs / disabilities than average
Sample size	20

Sample characteristics	Age 8-10; 10 F, 10 M; 7 White British, 4 Pakistani, 2 other Asian, 2 Black African, 1 mixed British/Asian, 4 unknown ethnicity
Year data collected	NR (published 2019)
Data collection methods	Focus groups conducted in private room in school; 45-51 mins
Data analysis methods	Interpretive Phenomenological Analysis; analysis focused on issues relating to individual experiences within the group setting; carried out by one researcher and checked by others
Limitations identified by author	Sampling of children selective and may have been biased towards more academically able children (because they were sampled for being less likely to have negative effects from time out of class). This report presents only a selective sample of the data from the whole project.
Limitations identified by reviewer	No further major limitations. Study focuses on a specific issue which only partly overlaps with the review question.

Study identifier	Hall
Research question / study focus	Lived experiences of children with overweight, esp. experiences of weight-based victimisation and how it differs from other kinds of unkindness
Theoretical approach	Psychological theories of stigma (Attribution Theory, Social Consensus Theory) and identity (Identity Change Theory)
Sampling and recruitment methods	(Note all data extraction refers to Study 2; there was a qualitative component to study 1 but this was mainly to develop the methods from the quantitative part and very little data is reported.) Sampling of school NR. Parental consent forms sent to (all?) children in selected year group in selected school; response rate 32/120; all whose parents consented and who were available included [three were absent on the day]. (pp77-78)
Setting / context / location	SW England; high-SES area (no further information)
Sample size	29

Sample characteristics	Age 9-11; 15 F, 14 M; n=1 Asian, all others white
Year data collected	NR (submitted 2012)
Data collection methods	Group interviews in single-sex groups (six groups). Interview schedule focused on experiences of weight-based unkindness
Data analysis methods	Contextualist thematic analysis; limited information
Limitations identified by author	NR
Limitations identified by reviewer	Relatively few qualitative data is reported and the analysis is limited. The report mixes together findings and discussion such that it is not always clear what is in the data and what is the researcher's interpretation. Children's weight status is not clearly reported (either overall, or in relation to the findings), so the meaning of some of the findings is unclear.

Study identifier	Harrold
Research question / study focus	Obesity stigma in children
Theoretical approach	NR
Sampling and recruitment methods	N=4 schools participated out of N=15 who were initially approached (unclear if this is all whose headteachers consented). Parental consent forms sent to parents of (all?) children in selected year groups; participation rate 131/299. One child excluded due to "learning and speech impairment" (p26).
Setting / context / location	Leeds; "white, working class and socially deprived area" (p26); school catchment areas had deprivation rankings "from 642 to 12,500 out of 32, 844 within England" (p27)
Sample size	130
Sample characteristics	Mean age 5:5 (range 4:2 - 7:3); 60 M, 70 F; 98% White British, 2% "Asian, Afro-Caribbean or other"



Year data collected	2016
Data collection methods	Data collection based on illustrated story prompt with characters of different body sizes. Children were asked about their perceptions of the characters. Individual interviews in “a quiet area of the school or classroom” (p28). Materials piloted with n=5 children (not in study sample).
Data analysis methods	Framework analysis focused on the concepts in the story. The focus was coding positive and negative responses to capture levels of obesity stigma. Analysis carried out by one researcher and validated with thesis supervisor.
Limitations identified by author	Homogeneity of sample may limit generalisability. Possible social desirability effects due to researcher being overweight. Picture prompts may not have been realistic in terms of responses.
Limitations identified by reviewer	The research design is partly quantitative, and the aims and methods are narrowly focused, with limited exploration of children’s perceptions on a broader level.

Study identifier	Herbert
Research question / study focus	Views about weight surveillance and about weight more generally
Theoretical approach	NR
Sampling and recruitment methods	Sampling of schools from a list of all schools in selected area (implicitly, attempted to recruit all those schools), with additional schools from researcher contacts; school response rate 11/285 (of which 4 recruited enough children to participate). Invitations were sent by schools to parents of children in selected year group (unclear if this was all children). Individual response rate NR, but stated to be “low” (p7)
Setting / context / location	SW England, Hampshire, London; 3 state schools, 1 fee-paying; Index of Multiple Deprivation deciles 10 (least deprived) n=2, 5 n=1, 3 n=1
Sample size	48

Sample characteristics	Year 4-7 (age 8-12), with most in Years 5-6; 23 F, 25 M; ethnicity 65% White British, 2% Black British, 2% mixed, 31% not disclosed.
Year data collected	NR (submitted 2024)
Data collection methods	Focus groups (n=4 to 10 participants); mean 27 mins; activities including 'mind mapping' and responding to a story about experiences of the NCMP; children could also write down their thoughts and place them in a 'secret box'. Group facilitators received specific training in issues around talking to children about weight.
Data analysis methods	Thematic analysis, led by a single researcher with input from two others
Limitations identified by author	Low response rate and likely selection bias. Participants' weight status was (deliberately) not recorded. Larger groups were difficult to facilitate and not all children may have had a chance to participate. Focus groups were mixed gender and this may have inhibited some children.
Limitations identified by reviewer	Some unclarity around sampling

Study identifier	Hooper
Research question / study focus	Conceptions of health, with reference to physical education
Theoretical approach	NR
Sampling and recruitment methods	Schools sampled based on prior survey, to select those which were aiming to support pupils to lead healthy lifestyles. Individual participants selected by stratified random sampling (accounting for gender, ethnicity, special educational needs, English as an additional language status and pupil premium status as a proxy for SES). Participants recruited at a briefing at school; parental consent (opt-out) received for 143/150.
Setting / context / location	Nottinghamshire and Derby. School populations: 49-51% male; 5-77% BME; 2-8% special educational needs; 1-22% English additional language; 5-26% pupil premium

Sample size	Unclear. N=117 for the case studies and N= 26 for the pilot had parental consent, but not clear that all of these actually participated (p53, p55)
Sample characteristics	Age 11-12. Other characteristics NR, but stated that samples were representative of school populations (see under 'setting/context')
Year data collected	2015-16
Data collection methods	Participatory focus groups in two phases. One phase including exercises, visual prompts, mind mapping; questions focused on concepts of health; conducted during PE lesson time; 3-8 participants per group; 45-75 minutes. Methods piloted with five groups in the pilot site. Second phase with the same participants (where available) which built on the findings of the first and used more open-ended tasks (producing posters and information sheets, small-group work on case studies).
Data analysis methods	Foucauldian discourse analysis. Analysis focused on identifying discursive constructs (particularly relating to 'health'), action orientation and positioning. Unclear whether more than one researcher was involved
Limitations identified by author	NR
Limitations identified by reviewer	Some unclarity in sampling, and demographics only reported at school level. Study focus only partly relates to the review question.

Study identifier	Kamal
Research question / study focus	Views about determinants of obesity and compensatory reasoning about health behaviours
Theoretical approach	Cognitive-psychological theories of compensatory health beliefs
Sampling and recruitment methods	NR (other than inclusion criteria: age 5-11 and able to converse in English)

Setting / context / location	Midlands. One urban and one rural school; pupil demographics were mostly White British and higher-SES
Sample size	48 for draw and talk, 35 for focus groups (unclear if these overlapped)
Sample characteristics	Age 5-10 (mean 7.42 for draw and talk phase, 7.29 for focus group phase). 46 F, 37 M (total, but see note above)
Year data collected	NR (submitted 2015)
Data collection methods	Phase 1: individual interviews using (a) “priming” task where children were presented with silhouettes of different body shapes and asked think about what was healthy or unhealthy; (b) draw and talk method where children were asked to draw an unhealthy or unfit person and Piagetian clinical interviewing used to probe their perceptions in detail. Interviews conducted in quiet room in school; 10-40 minutes. Phase 2: focus groups (31-58 minutes); no further information. [Some information is unavailable as the publicly available thesis does not have the appendices.]
Data analysis methods	Phase 1: content analysis using a priori framework of determinants of obesity. Phase 2: thematic analysis using a critical realist approach. No further information on analysis process.
Limitations identified by author	Use of ‘unhealthy’ / ‘unfit’ in the priming task may have shaped the views expressed. Focus group schedule may have been too broad.
Limitations identified by reviewer	Very limited information on sampling and sample characteristics.

Study identifier	Kesten
Research question / study focus	Influences on girls’ obesity-related health behaviours
Theoretical approach	Community Readiness Model / Trans-Theoretical Model of health behaviour
Sampling and recruitment	Schools sampled using stratified random sampling based on school size and area-level SES. All children in Years 3-6 in selected schools were invited to participate, but it’s unclear

methods	how many actually received the invitation and response rate NR. Sampling guided by theoretical saturation.
Setting / context / location	Charnwood (Leicestershire). The area population is 92.5% White British, with 14.2% of children in poverty and 11.6% eligible for free school meals. 4 small schools, 4 large; 3 least, 3 medium and 2 most deprived areas (tertiles of Index of Multiple Deprivation)
Sample size	56
Sample characteristics	Age 6-11; all female; no further information (mentioned p297 that sample was not as ethnically diverse as the population, but information NR)
Year data collected	2010
Data collection methods	Focus groups in quiet area in school; 2-7 participants; 30-55 minutes. Topics included ideas of 'community', healthy eating and physical activity, and several tasks designed to identify influences on health behaviours. Data collection piloted before study with daughters of university staff (and pilot observed by second researcher).
Data analysis methods	Thematic analysis. Coding reviewed, and a subsample of data independently double-coded, by thesis supervisors.
Limitations identified by author	Data not comprehensive. Views of physical activity may have been biased towards sport. Researcher may have been seen as an authority figure which could influence data. Lack of ethnic diversity in sample.
Limitations identified by reviewer	No major limitations

Study identifier	Kumari
Research question / study focus	Views of young people with overweight
Theoretical approach	NR
Sampling and recruitment methods	Participants recruited in person from a weight management programme. Response rate NR

Setting / context / location	NR
Sample size	11
Sample characteristics	Age 11-13. 4 F, 7 M. 5 White British, 1 Indian, 3 Pakistani, 2 Black African-Caribbean. All participants overweight, but data NR.
Year data collected	NR (submitted 2014)
Data collection methods	Data collection process NR. Interview questions focused on views and experiences of weight and support for attaining a healthy weight. Interview schedule piloted with two non-overweight young people.
Data analysis methods	Analysis based on grounded theory using constant comparative method. One transcript double-coded by second researcher.
Limitations identified by author	Small sample size with few female participants. Sample included two sets of siblings and their responses may have been related.
Limitations identified by reviewer	Limited information on methods or sample.

Study identifier	Lewis
Research question / study focus	Overweight children's views of physical activity
Theoretical approach	NR
Sampling and recruitment methods	Sampled from a community-based weight management programme. Sampling purposive for diversity in age, ethnicity and area-level SES. "There was an open invitation to take part", but detail of recruitment NR. Total participation rate 58/290
Setting / context / location	"A Northern town"; higher than average deprivation and 24% BME population

Sample size	58
Sample characteristics	Age 6-16 (6-11 n=39, 12-16 n=29). 29 F, 29 M. All overweight / obese (BMI $\geq$ 91st percentile)
Year data collected	NR (published 2014)
Data collection methods	Individual semi-structured interviews in “quiet” settings adjacent to physical activity settings; 5-30 minutes.
Data analysis methods	Thematic coding with a framework derived from previous research. Multiple researchers are mentioned but validation NR.
Limitations identified by author	Participants were attending the programme and may have been more motivated than others; all had at least one supportive parent. Younger children may not participate as extensively.
Limitations identified by reviewer	Fairly limited data is reported, and much of the data focuses on experiences of the programme rather than broader perceptions.

Study identifier	Mansfield
Research question / study focus	Children’s views of childhood obesity
Theoretical approach	NR
Sampling and recruitment methods	School (N=1) sampled purposively for low SES. All parents of children in Year 5 in selected school were sent consent forms; 9/30 consented; n=8 in final sample [unclear why less than consent rate]
Setting / context / location	Location NR; area of “high socio-economic disadvantage”
Sample size	8
Sample characteristics	Age 9-10 (Year 5); 3 F, 5 M

Year data collected	NR (published 2011)
Data collection methods	Individual [?] interviews with discussion prompts focusing on perceptions of obesity; “no longer than 30 minutes”; picture prompts also used for body size. Limited information on context of data collection.
Data analysis methods	Thematic analysis; coding carried out independently by two researchers and then resolved
Limitations identified by author	Small, possibly unrepresentative sample. Weight status of participants was not measured. Possible social desirability bias in responses.
Limitations identified by reviewer	No major limitations. The results are briefly presented and do not explore the complexity of views in depth.

Study identifier	Miller
Research question / study focus	Young women’s views on primary prevention programmes for eating disorders
Theoretical approach	NR
Sampling and recruitment methods	Recruited through Guiding units. Consent obtained from parents and participants. Excluded those “who were already diagnosed or who were under investigation for a possible eating disorder” (p443). No further information.
Setting / context / location	NR
Sample size	22
Sample characteristics	Age 10-14; all female
Year data collected	NR (published 2010)
Data collection methods	Focus groups, 4-5 participants each, stratified by age. Interactive tasks including a ‘secret box’, visual prompts and creating diagrams.



Data analysis methods	Framework analysis; partly double-coded
Limitations identified by author	Convenience sample. Small sample size. Data from the 'secret box' component could not be explored further (and data collection methods were not piloted).
Limitations identified by reviewer	Very little information on sampling, context or sample characteristics. The reporting of results is very brief and there is limited exploration of the themes. The study is focused on a specific question and not all the data is relevant for this review.

Study identifier	Monaghan
Research question / study focus	Views of body size and health
Theoretical approach	Feminism, poststructuralism, fat studies
Sampling and recruitment methods	NR
Setting / context / location	An all-girls school, no further information
Sample size	24
Sample characteristics	Age 12-13; all female; "Most identified as White British, though the group also included participants who identified as Mauritian, Turkish, half French, German and Indian" p124
Year data collected	2016
Data collection methods	Focus groups including a drawing exercise as part of educational workshops; workshops also included pedagogical content around fat acceptance and critical health theories. Topics included general views of health and well-being, body confidence and school policies.
Data analysis methods	Coding focused on identification of "health discourses" and discursive strategies, and in a subsequent stage, on "absences or silences ... and anomalies" (p126)

Limitations identified by author	NR
Limitations identified by reviewer	Very limited description of methods or sample. The workshops were both education and research and the authors do not consider the tensions involved in eliciting views as data on a topic in the same process as delivering pedagogical content on that topic (informed by a strong value framework).

Study identifier	Murphy
Research question / study focus	Views of health, diet, physical activity and weight, with focus on black and minority ethnic children
Theoretical approach	NR
Sampling and recruitment methods	Sampling of schools targeted at those with high proportions of BME pupils and/or pupils eligible for free school meals. All children in selected year groups invited and recruited in order of response, with additional sampling to prioritise BME participants. 26 participants out of 210 total invitations (but unclear what proportion this was of consenting children; response rates are described as 'low' in the discussion p604).
Setting / context / location	Coventry. N=3 schools; populations BME 66%-90%, FSM 31%-43%.
Sample size	26
Sample characteristics	Age 9-10; 15 F, 11 M. 69% lived in low-SES areas (highest IMD quintile). 4 White British, 3 White European, 4 Black African, 2 Arab, 3 Asian Indian, 3 Asian Bangladeshi, 7 mixed/other. 77% UK-born. 77% at least one parent born outside the UK.
Year data collected	NR (submitted 2020, published 2021)
Data collection methods	Individual interviews using 'draw, write and tell' technique. Children drew a picture of a healthy and an unhealthy child and this was used as a prompt for discussion. Interview guide also focused on diet, physical activity and weight. Interviews conducted in a quiet room in school.

Data analysis methods	Framework analysis with a priori focus on role of ethnicity and SES (as thematic constructs and as dimensions of difference in the data). Single coding but initial codes were reviewed by multiple researchers.
Limitations identified by author	Not all ethnic groups in local population represented in sample. Data on weight status not collected. Low response rates at school and individual level and hence potential sampling bias. The lead researcher who conducted interviews is White and some BME children may have been less forthcoming as a result.
Limitations identified by reviewer	No major limitations

Study identifier	Newson
Research question / study focus	Experiences of children living with obesity; views of a weight management programme [not clearly distinguished in the report]
Theoretical approach	NR
Sampling and recruitment methods	Children living with obesity sampled from community-based weight management programmes; no further information
Setting / context / location	Location NR; two programmes in areas of high deprivation, one in area of lower deprivation
Sample size	34
Sample characteristics	Mean age 9.5 (range 7-13). 19 F, 15 M. All had BMI >95th percentile
Year data collected	NR (submitted 2023; recruitment in 2018)
Data collection methods	Individual interviews (mean 37 mins) in children's homes or community venues (children could opt to have a parent present). Participants were given a scrapbook ahead of the interview (based on PPI for the project) with content based on the interview schedules; they could share this in the interview or keep it private. Interview questions mainly related to experiences of the intervention, but with some

	broader topics. Lead interviewers were not involved in delivering the intervention.
Data analysis methods	Reflexive thematic analysis including both interview transcripts and scrapbooks. Coding was inductive and iterative, involving discussion between multiple researchers (but formal double-coding or validation NR).
Limitations identified by author	Presence of parent for some interviews may have influenced responses. The intervention may have already improved children's wellbeing before data collection. Individual SES not measured. Gender differences not analysed.
Limitations identified by reviewer	Limited information on sampling. It is unclear whether the main focus is experiences of the intervention, or broader attitudes, and the analysis mixes the two.

Study identifier	Nnyanzi
Research question / study focus	Impact and implementation of National Child Measurement Programme
Theoretical approach	NR
Sampling and recruitment methods	Schools selected for diversity in SES. "Participating schools were selected using a proportionate stratified random sampling technique" p95. For the qualitative study, children were sampled purposively for diversity in area-level SES (n=7 from each tertile) from the larger sample for the quantitative component. No further detail on how they were sampled. The sample includes 21 children, so either response rate was 100% or children were recruited until the goal was reached (but there is a discrepancy between the stated goal and the attained sample wrt SES).
Setting / context / location	Gateshead. Area (PCT) is higher deprivation than average and higher rates of obesity.
Sample size	21 (for child qualitative data)
Sample characteristics	Age 10-11. 14 F, 7 M. Area-level deprivation high n=13, moderate n=2, low n=6. All White British. N=7 overweight/obese.
Year data collected	NR (submitted 2011)

Data collection methods	Individual semi-structured interviews in a private room at school; approx. 35 minutes. Questions focused on experiences of participating in the NCMP measurement and feedback and any subsequent impacts.
Data analysis methods	Thematic analysis; coding by two researchers independently; data triangulated between child and parent interviews [data from the latter not extracted here]
Limitations identified by author	Possible sampling bias due to need for opt-in parental consent. Only area-level SES used to stratify sampling.
Limitations identified by reviewer	Some unclarity in sampling for qualitative component. The study has a particular focus and most of the qualitative data reported is from parents, so limited relevant data is available for this review.

Study identifier	Ogden
Research question / study focus	Choices about food
Theoretical approach	NR
Sampling and recruitment methods	School sampling NR. Parental consent forms sent to all parents of children in selected year group. Participation rate 27 of “approx. n=80”.
Setting / context / location	S England; “a mixed ability state run Junior school” (p3)
Sample size	27
Sample characteristics	Age 9-10. 17 F, 10 M. All White British
Year data collected	NR (submitted 2019)
Data collection methods	Individual interviews in “semi-private” space in school library; 10-15 minutes. Children were given a food selection task based on visual prompts and asked to talk through their selections.

Data analysis methods	Inductive thematic analysis by two researchers
Limitations identified by author	Possible social desirability bias. May not generalise to real-world settings. Sample was homogeneous and may not be generalisable to other groups of children.
Limitations identified by reviewer	Study has a specific focus and only partly overlaps with the topic of this review.

Study identifier	Paddock
Research question / study focus	Use of social media
Theoretical approach	Critical realism
Sampling and recruitment methods	NR
Setting / context / location	N England. School in “area of economic deprivation” (p69), but details NR.
Sample size	64
Sample characteristics	Age 11-14 (mean 12.56). 33 F, 30 M, 1 not disclosed. 94% White, 3% mixed race, 2% African Caribbean. Described as “predominantly [...] of low socio-economic status” but no data reported.
Year data collected	NR (for relevant data) (submitted 2022)
Data collection methods	Focus groups; 5-8 participants each; 3 boys, 3 girls, 3 mixed; on school premises during lesson time; 29-50 minutes. Semi-structured interviews based on vignettes showing social media interactions. Questions focused on experiences of social media, appearance and gender differences.
Data analysis methods	Reflexive thematic analysis by one researcher, with some validation of themes by thesis supervisor (but not formally double-coded).

Limitations identified by author	Possible social desirability bias from focus groups. Sample was homogeneous and findings may not be generalisable to other groups.
Limitations identified by reviewer	Unclarity around sampling. The study focus is appearance in general rather than body size specifically.

Study identifier	Palmer
Research question / study focus	Understandings and experiences of the body
Theoretical approach	Draws on sociological theories of embodiment
Sampling and recruitment methods	Sampling of schools (n=2) for diversity in SES and cultural context, and state vs private. Children recruited through presentations in class (to all children in selected year group) and volunteered and then took home parental consent forms. Participation rate 39/92.
Setting / context / location	N England. One state school in a relatively deprived, “ethnically mixed” area; one private school in “a wealthy suburb” with low proportion of BME pupils (p52)
Sample size	39
Sample characteristics	Age 9-10. 23 F, 16 M.
Year data collected	2011-12
Data collection methods	Initial phase of observation in classrooms and other school sites. Group interviews (2-3) in self-selected friendship pairs/groups; “empty” rooms in school; 40-60 mins. Sessions involved various prompts and activities including stories, self-portraits and daily timelines, with a general focus on ideas about the body.
Data analysis methods	Thematic analysis including observation notes and interview transcripts, with focus on emotional and physical aspects of communication. Initial coding framework derived from the study research questions.
Limitations identified by	SES only measured at school level.

author	
Limitations identified by reviewer	Limited description of sample. The study has a broad focus and it is not always clear how the specific foci of the analysis were identified.

Study identifier	Rich
Research question / study focus	Not clearly stated
Theoretical approach	NR
Sampling and recruitment methods	Schools sampled for diversity in “social, cultural and policy contexts” (p9); no further information
Setting / context / location	“Middle England”. 8 schools with a wide range of populations, including independent and state schools
Sample size	90 for interviews (but unclear how many of these meet age criteria for this review); 1176 for questionnaires which did provide some qualitative data, but unclear which component this data comes from
Sample characteristics	Age 9-16. All the participants cited appear to be female, but there were at least some boys in the broader sample, so unclear if data from girls have been selected for this analysis. No further information
Year data collected	NR (published 2013)
Data collection methods	Questionnaires and interviews, no further information
Data analysis methods	NR
Limitations identified by author	NR
Limitations identified by	No information of any kind on methods or sample. The report appears to cover an analysis of a selection of data from a broader project, but it is unclear how this data was



reviewer	chosen. The research question is unclear and inconsistently reported. [Note that data extraction refers to Rich and Evans (2013); the linked papers refer to different subsamples and limited data was extracted from these.]
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Study identifier	Willett
Research question / study focus	Girls' views about fashion and digital media
Theoretical approach	Draws on feminist media studies and theories of consumer culture
Sampling and recruitment methods	Sampling of school (n=1) NR. Participants selected by school with the aim of being representative of the school population (details NR)
Setting / context / location	Inner London. School population approx. 75% BME (largest groups African-Caribbean and Bangladeshi); 60% English as an additional language; "nearly half" special educational needs; "considerable levels of social and financial hardship" (details NR). School was co-educational but was previously boys and "boys still outnumbered girls" (p425).
Sample size	NR
Sample characteristics	Age 12-13. All female. No further information
Year data collected	2004-05
Data collection methods	Participants were involved in workshops where they created website content; conversations during the workshops were recorded. After this, group semi-structured interviews; 2-4 participants; friendship groups. Interview topics included design and fashion, IT usage.
Data analysis methods	NR
Limitations identified by author	NR
Limitations identified by	Limited description of methods or sample. The study addresses a specific question which only partly overlaps with the focus of this review.

reviewer	
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Study identifier	Windram-Geddes
Research question / study focus	Girls' experiences of PE and physical activity
Theoretical approach	Draws on feminist theory and fat studies
Sampling and recruitment methods	Sampling of schools for diversity in location and demographics (p91). Sampling of individuals unclear. Recruitment varied by site but appears that all girls in selected year groups were invited to participate (at least for the secondary school sample); response rate NR (pp103-4). For primary school sample, recruitment was through a "Keep Active club", but limited information is reported
Setting / context / location	Central Scotland. Mix of urban, suburban and village locations.
Sample size	For primary NR exactly, approx. n=12 (p121); for secondary n=107
Sample characteristics	Age 10-14; all female; no other information
Year data collected	2011-12
Data collection methods	For primary school children: focus groups, self-selected groups, 2-4 per group. "Kinetic" focus groups where participants could be physically active during the discussion. Visual prompts and writing / drawing also used. For secondary school: focus groups with 4-8 participants and 1 individual interview, in school sites. Questions focused on experiences of PE and physical activity.
Data analysis methods	Thematic coding using first descriptive and then analytic codes; iterative in parallel with data collection
Limitations identified by author	Research carried out in schools rather than "a more relaxed space" (p135). Boys not included in focus groups. Participants may have been reluctant to share personal experiences.
Limitations identified by reviewer	Uncertainty around sampling and recruitment. Only part of the data is relevant to this review (although the linked paper reports an analysis focusing on this data).

Abbreviations: BMI, Body Mass Index; F, female; IMD, Index of Multiple Deprivation; M, male; NCMP, National Child Measurement Programme; NR, not reported; PE, physical education; SES, socio-economic status

## 10 APPENDIX E. STUDIES EXCLUDED AT FULL TEXT

Reference	Exclusion criterion
Benninghoven Dieter and Tetsch Nina; Jantschek Gunter;. (2008). Patients with eating disorders and their siblings. An investigation of body image perceptions.. <i>European child &amp; adolescent psychiatry</i> , 17(2), pp.118-26.	EX1
Adams M and Robling M; Grainger J; Tomlins J; Johnson A; Morris S; Velangi M; Jenney M;. 2016. "Quality of life Evaluation in patients receiving Steroids (the QuEST tool): initial development in children and young people with acute lymphoblastic leukaemia.". <i>Archives of disease in childhood</i> 101(3):241-6.	EX2
Allen Kerry. 2011. "Managing Prader-Willi syndrome in families: an embodied exploration.". <i>Social science &amp; medicine</i> (1982) 72(4):460-8.	EX3
Anonymous. 2017. "Somebody like me: a report investigating the impact of body image anxiety on young people in the UK". :44.	EX2
Arai L and Panca M; Morris S; Curtis-Tyler K; Lucas PJ;. 2015. Time, monetary and other costs of participation in family-based child weight management interventions: qualitative and systematic review evidence. : <i>journals.plos.org</i> .	EX3
Banks Jonathan and Cramer Helen; Sharp Deborah J; Shield Julian Ph; Turner Katrina M;. 2014. "Identifying families' reasons for engaging or not engaging with childhood obesity services: A qualitative study.". <i>Journal of child health care : for professionals working with children in the hospital and community</i> 18(2):101-10.	EX3
Bauer Katherine W and Branch Jacqueline M; Appugliese Danielle P; Pesch Megan H; Miller Alison L; Lumeng Julie C; Kaciroti Niko;. 2021. "Emerging Ideas. How Do Low-Income Mothers Talk to Children About Weight and Body Shape?". <i>Family Relations</i> 70:1477-1484.	EX2
Bell Sarah L and Audrey Suzanne; Cooper Ashley R; Noble Sian; Campbell Rona;. 2017. "Lessons from a peer-led obesity prevention programme in English schools.". <i>Health promotion international</i> 32(2):250-259.	EX3
Bhagat Krishna and Howard Donna E;. 2018. "The Dominant Obesity Discourse Versus Children's Conceptualizations of Health: A Comparison Through Dialogue and Drawings". <i>Qualitative Health Research</i> 28:1157-1170.	EX5
Boddy Lynne M and Knowles Zoe R; Davies Ian G; Warburton Genevieve L; Mackintosh Kelly A; Houghton Laura; Fairclough Stuart J;. 2012. "Using formative research to develop the healthy eating component of the CHANGE! school-based curriculum intervention.". <i>BMC public health</i> 12:710.	EX3
Braden Abby and Crow Scott; Boutelle Kerri;. (2014). Child self-reported motivations for weight loss: impact of personal vs. social/familial motives on family-based behavioral weight loss treatment outcomes. <i>Eating and Weight Disorders - Studies on Anorexia Bulimia and Obesity</i> , 20(2), pp.205-213.	EX1
Brockman Rowan and Fox Kenneth; Jago Russell;. 2011. "What is the meaning and nature of active play for today's children in the UK?". <i>International Journal of Behavioral Nutrition and Physical Activity</i> 8:15-15.	EX3
Brockman Rowan and Jago Russell; Fox Kenneth; Thompson Janice; Cartwright Kim; Page Angie;. 2009. "'Get off the sofa and go and play': Family and socioeconomic influences on the physical activity of 10-11 year old children". <i>BMC Public Health</i> 9:.	EX3
Burnette C Blair and Kwitowski Melissa A; Mazzeo Suzanne E;. 2017. "'I don't need people to tell me I'm pretty on social media:' A qualitative study of social media and body image in early adolescent girls.". <i>Body image</i> 23:114-125.	EX5

Calvert S and Dempsey RC; Povey R;. 2020. "A qualitative study investigating food choices and perceived psychosocial influences on eating behaviours in secondary school students". BRITISH FOOD JOURNAL 122(4):1027-1039.	EX3
Catalbas Meltem. 2022. "A Focused Ethnographic Study of Children's Perspectives and Experiences of Being Obese and Participating in an Obesity Intervention Program". , University of Sheffield (United Kingdom).	EX2
Clark MI and Spence JC; Holt NL;. 2011. "In the shoes of young adolescent girls: Understanding physical activity experiences through interpretive description". Qualitative research in sport ... :.	EX5
Clarke Joanne L and Griffin Tania L; Lancashire Emma R; Adab Peymane; Parry Jayne M; Pallan Miranda J;. 2015. "Parent and child perceptions of school-based obesity prevention in England: a qualitative study". BMC public health 15:1224.	EX3
Clarke Joanne Louise. 2016. "The role of the primary school in preventing childhood obesity". , University of Birmingham.	EX3
Clarke Rebecca and Heath Gemma; Nagakumar Prasad; Pattison Helen; Farrow Claire;. 2022. ""He's not fat, he just has asthma": a qualitative study exploring weight management in families living with pediatric asthma.". The Journal of asthma : official journal of the Association for the Care of Asthma 59(9):1750-1757.	EX2
Clarke Rebecca. 2020. "Weight Management in Children Who Have Asthma and Comorbid Overweight/Obesity". , Aston University (United Kingdom).	EX3
Copperstone CS and Douglas FCG; Craig LCA; Jackson DM;. 2018. "Parents and Schoolchildren Talking about Food and Drink Choices - A Focus Group Study". HEALTH BEHAVIOR AND POLICY REVIEW 5(1):28-39.	EX3
Cox Jennifer and Searle Aidan; Thornton Gail; Hamilton-Shield Julian; Hinton Elanor;. 2022. "Integrating COM-B and the Person-Based Approach to develop an ACT based therapy programme to raise self-determination in adolescents with obesity". Research Square (Research Square) :.	EX3
Cox Jennifer S and Searle Aidan J; Hinton Elanor C; Giri Dinesh; Shield Julian P H;. 2021. "Perceptions of non-successful families attending a weight-management clinic.". Archives of disease in childhood 106(4):377-382.	EX2
Craddock N and Smith HG; Garbett KM; Alleva JM;. 2025. Functionality appreciation in young children. : Elsevier.	EX3
Credos. (2016). Picture of health?. , , pp.23.	EX1
Curtis Penny. 2008. "The experience of young people with obesity in secondary school: some implications for the healthy school agenda". Health and Social Care in the Community, Vol 16 No 4 Jul 2008 :9.	EX2
Damant Estelle. 2020. "Grade A health: an exploration of the social construction of health and ability within secondary school physical education". :.	EX2
Datta N and Foukal M; Erwin S; Hopkins H; Tchanturia K; Zucker N;. 2021. "A mixed-methods approach to conceptualizing friendships in anorexia nervosa". PLOS ONE 16(9):.	EX3
Dohnt H K and Tiggemann M;. (2008). Promoting positive body image in young girls: An evaluation of 'Shapesville'. European Eating Disorders Review, 16(3), pp.222-233.	EX1
Drage Lucy Amelia. 2014. "Body esteem and education: How does body esteem develop in children and young people and what can schools do to promote positive body esteem?". , University of Exeter (United Kingdom).	EX3
Drummond Murray. 2012. "Boys' Bodies in Early Childhood". Australasian Journal of Early Childhood 37(4):107-114.	EX5

Edwards S and Skouteris H; Rutherford L; Cutter-Mackenzie A;. 2013. “It’s All About Ben10[TM]’: Children’s Play, Health and Sustainability Decisions in the Early Years”. <i>Early Child Development and Care</i> 183(2):280-293.	EX2
Eyre E. 2014. “Environmental influences on physical activity and weight status in children from deprived multi-ethnic backgrounds in Coventry”. , Coventry University (United Kingdom).	EX3
Eyre Emma and Duncan Michael; Birch Samantha; Cox Val;. 2013. “Environmental and school influences on physical activity in South Asian children from low socio-economic backgrounds”. <i>Journal of Child Health Care</i> 19:345-358.	EX3
Fairbrother Hannah and Ellis Katie;. (2016). <i>Everyday Family Food Practices</i> .	EX1
Farman R and Fitzgerald H; Radley D;. 2019. “Weight management provision in a special school: Experiences of disabled children and their families”. 26th European Congress on Obesity. Glasgow United Kingdom. 12(Supplement 1):268.	EX3
Flint Tori K. 2020. “Children’s Critical Reflections on Gender and Beauty through Responsive Play in the Classroom Context”. <i>Early Childhood Education Journal</i> 48(6):739-749.	EX5
Freire Kate and Pope Rodney; Coyle Julia;. 2018. “What are the drivers of cross-generational physical activity? Exploring the experiences of children and parents”. <i>Journal of Public Health</i> 27:591-601.	EX3
Fremont Ettya R and Friedrich Elizabeth A; Grimberg Adda; Miller Victoria A;. 2024. “Youth and parent perceptions of youth decision-making roles regarding evaluation for short stature”. <i>Children’s Health Care</i> 53:148-162.	EX3
Gadsby E W and Hotham S; Eida T; Lawrence C; Merritt R;. 2020. “Impact of a community-based pilot intervention to tackle childhood obesity: a ‘whole-system approach’ case study.”. <i>BMC public health</i> 20(1):1818.	EX3
Girlguiding. (2023). <i>Girls’ attitudes survey 2023: girls’ lives over 15 years..</i> London: Girlguiding, pp.35. Available at: <a href="https://www.girlguiding.org.uk/globalassets/docs-and-resources/research-and-campaigns/girls-attitudes-survey-2023.pdf">https://www.girlguiding.org.uk/globalassets/docs-and-resources/research-and-campaigns/girls-attitudes-survey-2023.pdf</a> .	EX1
Grimmett Chloe and Croker Helen; Carnell Susan; Wardle Jane;. 2008. “Telling parents their child’s weight status: psychological impact of a weight-screening program.”. <i>Pediatrics</i> 122(3):e682-8.	EX3
Guest E and Jarman H; Sharratt N; Williamson H; White P; Harcourt D; Slater A;. 2021. “‘Everybody’s Different: The Appearance Game’. A randomised controlled trial evaluating an appearance-related board game intervention with children aged 9-11 years.”. <i>Body image</i> 36:34-44.	EX3
Handford Charlotte M and Rapee Ronald M; Fardouly Jasmine;. (2018). The influence of maternal modeling on body image concerns and eating disturbances in preadolescent girls.. <i>Behaviour research and therapy</i> , 100, pp.17-23.	EX1
Harding Sarah and Smith Laura Mazzoli;. 2022. “Freedom through constraint: Young women’s embodiment, space and wellbeing during lockdown.”. <i>Wellbeing, space and society</i> 3:100101.	EX2
Harkensee Christian and Andrew Rachel;. 2021. “Health needs of accompanied refugee and asylum-seeking children in a UK specialist clinic.”. <i>Acta paediatrica (Oslo, Norway : 1992)</i> 110(8):2396-2404.	EX2
Harriger JA and Thompson JK;. (2012). Psychological consequences of obesity: Weight bias and body image in overweight and obese youth. <i>International Review of Psychiatry</i> , , pp..	EX1

Harriger Jennifer and Trammell Janet; Wick Madeline; Luedke Madeline;. (2019). Gender and age differences in pre-schoolers' weight bias beliefs and behavioural intentions.. The British journal of developmental psychology, 37(4), pp.461-465.	EX1
Harrison Sarah and Rowlinson Madaleine; Hill Andrew J;. (2016). "No fat friend of mine": Young children's responses to overweight and disability.. Body image, 18, pp.65-73.	EX1
Hart CS and Page A;. 2020. "The capability approach and school food education and culture in England: 'gingerbread men ain't gonna get me very far'". CAMBRIDGE JOURNAL OF EDUCATION 50(6):673-693.	EX3
Harwood Valerie. 2012. "Neither Good nor Useful: Looking Ad Vivum in Children's Assessments of Fat and Healthy Bodies". Discourse: Studies in the Cultural Politics of Education 33(5):693-711.	EX5
Henderson Emily Jacqueline. 2010. "Adiposity in British Pakistani and white British school children aged 7-11 years living in Middlesbrough, UK: associations with ethnicity, generation, and birth weight". , University of Durham (United Kingdom).	EX3
Hill J. 2015. "If you miss the ball, you look like a total muppet!' Boys investing in their bodies in physical education and sport". Sport, Education and Society :.	EX2
Hill Joanne. 2015. "Girls' Active Identities: Navigating Othering Discourses of Femininity, Bodies and Physical Education". Gender and Education 27(6):666-684.	EX2
Holt Nicholas L and Neely Kacey C; Newton Amanda S; Knight Camilla J; Rasquinha Allison; Ambler Kathryn A; Spence John C; Ball Geoff D C;. 2015. "Families' Perceptions of and Experiences Related to a Pediatric Weight Management Intervention: A Qualitative Study.". Journal of nutrition education and behavior 47(5):427-31.e1.	EX3
Holub SC. (2008). Individual differences in the anti-fat attitudes of preschool-children: The importance of perceived body size. Body image, , pp..	EX1
Holub Shayla C and Tan Cin Cin; Patel Sanobar L;. (2011). Factors associated with mothers' obesity stigma and young children's weight stereotypes. Journal of Applied Developmental Psychology, 32, pp.118-126.	EX1
Howells Kristy and Bowen J; Mannion K; McMartin C;. 2019. "The adoption of daily mile as an active mile initiative: the children's and teachers' voices". : .	EX3
Institute Joanna Briggs. (2011). Children's views about obesity, body size, shape and weight; Inequalities and the mental health of young people: a systematic review of secondary school-based .... Journal of Advanced Nursing, , pp..	EX1
Jassi Amita D and Baloch Aysha; Thomas-Smith Kike; Lewis Angela;. 2020. "Family accommodation in pediatric body dysmorphic disorder: A qualitative study.". Bulletin of the Menninger Clinic 84(4):319-336.	EX3
Jones Catrin P and Armstrong-Moore Roxanne; Penney Tarra L; Cummins Steven; Armitage Sofie; Adams Jean; White Martin;. 2022. "Adolescents' perspectives on soft drinks after the introduction of the UK Soft Drinks Industry Levy: A focus group study using reflexive thematic analysis.". Appetite 179:106305.	EX3
Keenaghan S and Polaskova M; Thurlbeck S;. (2020). Alice in Wonderland: The effects of body size and movement on children's size perception and bodily awareness in virtual reality. : scholar.archive.org.	EX1
Kehler Michael P. H. D and Atkinson Michael P. H. D;. 2015. "The Space Between: Negotiating Male Subjectivities in Physical Education Research". International Journal of Men's Health 14:259-272.	EX5
Kemp BJ and Thompson DR; McGuigan K; Watson CJ; Heron N; Woodside J; Devaney FK; Harrison N; Neill DT; Cutting D; Ski CF;. 2023. "Families'	EX3

expectations of an eHealth family-based cardiovascular disease-risk reduction programme”. EUROPEAN JOURNAL OF CARDIOVASCULAR NURSING 22(1):82-88.	
Ketteridge Asha. 2008. “Exploring the reasons why adolescents participate in physical activity and identifying strategies that facilitate their involvement in such activity”. Australian Occupational Therapy Journal 55(4):.	EX3
Kilmurray M and Collins SC; Caterson ID; Hill AJ;. (2020). Is Weight Bias Evident in Peer Interactions Between Young and Older Children?. OBESITY, 28(2), pp.333-338.	EX1
Kilmurray Michelle. (2017). Peer-to-Peer Responses to Body Shape in Young Children. . University of Leeds.	EX1
Kime N H and McKenna J; Griffiths C; Rivett M; Gately P;. 2018. “A qualitative evaluation of healthy weight services in a local authority in England”. Health Education Journal 77(8):939-951.	EX2
Kirby Joanna and Tibbins Carly; Callens Claire; Lang Beckie; Thorogood Margaret; Tigbe William; Robertson Wendy;. 2012. “Young People’s Views on Accelerometer Use in Physical Activity Research: Findings from a User Involvement Investigation.”. ISRN obesity 2012:948504.	EX3
Kirby Joanne. 2013. “Influences on young people’s physical activity in Scotland : a socio-ecological approach”. , .	EX3
Kornilaki Ekaterina N. (2015). Obesity Bias in Children: The Role of Actual and Perceived Body Size. Infant and Child Development (Online), 24, pp.365-378.	EX1
Krayer A. 2008. “Social comparison and body image in adolescence: a grounds theory approach”. Health Education Research 23(5):.	EX2
Ktenidis Antonios. 2020. “‘Short’ Stories of Young People with Restricted Growth of Their Schooling Experiences (Secondary Education) in the United Kingdom”. , .	EX2
Land Nicole. (2022). Tending, Counting and Fitting with Post-Developmental Fat(s) in Early Childhood Education. Contemporary Issues in Early Childhood, 23(1), pp.80-95.	EX1
Law Catherine and Cole Tim; Cummins Steven; Fagg James; Morris Stephen; Roberts Helen;. 2014. “A pragmatic evaluation of a family-based intervention for childhood overweight and obesity”. . :	EX3
Lee Pi-Hsia and Lai Hsiang-Ru; Chou Yu-Hua; Chang Lu-I; Chang Wen-Ying;. 2009. “Perceptions of Exercise in Obese School-Aged Children”. Journal of Nursing Research 17:170-178.	EX5
Lewis K and Fraser C; Manby M;. 2014. “Is it worth it?A qualitative study of the beliefs of overweight and obese physically active children”. Journal of Physical ... :.	EX3
Lewis Kiara. 2015. “Engaging children and young people in physical activity”. , University of Huddersfield (United Kingdom).	EX3
Lloyd Jenny and Dean Sarah; Creanor Siobhan; Abraham Charles; Hillsdon Melvyn; Ryan Emma; Wyatt Katrina M;. 2017. “Intervention fidelity in the definitive cluster randomised controlled trial of the Healthy Lifestyles Programme (HeLP) trial: findings from the process evaluation.”. The international journal of behavioral nutrition and physical activity 14(1):163.	EX3
Lunde C and Gattario KH;. 2017. “Performance or appearance? Young female sport participants’ body negotiations”. Body image :.	EX5
Lyles Annmarie M. S. R. N and Riesch Susan K. PhD R. N. Faan; Sanders Linda M. P. H; Sass-DeRuyter Suzanne M. A. P. N. P; Birchmeier Becky M. S. R. N; Kotula Kelly B. S. R. N;. 2012. “How Do Treatment-Seeking Overweight Youth and Their	EX5



Parents Describe Weight Promoting Factors in Their Family?”. Journal of Community Health Nursing 29:187.	
Macdiarmid Jennie I and Wills Wendy J; Masson Lindsey F; Craig Leone C A; Bromley Catherine; McNeill Geraldine;. (2015). Food and drink purchasing habits out of school at lunchtime: a national survey of secondary school pupils in Scotland.. The international journal of behavioral nutrition and physical activity, 12, pp.98.	EX1
Mackintosh KA and Knowles ZR; Ridgers ND; Fairclough SJ;. 2011. “Using formative research to develop CHANGE!: a curriculum-based physical activity promoting intervention”. BMC PUBLIC HEALTH 11:.	EX3
Martin Anne. 2014. “Lifestyle interventions to improve educational attainment in overweight or obese children”. , The University of Edinburgh (United Kingdom).	EX2
Matheson Emily and Schneider Jennifer; Tinoco Aline; Gentili Claudio; Silva-Breen Hannah; LaVoi Nicole; White Paul; Diedrichs Phillippa;. (2023). The co-creation, initial piloting, and protocol for a cluster randomised controlled trial of a coach-led positive body image intervention for girls in sport. BMC Public Health, 23, pp..	EX1
Maynard Maria and Baker Graham; Harding Seeromanie;. (2017). Exploring childhood obesity prevention among diverse ethnic groups in schools and places of worship: Recruitment, acceptability and feasibility of data collection and intervention components.. Preventive medicine reports, 6, pp.130-136.	EX1
McDougall J and Duncan M J;. 2008. “Children, video games and physical activity: An exploratory study”. International Journal on Disability and Human Development 7(1):89-94.	EX3
McEvoy Claire and Lawton Julia; Kee Frank; Young Ian; Woodside Jayne; McBratney J; McKinley Michelle;. 2014. “Adolescents’ views about a proposed rewards intervention to promote healthy food choice in secondary school canteens”. Health Education Research 29:799-811.	EX3
McLaughlin Janice. 2017. “The medical reshaping of disabled bodies as a response to stigma and a route to normality”. Medical Humanities 43:244.	EX3
Monaghan Lee F. 2014. “Civilising recalcitrant boys’ bodies: Pursuing social fitness through the anti-obesity offensive.”. Sport, Education and Society 19(6):691-711.	EX2
Morano M and Colella D; Capranica L;. (2011). Body image, perceived and actual physical abilities in normal-weight and overweight boys involved in individual and team sports. Journal of Sports Sciences, , pp..	EX1
Morgan K and Van Godwin J; Darwent K; Fildes A;. 2019. “Formative research to develop a school-based, community-linked physical activity role model programme for girls: CHOosing Active Role Models to INspire Girls (CHARMING)”. BMC PUBLIC HEALTH 19:.	EX3
Murray Aisling and Smith Scott; Dominie Mahala; Nikolajeva Milena; Porricelli Daniele; van Loggerenberg Francois; Ougrin Dennis; Lau Jennifer Y F;. 2024. “Children’s emerging concepts of resilience: insights from using body mapping in an East London cohort sample of 7-10-year-old children.”. Frontiers in psychology 15:1408771.	EX3
Nabors Laura and Thomas Myra; Vaughn Lisa; Adams Ryan; Amaral Joe; Olsen Brian T;. 2011. “Children’s Attitudes About an Overweight or Non-overweight Weight Victim”. Journal of Developmental and Physical Disabilities 23:87-98.	EX5
Nally Sarah and Ridgers Nicola; Gallagher Alison; Murphy Marie; Salmon Jo; Carlin Angela;. 2022. ““When You Move You Have Fun”: Perceived Barriers, and	EX3

Facilitators of Physical Activity From a Child's Perspective". <i>Frontiers in Sports and Active Living</i> 4:.	
O'Connell R and Brannen J;. 2014. "Children's food, power and control: Negotiations in families with younger children in England". <i>CHILDHOOD-A GLOBAL JOURNAL OF CHILD RESEARCH</i> 21(1):87-102.	EX3
O'Connor Jacklin and Golley Rebecca; Perry Rebecca; Magarey Anthea; Truby Helen;. (2014). A longitudinal investigation of overweight children's body perception and satisfaction during a weight management program. <i>Appetite</i> , 85, pp.48-51.	EX1
Owen Sarah E and Sharp Deborah J; Shield Julian P; Turner Katrina M;. 2009. "Childrens' and parents' views and experiences of attending a childhood obesity clinic: A qualitative study.". <i>Primary Health Care Research and Development</i> 10(3):236-244.	EX2
Ozdamar ertekin and Zeynep; Atik Deniz;. 2013. "Children's perception of food and healthy eating: dynamics behind their food preferences". <i>International journal of consumer studies</i> 37:59-65.	EX3
Pallan Miranda and Hurley Kiya L; Griffin Tania; Lancashire Emma; Blissett Jacqueline; Frew Emma; Gill Paramjit; Hemming Karla; Jackson Louise; Jolly Kate; McGee Eleanor; Parry Jayne; Thompson Janice L; Adab Peymane;. 2018. "A cluster-randomised feasibility trial of a children's weight management programme: the Child weigHt mANaGement for Ethnically diverse communities (CHANGE) study.". <i>Pilot and feasibility studies</i> 4:175.	EX3
Paxton SJ and McLean SA; Rodgers RF;. (2022). "My critical filter buffers your app filter": Social media literacy as a protective factor for body image. <i>Body Image</i> , , pp..	EX1
Pearce A and Kirk C; Cummins S; Collins M; Elliman D; Connolly A M; Law C;. 2009. "Gaining children's perspectives: a multiple method approach to explore environmental influences on healthy eating and physical activity.". <i>Health &amp; place</i> 15(2):614-621.	EX3
Perez Marisol, Kroon Van Diest and Ashley M; Smith Haylie; Sladek Michael R;. (2018). Body Dissatisfaction and Its Correlates in 5- to 7-Year-Old Girls: A Social Learning Experiment. <i>Journal of Clinical Child and Adolescent Psychology</i> , 47, pp.757-769.	EX1
Pescott Claire. 2022. "“Me, My Selfie and I”: An Exploration of Subjectivity and Identity Portrayal in the Social Media Use of 10-And 11-Year-Olds”. , University of South Wales (United Kingdom).	EX3
Pescott Claire. 2024. "Self-presentation within children's digital spaces.". <i>Children, young people and online harms: Conceptualisations, experiences and responses.</i> :61-83.	EX3
Pescud M and Pettigrew S; McGuigan MR; Newton RU;. 2010. "Factors influencing overweight children's commencement of and continuation in a resistance training program". <i>BMC PUBLIC HEALTH</i> 10:.	EX3
Pickard Angela. 2013. "Ballet body belief: Perceptions of an ideal ballet body from young ballet dancers.". <i>Research in Dance Education</i> 14(1):3-19.	EX2
Pilcher Jane. 2010. "What not to wear? Girls, clothing and 'showing' the body". <i>Children and society</i> 24:461-470.	EX3
Pittson Helen and Wallace Louise;. (2011). Using intervention mapping to develop a family-based childhood weight management programme.. <i>Journal of health services research &amp; policy</i> , 16 Suppl 1, pp.2-7.	EX1

Pizzirani Bengianni et al;. (2022). Healthy lifestyle programs in out-of-home care: implementing preventative trauma-informed approaches at scale. <i>Australian Social Work</i> , 75(1), pp.5-18.	EX1
Povey R and Cowap L; Gratton L;. 2016. ““They said I’m a square for eating them” Children’s beliefs about fruit and vegetables in England”. <i>British Food Journal</i> :.	EX3
Pratt Keeley J and Lamson Angela L; Radley Sarah V;. 2015. “The Self-Reported Strengths and Concerns of Treatment-seeking Obese Youth and Their Caregivers”. <i>Children’s Health Care</i> 44:87.	EX5
Puglisi L and Okely A; Vialle W; Pearson P;. 2010. “A naturalistic inquiry into the daily lives of obese children”. 11th International Congress on Obesity, ICO 2010. Stockholm Sweden. 11(SUPPL. 1):426.	EX5
Puglisi Lauren M and Okely Anthony D; Pearson Philip; Vialle Wilma;. 2013. “Understanding the day-to-day lives of obese children and their families.”. <i>Family &amp; community health</i> 36(1):42-50.	EX5
Putter Kaila C and Jackson Ben; Thornton Ashleigh L; Willis Claire E; Goh Kong Min Bryce; Beauchamp Mark R; Benjanuvatra Nat; Dimmock James A; Budden Timothy;. 2022. “Perceptions of a family-based lifestyle intervention for children with overweight and obesity: a qualitative study on sustainability, self-regulation, and program optimization.”. <i>BMC Public Health</i> 22(1):1-16.	EX3
Rawlins E and Baker G; Maynard M; Harding S;. 2013. “Perceptions of healthy eating and physical activity in an ethnically diverse sample of young children and their parents: the DEAL prevention of obesity study.”. <i>Journal of human nutrition and dietetics : the official journal of the British Dietetic Association</i> 26(2):132-44.	EX3
Rich E. 2024. “A New Materialist Analysis of Health and Fitness Social Media, Gender and Body Disaffection: ‘You Shouldn’t Compare Yourself to Anyone... but Everyone Does’”. <i>YOUTH</i> 4(2):700-717.	EX2
Roberts Michele and Pettigrew Simone;. 2013. “Psychosocial influences on children’s food consumption.”. <i>Psychology &amp; Marketing</i> 30(2):103-120.	EX5
Robertson Wendy and Fleming Joanna; Kamal Atiya; Hamborg Thomas; Khan Kamran A; Griffiths Frances; Stewart-Brown Sarah; Stallard Nigel; Petrou Stavros; Simkiss Douglas; Harrison Elizabeth; Kim Sung Wook; Thorogood Margaret;. 2017. “Randomised controlled trial evaluating the effectiveness and cost-effectiveness of ‘Families for Health’, a family-based childhood obesity treatment intervention delivered in a community setting for ages 6 to 11 years.”. <i>Health technology assessment (Winchester, England)</i> 21(1):1-180.	EX3
Robertson Wendy. 2009. “An evaluation of ‘Families for Health’ : a new family-based intervention for the management of childhood obesity”. , .	EX3
Rodgers Rachel F and Wertheim Eleanor H; Damiano Stephanie R; Gregg Karen J; Paxton Susan J;. 2019. “A qualitative, prospective study of children’s understanding of weight gain.”. <i>The British journal of developmental psychology</i> 37(3):369-381.	EX5
Russell Lucy and Alsop Rachel; Bradshaw Lucy; Clisby Suzanne; Smith Kerry;. 2017. “The state of girls’ rights in the UK.”. :168.	EX3
Sahota Pinki and Christian Meaghan; Day Rhiannon; Cocks Kim;. 2019. “The feasibility and acceptability of a primary school-based programme targeting diet and physical activity: the PhunkyFoods Programme.”. <i>Pilot and feasibility studies</i> 5:152.	EX3
Sarigol Ordin and Yaprak; Karayurt Özgül; Unek Tarkan; Astarciolu Ibrahim;. 2017. “Pediatric liver transplant patients’ transition to adulthood: Patient and parent experiences”. <i>Nursing and Health Sciences</i> 19:393-399.	EX3

Schell-Busey Natalie and Connell Nadine M; Kahle Lindsay L;. (2017). Weight, Perceptions, and Bullying: What Kind of Pounds Matter?. <i>Journal of Child and Family Studies</i> , 26, pp.2101-2113.	EX1
Sherrington AM and Oakes S; Hunter-Jones P;. 2021. "Advertising healthy eating to young consumers: insights from English and Swedish adolescents". <i>JOURNAL OF MARKETING MANAGEMENT</i> 37(15-16):1624-1655.	EX3
Shrewsbury Vanessa A and Baur Louise A; Nguyen Binh; Steinbeck Katharine;. (2013). Transition to adult care in adolescent obesity: a systematic review and why it is a neglected topic. <i>International journal of obesity</i> (2005), 38, pp.475-479.	EX1
Sides Nicola and Pringle Andy; Newson Lisa;. 2024. "The lived experience of weight loss maintenance in young people.". <i>Health expectations : an international journal of public participation in health care and health policy</i> 27(1):e13955.	EX3
Silver Joanna and Reavey Paula;. 2010. "'He's a good-looking chap aint he?': narrative and visualisations of self in body dysmorphic disorder". <i>Social science &amp; medicine</i> (1982) 70:1641-1647.	EX2
Sommer Rachel and Bullinger Monika; Chaplin John; Do Ju-ky; Power Mick; Pleil Andreas; Quitmann Julia;. 2017. "Experiencing health-related quality of life in paediatric short stature - a cross-cultural analysis of statements from patients and parents.". <i>Clinical Psychology &amp; Psychotherapy</i> 24(6):1370-1376.	EX5
Spence S and Delve J; Stamp E; Matthews JNS; White M; Adamson AJ;. (2014). Did School Food and Nutrient-Based Standards in England Impact on 11-12Y Olds Nutrient Intake at Lunchtime and in Total Diet? Repeat Cross-Sectional Study. <i>PLOS ONE</i> , 9(11), pp..	EX1
Staniford Leanne Jane and Breckon Jeff David; Copeland Robert James; Hutchison Andrew;. 2011. "Key stakeholders' perspectives towards childhood obesity treatment: a qualitative study.". <i>Journal of child health care : for professionals working with children in the hospital and community</i> 15(3):230-44.	EX2
Staniford LJ and Copeland RJ; Breckon JD;. 2019. "'What's the point when you only lose a pound?' Reasons for attrition from a multi-component childhood obesity treatment intervention: a qualitative inquiry". <i>QUALITATIVE RESEARCH IN SPORT EXERCISE AND HEALTH</i> 11(3):382-397.	EX3
Stankov Ivana and Olds Timothy; Cargo Margaret;. 2012. "Overweight and obese adolescents: what turns them off physical activity?". <i>International journal of behavioral nutrition and physical activity</i> 9:1-15.	EX2
Su Wei. 2021. "Preschool children's perceptions of other children based on body size". :.	EX5
Swami Viren and Punshon Sarah; Paul Toni-Dee;. (2022). Promoting positive body image in children through theatre: An evaluation of Cinderella: the AWESOME Truth.. <i>Body image</i> , 42, pp.50-57.	EX1
Thompson Claire and Cummins Steven; Brown Tim; Kyle Rosemary;. 2015. "What does it mean to be a 'picky eater'? A qualitative study of food related identities and practices.". <i>Appetite</i> 84:235-9.	EX2
Thyne Maree and Robertson Kirsten; Thomas Tabitha; Ingram Mikaela;. 2016. "'It is amazing how complete is the delusion that beauty is goodness': expectancies associated with tween makeup ownership". <i>International Journal of Consumer Studies</i> 40:543-551.	EX3
Tort-Nasarre G and Pollina-Pocallet M; Suquet Y Ferrer; Bravo M Ortega; Cartagena M Vilafranca; Artigues-Barberà E;. 2023. "Positive body image: a qualitative study on the successful experiences of adolescents, teachers and	EX5

parents". International Journal of Qualitative Studies on Health and Well-Being 18:.	
Tremblay Line and Lovsin Tanya; Zecevic Cheryl; Larivière Michel;. (2011). Perceptions of self in 3–5-year-old children: A preliminary investigation into the early emergence of body dissatisfaction.. Body Image, 8(3), pp.287-292.	EX1
Trimmer Rachel E and Mandy William P L; Muntoni Francesco; Maresh Kate E;. 2024. "Understanding anxiety experienced by young males with Duchenne muscular dystrophy: a qualitative focus group study.". Neuromuscular disorders : NMD 34:95-104.	EX3
Trimmer Rachel. 2019. "Understanding Anxiety in Duchenne Muscular Dystrophy, Starting with the Perspectives of Boys with the Condition and Parents". , University of London, University College London (United Kingdom).	EX3
Twiddy Maureen and Wilson Inga; Bryant Maria; Rudolf Mary;. 2012. "Lessons learned from a family-focused weight management intervention for obese and overweight children.". Public health nutrition 15(7):1310-7.	EX3
Tylka Tracy L and Calogero Rachel M;. (2010). Fiction, fashion, and function revisited: An introduction to the special issue on gendered body image, Part II.. Sex Roles: A Journal of Research, 63(9-10), pp.601-608.	EX1
Vamos E P and Lewis E; Junghans C; Hrobonova E; Dunsford E; Millett C;. (2016). Community-based pilot intervention to tackle childhood obesity: a whole-system approach.. Public health, 140, pp.109-118.	EX1
van de Pas Kelly. 2024. "Severe obesity in youth". , .	EX3
Visram S and Hall T D; Geddes L;. 2013. "Getting the balance right: qualitative evaluation of a holistic weight management intervention to address childhood obesity.". Journal of public health (Oxford, England) 35(2):246-54.	EX3
Walker Kathleen and Caine-Bish Natalie; Wait Samantha;. 2009. "I like to jump on my trampoline: an analysis of drawings from 8- to 12-year-old children beginning a weight-management program.". Qualitative health research 19(7):907-17.	EX3
Walker M and Mistry B; Amin R; McAdam L;. 2022. "A qualitative exploration of the priorities and experiences of children with Duchenne muscular dystrophy, their parents, and healthcare professionals around weight ...". Disability and ... :.	EX5
Warburton Victoria E and Beaumont Lee C; Bishop Krystal C. M;. 2022. "Pre-adolescent children's understanding of health and being healthy: a multidimensional perspective from the UK". Health Education 122:519-534.	EX3
Watson Libby A and Baker Martyn C; Chadwick Paul M;. 2016. "Kids just wanna have fun: Children's experiences of a weight management programme.". British journal of health psychology 21(2):407-20.	EX3
Watson Paula M and Dugdill Lindsey; Pickering Katie; Hargreaves Jackie; Staniford Leanne J; Owen Stephanie; Murphy Rebecca C; Knowles Zoe R; Johnson Laura J; Cable N Timothy;. 2021. "Distinguishing factors that influence attendance and behaviour change in family-based treatment of childhood obesity: A qualitative study.". British journal of health psychology 26(1):67-89.	EX3
Watson Paula Mary. 2012. "Feasibility Evaluation and Long-Term Follow Up of a Family-Based Behaviour Change Intervention for Overweight Children (GOALS)". , Liverpool John Moores University (United Kingdom).	EX3
Webb Emma and Teague Bonnie; Farrar Matt; Farrar Victoria; Szinay Dorothy; Chan Li; Ken K; Jackson Ben; Naughton Felix; Wilson Jon; Wylie Sydney; Webb Emma;. 2024. "Views of adolescent patients and their families on the use of digital technology to support health behaviour change in young people under the care of a Complications of Excess Weight service (Preprint)". :.	EX2

Webster Deborah. 2021. "An Exploration of the Online and Offline Social Networks of Post Primary School Pupils in Northern Ireland and Their Relationship with Subjective Wellbeing". , Queen's University Belfast (United Kingdom).	EX2
White W J. 2017. "Novel approaches in adolescent obesity management". , University of London, University College London (United Kingdom).	EX3
Whitelaw S and Smart E; Kopela J; Gibson T; King V;. 2011. "Developing social marketing capacity to address health issues.". Health Education 111(4):319-331.	EX2
Women in Sport and Youth Sport Trust;. 2015. "The tipping point: confidence and attitudes in seven and eight year old girls - provisional findings". :9.	EX3
Yeatts Paul E and Martin Scott B; Farren Gene L;. (2019). Adolescents' psychological well-being and their perceptions of parental encouragement to control weight. Journal of Family Studies, 27, pp.607-620.	EX1
Zigler C K and Ardalán K; Hernandez A; Caliendo A E; Magee K E; Terry M A; Mann C M; Torok K S;. 2020. "Exploring the impact of paediatric localized scleroderma on health-related quality of life: focus groups with youth and caregivers.". The British journal of dermatology 183(4):692-701.	EX3

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