

'It's on your conscience all the time': a systematic review of perspectives on obesity amongst young people in the UK aged 12-18.

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'It's on your conscience all the time': a systematic review of perspectives on obesity amongst young people in the UK aged 12-18.

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Abstract (299 words)

Objective To synthesise the perspectives of young people in the UK on obesity, body size, shape and weight.

Design Systematic review of qualitative studies using thematic synthesis.

Data sources Sensitive searches of 18 electronic databases from 1997 – February 2010 supplemented by grey literature searches.

Study selection Studies produced since 1997 using qualitative methods to collect perspectives of people aged 12-18 in the UK, reporting methods for data collection or analysis. Studies of people with eating disorders and those rated low in reliability and usefulness were excluded.

Results Searches identified 30 studies involving a range of young people and contexts. Young people of all sizes placed considerable emphasis on personal responsibility, and on the social, rather than health implications of being overweight. Young people with experience of obesity described severe, unrelenting, size-related abuse and isolation. Regardless of their own size, young people were judgemental of individuals who were overweight, but those with experience of obesity described an environment that contained multiple barriers to weight loss. Only one study asked young people directly what might support them in developing or maintaining a healthy body size. Study findings were configured under three main themes, labelled with quotes from included studies: general perceptions of size and society's responses ('It's on your conscience all the time'); the experiences of young people who were overweight ('If I had the choice I wouldn't be this size'); and these larger young people's experiences of trying to loose weight and suggestions for action ('Make sure, even when it's hard, you've got people there').

Conclusions The perspectives of young people in the UK, when synthesised across the spectrum of body sizes, paint a picture of a stigmatising and abusive social world. Research and policy need to engage young people actively so as to address the social implications of obesity.

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3	'Article summary' section
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39	identify means that can be used to address the negative social implications
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BACKGROUND

Obesity in young people in the UK continues to be a public health issue. A recent Englandwide survey found that over 23 % of boys and 16 % of girls aged 11-15 would be grouped in this category.[1] Young people who are overweight can experience physical ill-health due to obesity while they are still young[2-3] and have an increased risk of being overweight as an adult.[4] Studies have found low levels of mental health in young people classified as obese.[5]

The influences on body weight are complex and multi-levelled. Highly complicated 'system maps' have been developed to try to describe the many links between body weight and biological and genetic factors, individual behaviour, and influences from individuals' social and physical surroundings. [6] Nonetheless, press coverage often emphasises individual choices over structural factors that might influence weight gain.[7-8] In contrast, weight gain in the population has been characterised in the field of public health as, 'the inevitable – and largely involuntary – consequence of exposure to a modern lifestyle',[9(p5)] or due to the 'obesogenic environment'.[10-11] It is also recognised that, once a certain weight is gained, multiple factors act to make that weight extremely difficult to lose, and even likely to increase.[11]

In terms of social values, despite its increasing prevalence, obesity still transgresses social norms. To be very overweight is seen as morally reprehensible.[12-13] Judgements in the general population about obesity are imbued with ideas about personal responsibility and stereotyping is common, with obesity linked with socially undesirable behaviours and other attributes, such as weakness of will, laziness and greed.[14-15] Such attitudes appear to be mirrored in people's behaviours and experiences; studies of adults who are very overweight

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show that they experience both stigma and discrimination and that this impacts negatively on their well-being.[16-18]

Research evidence to help us decide how to prevent or deal with obesity in young people is limited.[19-20] Intervention research regularly fails to consider what young people themselves think,[21] and yet young people are likely to have insights into factors that influence their own weight and that of their peers, and ideas about how they can be supported to keep their own weight within a healthy range. Research that explores these insights can inform initiatives that aim for positive outcomes.[22-23]

The techniques available for systematic reviews of research, perhaps better known for the aggregation of intervention effect sizes, also include those for meshing together, or configuring, study findings.[24] Configuration in systematic reviews can help make sense of multiple accounts from varied perspectives and so build theory about lived experience.[25-26] The authors know of only five previous systematic reviews that include views on body size. A companion review to this study explored children's views (aged 4-11).[27] The others all explore the views of adults,[28-31] with the first of these also including the perspectives of young people diagnosed as obese. The systematic review presented here examines recent research findings from the UK where young people aged from 12-18 provide views about their own body sizes or about the body sizes of others. It aims to help inform the development of practice and policy-based initiatives and the commissioning of further research in ways that put the perspectives of young people at the fore-front.

A note on language: Descriptive terms for body size are extremely value laden. We have tried to restrict our use of terms that could potentially further stigmatise individuals or cause

offence. We have avoided unqualified use of possibly pejorative terms unless young people or others are quoted as using them to describe themselves. It is also difficult to report body size variation in the literature with precision, since the body sizes of participating young people are often not explicitly specified by study authors, or identified by young people themselves. When authors have indicated a distinction, we have used the phrase 'healthy weight/size' to contrast young people who are not overweight with those who would be classified as overweight. We have used 'large', 'larger', or 'overweight' interchangeably to indicate that young people have a larger body size when this information is available in study reports. We have also used the phrases 'very overweight/ large' to indicate that a young person is identified as having been diagnosed as clinically obese, or as having a body mass index in excess of 30.

METHODS

We searched 18 electronic databases from the fields of health, public health, education, social science and social care in February / March 2010, taking care to include sources rich in UK-based journal and report literature. Controlled term and free-text searches were used that combined sets of terms for young people, body size, views research, and geographical location. We also searched six key journals and 54 websites by hand, used internet search engines, scanned reference lists, looked for papers that had cited key studies, and contacted key informants for relevant research (Web only file 1). We managed review data using the specialised online review software EPPI-Reviewer.[32]

Study selection

We included studies that reported views about obesity, body size, shape or weight, sought from children in the UK aged 12 - 18. We defined *views* as attitudes, opinions, beliefs, feelings, understandings or experiences, and excluded studies that measured only health or weight status, behaviour or factual knowledge. Studies needed to have used qualitative data collection methods (e.g. in-depth or semi-structured interviews and/or focus groups) and, as a minimum, to have described one of two key aspects of a study's methods (data collection or analysis). We sought studies published in English since the start of 1997 (to cover a period of heightened interest in the topic of obesity). We excluded studies solely of young people with an eating disorder diagnosis. This last criterion was the only one not set out in the review's protocol (which is available from the authors). These inclusion criteria were piloted by the first four authors of this study and a sample of early screening decisions was double-checked by the first author. Screening was thereafter done individually.

Describing and appraising studies

We described the final set of included studies using a standardised classification system,[33] supplemented using frameworks from previous reviews of the views of children and young people.[25] The quality of included studies was appraised using criteria modified from a set developed for examining the findings of evaluations of intervention processes (Table 1).[34-35] The studies were each allocated a 'weight of evidence' with two dimensions. First, we rated the reliability of the findings (using criteria 1 to 4). Secondly, we rated the findings' usefulness (based on the richness and complexity of analysis, and the privileging of perspectives, e.g. methods encouraging young people to prioritise issues for discussion – using criteria 5 and 6). Two reviewers worked independently on each study, before reaching consensus. We excluded studies from the synthesis if they were rated low on both dimensions.

[Table 1 to go about here]

Criterion (with guid	ance for reviewers)
Consider whether: *the sampling strate *attempts were mad perspective to offer) *characteristics of th	to increase rigour in the sampling? gy was appropriate to the questions posed in the study (e.g. was the strategy well reasoned and justified?); e to obtain a diverse sample of the population in question (think about who might have been excluded; who may have had a different s sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were in e, basic socio-demographics, characteristics relevant to the context of the study, etc.).
Consider whether: *data collection tool: *(if qualitative) data perspectives and ex method of data colle	o ensure that all participants were able and willing to contribute (e.g. processes for consent, language barriers, power relations betweer
Consider whether: data analysis meth diversity in perspect (if qualitative) the a the analysis sough cases/exceptions, fe	ods were systematic (e.g. was a method described/can a method be discerned?); tive was explored; inalysis was balanced in the extent to which it was guided by preconceptions or by the data); to rule out alternative explanations for findings (in qualitative research this could be done by, for example, searching for negative reding back preliminary results to participants, asking a colleague to review the data, or reflexivity; in quantitative research this may be e, significance testing).
Consider whether: enough data are pr the data presented the data presented	s of the study grounded in/ supported by the data? esented to show how the authors arrived at their findings; fit the interpretation/support claims about patterns in data; illuminate/illustrate the findings; ies) quotes are numbered or otherwise identified and the reader can see that they don't just come from one or two people.
	For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

1		
2	5 Please rate the findings of the study in terms of their breadth and depth.	
3	Consider whether:	
4	(NB: it may be helpful to consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/analysed);	
5		
6	*a range of issues are covered;	
7	* the perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective);	
8	*richness and complexity has been portrayed (e.g. variation explained, meanings illuminated);	
9	*there has been theoretical/conceptual development.	
10		
11	6 To what extent does the study privilege the perspectives and experiences of young people?	
	Consider:	
12	* whether there was a balance between open-ended and fixed response options;	
13	*whether children were involved in designing the research;	
14	* whether there was a balance between the use of an a priori coding framework and induction in the analysis;	
15	*the position of the researchers (did they consider it important to listen to the perspectives of children?);	
16	* whether steps were taken to assure confidentiality and put young people at ease.	
17	whether steps were taken to assure connicentiality and put young people at ease.	
18	7 Overall, what weight would you assign to this study in terms of the reliability/trustworthiness of its findings?	
19	Guidance: Think (mainly) about the answers you have given to questions 1 to 4 above.	
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23	8 What weight would you assign to this study in terms of the usefulness of its findings for this review?	
24	Guidance: Think (mainly) about the answers you have given to questions 5 and 6 above and consider:	
25	*the match between the study aims and findings and the aims and purpose of the synthesis;	
26	*its conceptual depth/explanatory power.	
27		
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29	\$ The following responses were available for these questions: 1-3. Yes, a fairly thorough attempt was made; Yes, several steps were taken; Yes, a fe	w
30	steps were taken; No, not at all/Not stated/Can't tell. 4. Good grounding/support; Fair grounding/support; Limited grounding/support. 5. Limited breadth or	
31	depth; Good/fair breadth but very little depth; Good/fair depth but very little breadth; Good/fair breadth and depth. 6. Not at all; A little; Somewhat; A lot	
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Analysis

Four reviewers worked on the analysis. We used thematic synthesis to examine each line of each study's findings and create codes that described meaning and content.[36] Findings were sought throughout the report, not just from results sections. We looked first at studies with views from young people described as having experience of being overweight, and then moved on to the remainder. We looked for similarities and differences between codes as the code set grew, and attempted to identify a smaller set of themes that captured the most recurrent and most emphasised ideas across the full range of studies' findings, while also looking for contradictory ideas. This smaller set of ideas was developed in the light of the review's questions, the themes identified in our earlier review of children's views, [27] and authors' descriptions of body size status (experience of overweight vs. otherwise). The lead author then wrote a narrative to illustrate the themes, with direct quotes from the included studies used as theme headings. We also consulted a group of young people (PEAR), convened by the National Children's Bureau to enable young people's views and opinions to influence public health research.[37] We worked with the group for one and a half hours within a longer group residential. The group was presented with illustrations of the synthesis themes and asked whether this seemed believable and whether anything might be missing, as well as for ideas about how to present findings.

RESULTS

The state of the literature

We found and screened 28,267 citations and identified 30 studies for the review's synthesis (Web only file 2 presents the flow of studies through the review).

[Table 2 to go about here]

Table 2: Details of included studies: aims and sample characteristics (N=30)

Study [reference no]	Aims	Sample size	Weight status	Data collection and analysis methods
Billings et al. 2008) [w1] ³⁸	To explore factors which motivate and create barriers to engagement in regular physical activity for 11-12 and 14-15 year old girls.	91	Not stated.	Group interviews Content analysis
Bramham (2003) [w2] ³⁹	To explore boys' perceptions and experiences of school-based PE and involvement in extra-curricular and out-of-school physical activities.	24	Mesomorphic (i.e. compact and muscular) (mainly).	Individual and group interviews Data analysis method not reported.
Cockburn and Clarke (2002) [w3] ⁴⁰	To explore the cultural and sub-cultural aspects of teenage girls' and young women's lives which influence their involvement in sport and PE.	6	Not stated.	Individual interviews Reflexive interpretation and biographical analysis
Curtis (2008) [w4] ⁴¹	To explore the experiences of young people with obesity within the secondary school environment in relation to areas of concern prioritised by the HSP (Healthy Schools Project)	17	Not stated. (participants recruited from community-based obesity intervention programme.)	Individual and group interviews Thematic analysis
Daley et al. (2008) [w5] ⁴²	A qualitative study nested within a randomised controlled trial explored obese adolescents' experiences of participation in an exercise therapy intervention.	25	Classified as obese or morbidly obese.	Individual interviews Thematic analysis
Flintoff and Scraton (2001) [w6] ⁴³	To explore young women's perspectives of and attitudes towards involvement in physical activity and physical education (PE). Explores the nature, purposes and experiences of involvement, both in and out of school and interface between identities, structures and cultural settings. Located within developing feminist theoretical debates.	21	Mesomorphic (mainly).	Individual interviews Thematic analysis
Frost (2001) [w7] ⁴⁴	A theoretical, feminist, sociological enquiry examining the direct perception of young women about how they, and their contemporaries, experience their bodies.	7	Not stated.	Group interviews before and after art clas plus questionnaire Data analysis method not stated
Gorely et al. (2003) [w8] ⁴⁵	To develop the concept of gender-relevant physical education combining the work of Pierre Bourdieu and his notion of the habitus and feminist philosopher Iris Marion's analysis of feminine motility by drawing on data generated from a study of young people's articulation of the relationships between muscularity, physicality and gender.	348	Not stated.	Group and individual interviews Data analysis method not stated
Griffiths and Page (2008) [w9] ⁴⁶	To examine the relationship between obesity and victimisation, and the impact it has on peer relationships.	5	Classified as obese.	Sequence of two to three individual interviews Interpretative phenomenological analysis
Grogan et al. (2009) [w10] ⁴⁷	To investigate how young men and women smokers and non-smokers talk about the impact of smoking on appearance, with the aim of using these accounts to inform anti-smoking campaigns targeted at young people	47	Not stated.	Group interviews Thematic analysis
Grogan and	To understand how men and boys construct body image including their views	12	none were notably over-	Group interviews

Richards (2002) [w11] ⁴⁸	on body dissatisfaction, body shape ideals and behavioural concomitants of body image.		or underweight as judged by the researchers	Thematic analysis
Health Experience Research Group (2010) [w12] ⁴⁹ (a-w: see note at table foot)	To examine a range of peoples' perspectives in terms of what someone might expect to experience when diagnosed with a particular condition or illness. All the young people and parents interviewed had been affected by weight issues. The research was done with the aim of populating a website 'youthhealthtalk.org', so as to help people 'share in young people's experiences of health and illness.'	24	Some of the young people had been told they were overweight or were in the medical category 'obese'	Individual interviews, sometimes with friend present Thematic analysis
Hester et al. (2009b) [w13] ⁵⁰	To uncover in-depth qualitative accounts of intervention impact from obese young people during a period of lifestyle change after attending a residential weight-loss camp.	5	Classified as obese.	Researcher participation in intervention prio to individual interviews Thematic analysis
Holt et al (2005) [w14] ⁵¹	To explore children's perceptions of attending a residential paediatric weight- loss camp.	15	Classified as obese.	Individual interviews Thematic analysis
Krayer et al. (2008) [w15] ⁵²	To describe the nature of social comparison processes mentioned spontaneously by boys and girls with a particular focus upon enhancement comparisons.	20	Not stated	Sequence of two individual interviews Grounded theory approach
Kurtz and Thornes (2000) [w16] ⁵³	To gather children's views about their health needs to inform policy and the strategic development of services for school-age children in England.	43	Not stated.	Group interviews Data analysis method not stated
Lloyd and Dittmar (1997) [w17] ⁵⁴	To broaden and deepen understanding of 'normal' adolescent boys' and girls' body image concerns, in order to provide an appropriate basis for interventions aimed at promoting healthier diet and lifestyle.	56	Not stated.	Individual and group interviews Thematic analysis
Lucas and Lloyd (1999) [w18] ²⁹	To explore adolescents' use of cigarettes to moderate negative emotions.	32 groups with 2-6 girls in each group	Not stated.	Group interview with a video presentation to encourage discussion Thematic analysis
Ludvigsen and Sharma (2004) [w19] ⁵⁵	To examine the influences upon children and young people in their food choices during the school day.	54	Not stated.	Participant observation and questionnaires followed by group interviews using photographs as prompts Data analysis method not stated
Mulvihill et al. (2000b) [w20] ⁵⁶	To provide data on the reported drivers and barriers to physical activity among young people aged 5-15 years.	103	Not stated	Group interviews Data analysis method not stated
Owen et al. (2009) [w21] ⁵⁷	To explore children's (and parents') views and experiences of attending a hospital-based childhood obesity clinic, in order to inform the development of services in primary care.	11	Classified as overweight.	Individual interviews (parents not present) Thematic analysis
Percy-Smith (2007) [w22] ⁵⁸	To explore young people's understandings and experiences of health as experienced in their everyday lives and according to their own terms of reference rather than in response to policy priorities.	62	Not stated	Participative action research using: young people considering relevant research conducted by their peers, followed by interactions between young people and health professionals, group art work and plenary discussion

				Thematic analysis
Reid and Hendry (2001) [w23] ⁵⁹	To examine young people's health concerns within the context of young people's own perspectives.	37	Not stated	Series of two group interviews Thematic analysis
Shucksmith and Hendry (1998) [w24] ⁶⁰	To examine young people's views about diet, weight, their appearance and the impact of fashion norms.	50 group interviews, 44 individual interviews	Not stated	Group interviews Thematic analysis
Velija and Kumar (2009) [w25] ⁶¹	To explore, through focus group interviews with Year 10 girls, how girls' experiences of PE and GCSE PE are gendered.	16	Not stated	Group interviews Thematic analysis
Wallace et al. (2007) [w26] ⁶²	To explore adolescents' experience of the impact of having cancer, including the burden of illness, treatments and resultant appearance changes.	8	Not stated	Individual interviews Interpretative phenomenological analysis
Willett (2008) [w27] ⁶³	To provide empirical evidence which will look past the structure–agency dichotomy to see how human agency and social structure act through each other to influence pre-teen and teen girls' consumption of fashion and digital media.	26	Not stated	Art work and individual interviews Thematic analysis.
Wills et al. (2006) [w28] ⁶⁴	To explore the embodied perceptions of obese, overweight and 'normal' weight young teenagers [from socio-economicallydisadvantaged families living in Eastern Scotland], within the socio-cultural contexts in which these young teenagers live their everyday lives.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills et al. (2008a) [w29] ⁶⁵	To examine the dietary practices and health and weight conceptualisations of BMI-defined obese/overweight and non-obese/overweight young teenagers from middle-class families; to situate these observations within the 'habitus' of the family by exploring these issues from the perspectives of their parents; and to compare these data to the data already collected in an earlier study involving young working class teenagers.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills (2005b) [w30] ⁶⁶	To examine how the new social contexts experienced by young people after leaving school are related to everyday food practices and eating habits.	31	Not stated	Food diaries and individual interviews Thematic analysis

Note: The findings for the Health Experience Research Group (2010) study [w12], are contained in a series of webpages, which are represented in this paper's text by the

letters a-w. To save space in this paper, readers who want to follow the links to each webpage are referred to this study's full technical report at

http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395.

The 30 studies varied considerably in terms of their stated aims and data collection methods. Table 2 describes each study briefly and specifies the code that is used to reference the study in this paper (w1-w30). Thirteen studies focused directly on body size, shape or weight. Five of these focused on the views of young people who were or who had been overweight about their recent experience of an intervention for losing weight,[w4, w13-14, w21] or encouraging physical activity.[w5] The other eight asked young people to describe their own and others' experiences of being a certain body size, or for more general views about body size or image.[w7, w9, w11-12, w15, w17, w28-29] The remaining 17 studies focused on young people's overall health needs,[w16, w22-24] food,[w19, w30] smoking,[w10, w18] cancer,[w26] clothes and identity,[w27] physical education,[w2-3, w6, w8, w25] and physical activity.[w1, w20] Most, but not all of the findings from young people with experience of being overweight were identified from nine studies.[w4-5, w9, w12-14 w21, w28-29] It was often not possible, from these and other studies, to identify the extent to which participating young people were overweight (e.g. classifiable as obese, as opposed to overweight).

In terms of quality, only three studies, [w4, w12, w28] were judged to have highly reliable findings (Web only file 3). Seven studies were judged highly useful. [w4-5, w9, w12-14, w28] Six studies were excluded from the synthesis on quality grounds. [67-72] (For an indication of the contribution of each included study see Web only file 4.)

Young people's views

Analysis of the findings of each study resulted in three main themes, each with further sub-themes (Table 3): (i) general perceptions about different body sizes and society's responses to them – which were often couched in moral terms ('It's on your conscience all the time'); (ii) Overweight young people's experiences that they linked to their size ('If I had the choice, I wouldn't be this size'); and (iii) Overweight young people's experiences of trying to lose and maintain weight and their suggestions for action ('Make sure, even when it's hard, you've got people there'). The PEAR group considered these themes to be believable

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<text><text><text> but members were concerned by the severity of accounts that they read. They suggested that when writingup we should try to avoid further upset. In response, we attempted to avoid language that labelled young people, and included in the synthesis cases illustrating constructively resistant or positive attitudes. The rest of this section details the findings of the synthesis, with each of the above main themes addressed in turn.

[Table 3 to go about here]

Table 3 Quotations from study participants to illustrate each theme

Themes	Illustrative quotes from participants (also see quotes in the text) [Study reference no
It's on your	conscience all the time
It's down to me	I mean if you're the one that wants to lose weight, then you can't say "Right, mum, can you lose weight for me?" you're the one who has to go oot for exercise and cut doon on your foods and that eh? That's what I ken, its doon tae me. [Nick, male, 13yrs, ethnicity unspecified, very overweight][w28 p400]
	I would love to say it's all to do with genetics and I have nothing to do with it, but I know that what I do isn't particularly healthy and therefore it's due to me as well I think it's for me it's just the fact that I'm stubborn and lazy and that I like eating my food. [Holly, female, 18yrs, white, very overweight][w12m]
It's like a girl thing?	Tobias:I'm a couple of inches shorter than all my friends as well and I feel pressure. Tom: you've got friends who are like quite big in build you want to be the same as them. Although you might not be able to do anything about it, it's on your conscience all the time. You want to be that sort of size. [Tobias and Tom, male, 16-17yrs, ethnicity unspecified, healthy weight][w11 p229]
lf you're fat, then they don't like you	they (boys) think that if you look good then you're okay but if you're fat then they don't like you. [female, 11-14yrs, ethnicity and body size unspecified][w18 p24]
People that are right big have right dirty houses	Like when you start thinking ahead, like what are you going to be like, people just sit at home eating pizza all time, I wouldn't like to be one those boring people. I want to be a person that can go out, go on holiday, go to work, have lots of friends, get out of the house you watch lot of programmes all people that are right big have right dirty houses. [male, 14yrs, white, very overweight, BMI 31.3][w5 p814]
Being fat is really a bad thing	If you've got someone in your family who's quite fat, you see how they are and you think to yourself, I don't want to be like thatIt's a bit of a turnoff if you're fat, so you try not to get like that. [Tony, male, 16-17yrs, white, body size unspecified] [w11 p226] I think it's all down to like your mental, your mental picture of yourself really it's when you're like, "Oh I feel so bad and ugly today." That, that's when you become really bad, and so size isn't the thing, it's more the way you act, if you act like all closed and in a corner and not socialising, then I mean attractive is someone who is the life and soul of the party, dancing in the middle, having a good laugh.' [Huw, male, 17yrs, white, overweight] w12j
If I had the c	hoice, I wouldn't be this size
Not wanting to stick out	But the places where I go most of the clientele are like a lot older than me And that's weird to think that, you know, you'll be, you're wearing the same clothes as like your 50 year old neighbour or whatever And it isn't nice you are always thinking about it, especially in public if I had the choice I wouldn't be this size. [Rachel, female, 17yrs, white, overweight][w12d]
	it makes you feel really bad 'cos if they're going, "Oh I'm too fat," how's that supposed to make you feel 'cos when you're like twice the size of 'em? [Huw, 17yrs, white, overweight][w12b]
Day after day, you're that terrified	it wasn't just a group thing, it was walk down the corridor, and I actually counted this one day how many people said something to me, just walking about a hundred yards twenty-three people I think, and you know every day in between every lesson and going, you know, it gets a lot. [Becca, female, 17yrs, white, overweight][w12c]
	Day after day, walking in you're that terrified that you don't want to go school, this is what my point of view were like three years I tried not going to school because I used to get bullied and my mum got took to court. [Eve, female, age and ethnicity unspecified, very overweight][w4 p414] I've put on the weight and I still want to do it [participate in PE classes] but it's the glances, it
	LIVE OUT OF THE WEIGHT AND I STILLWART TO GO IT INARTICIDATE IN PE CLASSES NUT IT'S THE GLANCES. IT

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	she can barely keep-up." [Sam, female, 15ys, overweight, BMI 38.0][w9 p41]
	I don't like having to walk into places where I don't know anyone or walking past a group of
	people; I don't like walking past because of things they might say and they are less likely to
	say if I've got Diane [sister] with me. [Jane, 17yrs, ethnicity unspecified, overweight, BMI
	46.7][w4 p42]
Vicious	I was just getting bullied all the time and nobody wanted to be with me. I was always on my
circles	own in my bedroom doing my own thing [For the first six weeks of a weight-loss
	programme] I just sat in a corner, didn't talk to anybody. I wouldn't even talk to any of the
	friends that I'd made. [Chelsea, female, 17yrs, white, overweight][w12s]
Ī	When I cry I eat, but then I eat because I'm crying, but I'm crying because I'm getting bigger,
	and it's just a vicious circle. [Vicki, female, 18yrs, white, overweight][w12i]
Make sure, e	ven when it's hard, you've got people there
Easier said	I've got a younger brother and we've got all these sort of stuff in house for him and then
than done	that's just like a bit, a bit of a temptation And sometimes when he gets right nice stuff and
	I'm sat there eating, I don't know, fish, chips, and mushy peas and it's just not right. [Reg,
	female, 13yrs, white, overweight][w12l]
	[after an exercise intervention] I felt healthier and better and stuff and I felt like I had actually
	done something. Rather than going home and being a couch potato. [Male, 15yrs, white,
	very overweight, BMI 37.6][w5 p814]
Yo-yos and	I was 14 years old and having so much like, being so unhappy being overweight, finally
pick me ups	getting the weight off is amazing, then piling it all straight back on was just absolutely
	heartbreaking. Yo-yoing up and down in normal diets just, has just become a way of life
	really now It just makes you really doubt yourself. [Vicki, female, 18yrs, white,
	overweight][w12e]
	[commenting on experience of a community-based weight-loss intervention] You have
	people who are in the same situation as you who know what it's like and things like that. I
	you have a problem or if you have like just a total collapse you've got people who will just
	pick you back up. And I think that's been the most thing about it, the most important thing
	that I've had for me. [Emily, female, 14yrs, white, overweight][w12I]
Be nice.	There's ways to be more tactful. As you know, the doctors that I've had haven't always been
You've got to	particularly nice about ityeah, there's ways to say things nicely, and although sometimes
help.	you need to go for the approach that says, "You need to do something about your weight
	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight
	[w12p]
	I'd just say to like parents that without you, you won't be, your child won't be able to do it
	And you've got to help them as much as they're helping themself. And just, if you don't help
	them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale:
	female, 14yrs, ethnicity unspecified, overweight][w12a]
	Make sure that even when it is hard, you've got people there. [Cris, 14yrs, gender, ethnicity
	and body size unspecified][w13 p4]

It's on your conscience all the time

This first main theme included ideas about what can influence body size, who is accountable and

concerned, implications, and ideal, aspired to and acceptable bodies.

It's down to me

Some young people's accounts of what could influence their weight referred to relatively unchangeable physical phenomena, such as body metabolism, bone structure, puberty or genetics.[w1, w7, w12, w28-29] Young people of all sizes, however, emphasised the individual behaviours of being physically active and watching what you eat,[w5-7, w11-w12, w20, w23-24, w27-28] and considered body size was within their own control.[w11-12, w28]

One study reported that participants stated 'quite fervently' that a young person's size was their own responsibility,[w28] and in only two studies did young people suggest that some responsibility might lie elsewhere.[w12, w19] Young people who felt, or already were large made it clear that they knew they had to do something and tended to be critical of their own self-will.

It's like a girl thing?

Young people tended to identify young women as being more interested in body weight.[w7-8, w10-11, w12b, w15, w19, w29] As one put it, 'It's like a girl thing. It's like "oh she is wearing some tight jeans she looks awful." ' [Male, 13yrs, ethnicity and body size unspecified].[w15 p895] But accounts also identified young men's concerns, which had the additional focus of height and musculature.[w2, w7, w11, w17]

If you're fat, then they don't like you

Young people did not necessarily equate a large body size with ill-health,[w28-29] although the need to lose weight for their future health was identified by young people with a high weight.[w12k] In one study framed explicitly around body size, only a minority spontaneously mentioned improved health as a benefit of losing weight.[w28] Some (mainly young men) did report concern that an increased size might, or already was, reducing physical ability or performance.[w16]

Far more emphasis was placed on the impact of body size on relationships. Young people with a healthy size identified how overweight young people would not be respected,[w18] or would be picked on,[w7] or

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bullied.[w28] [see 'Day after day...' below.] Relations with the opposite sex were particularly pertinent.[w8, w11, w12j, w25, w30]

People that are right big have right dirty houses

Young people, many who were themselves a large size, attributed a consistently similar set of negative characteristics to people with large bodies, describing them as lazy, or unable to control their desire for food, or both,[w 5, w17, w29] While sometimes young people made efforts not to appear judgemental of people with large bodies, this was not always the case. This, and participants' emphasis on individual control are illustrated by one young women saying, 'Fat people, I hate fat people. I don't hate their personalities, I just don't like the way they look. I just don't know why folk would do that to themselves.' [Elspeth, female, 13-15yrs, white Scottish, body size unspecified] [w29 p7]

Being fat is really a bad thing

Young people's ideas about which body sizes were valued were consistent across studies. Both sexes characterised an ideal young woman's body as thin,[w12o, w24, w30] slim,[w17] or skinny.[w2010v, w22] For both sexes, the ideal for young men was muscular,[w2, w11, w15, w17] and looking fit.[w11, w17] Young men themselves added not too muscular,[w8, w11, w12b] and toned.[w12b] The aspirations of young people with healthy size bodies tended to refer to these ideals, or avoiding being very large.

In terms of unacceptable body sizes, over half the participants in one study of young women identified weight as the deciding factor for judging whether your appearance was acceptable or not.[w7 p148] A participant in another study was more specific, saying, 'Being fat is really a bad thing, more than anything. More than having a face that is not so good looking.' [14-17yrs, gender, ethnicity and body size unspecified][w23 p156]

Overweight young people expressed more complex views about size and acceptability,[w12, w28] for example explaining how valuing yourself was key to being found attractive by others.

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If I had the choice, I wouldn't be this size

This second main theme incorporated the views of young people who would be, or had been, classified as overweight about their experience of being that size. For views on attempting to lose weight or maintain weight-loss, see 'Make sure, even when it's hard, you've got people there', below.

Not wanting to stick out

Overweight young people described how everyday social activities could be difficult because of their size.[w4, w9, w12, w28] Shopping trips and other social events could leave them feeling excluded, marked out as different and ashamed and could lead to them questioning themselves,[w12d, w28] and spending a great deal of time on their own at home.[w4] One participant described this sense of feeling different, saying 'I ...just wanted to be part of the crowd and not to stick out like a sore thumb... Because sticking out... when someone sees the person who looks, who is bigger than... most of them, almost everyone there, that makes you feel really bad.' [Huw, male, 17yrs, white, overweight][w12b]

Interacting even with friends could be difficult. Some larger young people reported friends saying that they were ashamed to be seen with them,[w12] others described feeling more confident with peers who knew them before they became overweight.[w9 pS42] In addition to explicit cases of ridicule and abuse [see 'Day after day, you're that terrified'], young people described difficult conversations where their peers, who they judged not to be overweight, had described themselves as fat, solely to gain reassurance that they were not.[w4, w12, w17, w28]

Day after day, you're that terrified

In just over a third of studies, young people of varied sizes identified bullying as something that was experienced when you had a large body size.[w2-5, w9, w11-15, w24, w28] Young people classified as very overweight reported severe incidents of physical abuse, that included being threatened with a knife, beaten, kicked, pushed down stairs and having objects thrown at them.[w4, w9, w12s] Verbal abuse, such - 22 -

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as name-calling and using slurs, was described as more common, but, along with less direct abuse, such as deliberate and extended isolation, whispering, or sniggering, was the source of considerable distress.[w4, w9, w12c]

School was the setting for much of the abuse and it had become so serious for some that they were unable to attend. Young people identified physical education (PE) lessons as a particular source of exposure to humiliating ridicule.[w3, w9]

Size-related abuse was heavily implicated by young people as a negative factor for their emotional health, leading to reduced confidence, anxiety (especially around venturing into public spaces), loneliness and depression.[w9, w12c]

Vicious circles

Young people who would be classified as overweight described a variety of coping strategies. These included extreme withdrawal, as well as eating to reduce boredom, when stuck at home, and for comfort following bullying.[w12] Some described how these responses could leave them feeling worse and lead to other, additional difficulties, including further weight gain.

In contrast, others appeared to have developed more defiant coping strategies, as illustrated by one participant, who said,' I know more fat jokes than anybody else going. I'm better at it than they are. ... I got so low on so many occasions. Now it's just like "you have a problem with me, that's your problem." [Ann, female, 17 years, ethnicity unspecified, overweight, BMI 43.3][w9 pS42]

Make sure, even when it's hard, you've got people there

This third, and last, main theme incorporated the views of young people about what happens when they are overweight and try to lose weight. Also presented here are young people's suggestions as to what actions

should be taken to support them in maintaining or reaching a healthy weight, and coping with related stresses and anxieties.

Easier said than done

Larger young people described difficulties modifying what they ate,[w12-14] and frustration at repeated weight-loss attempts.[w12] They were sensitive to the additional effort they felt they had to put into regulating their food intake compared to their peers.[w12-13, w24] As one participant in a residential camp put it, 'I thought "I've been good now surely I can't spend the rest of my life spending as much focus on my weight as I have been doing"... people manage to stay the same weight and they don't really focus on it. They have their food... and they live their life.' [Ashley, male, 16yrs, ethnicity unspecified, very overweight][w13p310]

These young people described various barriers to physical activity. In addition to the abuse described above when exercising in school, some said that getting tired, or out of breath too quickly, or other size-related physical complications, such as asthma, got in the way of their exercising.[w5, w12] The availability of calorie-dense foods sometimes made it difficult to stick to healthy eating plans, especially when others were enjoying different kinds of food.[w12, w14] Others reported difficulties with family and friends' own size-related beliefs. These included incorrect dietary advice,[w12-13] and unhelpful pressure to take, or not to take action.[w12-13, w28]

Again emphasising personal responsibility, young people who had taken action successfully over their size emphasised the central importance of avoiding laziness,[w5, w12, w28] and being proud about taking action.[w12-13, w21, w28]

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Yo-yos and pick me ups

Larger young people described frustration at the slow rate of substantial weight loss.[w12] They were preoccupied with the idea of weight rebounding,[w13-14, w28] and described being demoralised by regaining weight.[w12-13] When talking about things that were helpful for coping with this long-term process of weight loss, young people identified goals, and feedback from others in particular.[w12, w21] Also helpful was support from, and giving support to, others who were going through, or had gone through, the same experience.

Be nice. You've got to help.

Overweight young people tended to suggest things that they themselves could or should do to support themselves. Some stated that education regarding the benefits of healthy eating and exercise was important.[w12] They also encouraged other overweight young people to access their psychological resources.[w12, w22] When it came to their suggestions as to what others could do, these centred around the need for professionals and other people to be less judgemental.

They suggested that families could support and encourage them by joining in with their attempts to pursue a healthy lifestyle. Above all, these young people repeatedly emphasized the need for support.

DISCUSSION

This is the first systematic review of which we are aware that attempts to configure perspectives about obesity from young people with a range of body sizes. It finds that young people in the UK emphasise the social implications of having a large body size more than they do the consequences for health, an overweight body size being problematic for relations with the opposite sex, and, as in our review of children's views,[27] linked to having fewer friends in general and to being teased or bullied. This limited salience of the physical health outcomes of health behaviours has been found in previous reviews of other health-related topics.[73] Similarly, the moralistic attitudes towards obesity and the negative stereotyping of people with larger bodies expressed by young people of all body sizes in this review have both been reported in studies of young people from other countries.[74] -25-

But the reports of the young people in the current review not only emphasise social consequences, they also refer to key social influences in young people's day to day environments that relate to body size. These young people identify ways in which people who are overweight, and ultimately weight itself, can be affected by the attitudes and behaviours of those around them. The overweight young people in the current review describe in some detail how weight-related taunting and abuse, and being marked out as unacceptably different, can lead to them feeling ashamed, isolated and fearful. Studies from outside the UK have found that overweight and obesity serve as a gateway to mental and emotional health problems in young people, engendering low self-esteem, depression, anxiety and poor body image.[5,74-78] Some young people also gave personal accounts of vicious cycles of bullying or isolation leading to comfort eating and lowered mood, weight gain and further bullying or isolation. Weight-based teasing has also been associated with maladaptive eating and weight control behaviours, such as binge eating in studies of US adolescents.[79-80]

Despite these accounts of social environments that are far from conducive to losing or maintaining weight, the young people in this review placed an overwhelming emphasis, regardless of their size, on personal responsibility in achieving and maintaining and healthy weight. Far from abandoning this responsibility, young people of a high weight appeared all too aware of their perceived inadequacies. They described repeated failed attempts to maintain weight loss and blamed and doubted themselves when unsuccessful. When weight loss was successful, they were often proud at having conquered 'laziness'.

Confidence in this review's findings is bolstered by its comprehensive searches. Very sensitive searches of bibliographic databases were supplemented by other methods to seek out less easily found literature, including unpublished reports. As a result, the review also benefited from access to one study's excerpts from its interview transcripts (published online as part of a self-help website).[49,81] We were able to access some of this study's 'raw' data directly in some context as interviewer questions and the responses to these were presented together and often in sequence. The sample of this same study, which had a

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preponderance of overweight young people, along with the sampling approach of six other studies gives this review a good basis from which to study the views of overweight young people in particular. A limitation of the review was that it identified only a small body of studies that could be characterised as being research 'for' young people, rather than 'of' them.[82] Only one study, for example, appears directly to have asked young people what they thought should be done to support them in developing or maintaining a healthy body size. There is a clear need for research to engage young people more actively in exploring the circumstances surrounding obesity.

The young people in this review help remind us that approaches that merely educate and admonish individuals about lifestyles and being overweight are not only insufficient but also potentially counterproductive. Increasingly practitioners at the front-line of care, along with members of the general public, researchers and policy-makers are signing up to coalitions that advocate for the inclusion in policy discussions of the perspectives of people who are very overweight.[83-84] This systematic review can contribute to such debates in the UK, in that the views synthesised include clear demands that larger young people be encouraged, supported and freed from persecution so that they can deal with the complex phenomenon of obesity in ways that are most appropriate for them.

FOOTNOTES

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Data sharing: Technical appendix available at: <u>http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395</u>.

Web only file 1: Full search strategy.

Web only file 2: PRISMA flow chart

Web only file 3: Study quality

of each study to the synthesis Web only file 4: The contribution of each study to the synthesis themes

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 Rev. 2013; 14. doi: 10.1111/obr.12103

Web only file 1. Search strategies and sources for

Rees R, Caird J, Dickson K, Vigurs C, Thomas J (2013) *The views of young people in the UK about obesity, body size, shape and weight: a systematic review*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

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A. Bibliographic databases

ASSIA (CSA)

Searched on 8.2.10. Search generated 980 records.

(((((DE=("adolescence" or "adolescent boys" or "adolescent girls" or "adolescents" or "boys" or "childhood" or "children" or "girls" or "older children" or "pupils" or "school leavers" or "young people")) or(TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*") or AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*"))) or(DE="puberty")) and((DE=("obesity" or "anorexia nervosa" or "binge eating" or "body mass index" or "body alteration" or "body dysmorphic disorder" or "body fat" or "body image" or "body image disturbances" or "body mass" or "body shape" or "body size" or "body weight" or "bulimia nervosa" or "compulsive eating" or "dysphagia" or "eating disorders" or "hyperphagia" or "pica" or "purging" or "rapid eating" or "thinness" or "underweight" or "weight")) or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders")))) and((DE=("emotion psychology" or "psychology" or "acceptability" or "affective experiences" or "analysis" or "analytical ethnography" or "analytical psychology" or "anecdotes" or "anxiety" or "applied behavioural analysis" or "applied ethnography" or "applied psychology" or "applied research" or "attitudes" or "authentic experience" or "autoethnography" or "behaviour studies" or "behavioural analysis" or "behaviourism" or "beliefs" or "biographical data" or "case studies" or "childhood experiences" or "cognitive interviews" or "community based research" or "community psychology" or "comparative research" or "complex theory" or "comprehension" or "concept analysis" or "concerns" or "connotative meaning" or "content analysis" or "contextual analysis" or "conversation" or "discourse" or "discourse analysis" or "discursive psychology" or "dissatisfaction" or "emotional experiences" or "emotions" or "ethnography" or "ethnomethodology" or "evaluative research" or "experiences" or "familiar stories" or "field research" or "focus group interviews" or "focus groups" or "frightening stories" or "grounded theory" or "group interviewing" or "health beliefs" or "health psychology" or "hermeneutics" or "historical narratives" or "ideals" or "implicit beliefs" or "individual psychology" or "interaction analysis" or "interpretative phenomenological analysis" or "interviewing" or "interviews" or "life satisfaction" or "liking" or "market research" or "meaning" or "narratives" or "negative beliefs" or "negative experiences" or "observation" or "observational research" or "opinions" or "participant observation" or "participatory research" or "perceptions" or "personal experiences" or "personal narratives" or "phenomenology" or "prejudice" or "process analysis" or "gualitative analysis" or "gualitative data" or "gualitative methods" or "qualitative research" or "research" or "satisfaction" or "self" or "selfbeliefs" or "selfconcept" or "semistructured interviews" or "sense of self" or "shared stories" or "short stories" or "single case studies" or "social analysis" or "social anxiety" or "social attitudes" or "social beliefs" or "social experiences" or "social meaning" or "social perception" or "social psychology" or "social satisfaction" or "social sciences research" or "sociocultural research" or "sociological research" or "stories" or "structured behavioural interviews" or "structured interviews" or "subjective 59 experiences" or "videotaped interviews" or "viewpoint" or "worry")) or(TI=(ethnolog* OR stories OR content analysis 60 OR ethnographic OR audiorecording OR "observational method?" 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Bibliomap

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Searched on 09.02.10. Search generated 478 records.

Search of EPIC

1. Keywords: What type of study does this report describe?: case control study OR cohort study OR survey OR systematic review OR process evaluation OR other design OR not stated (7011)

- 2. Keywords: Focus of the report: obesity (576)
- 3. Keywords: Focus of the report: eating disorder (191)

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4. Keywords: Characteristics of the study population: children OR young people (8995)

1	n ney	fords. Characteristics of the study population, chiraren on young peop
2 3	5. 2. 0	R 3 (747)
4 5	6. 1 AN	D 4 AND 5 (311)
6 7	7. Free	text (item record) obesity (412)
8 9 10	8. Free	text (item record) views (117)
10 11 12	9. 7 AN	D 8 (2)
13 14	10. 6 C	R 9 (311)
15 16 17 18		of Bibliomap
19 20	11.	Freetext (item record) child* (1326)
21 22	12.	Freetext (item record) youth (2963)
23 24	13.	Freetext (item record) "young people" (2546)
25 26 27	14.	Freetext (item record) adolescen* (1)
28 29	15.	Freetext (item record) obesity (1203)
30 31	16.	Freetext (item record) obese (507)
32 33	17.	15 OR 16 (1353)
34 35	18.	11 OR 12 OR 13 OR 14 (6281)
36 37	19.	17 AND 18 (172)
38 39	20.	10 OR 19 (456)
40 41 42	21.	Freetext (item record) "eating disorder" (122)
42 43 44	22.	Freetext (item record) "body weight" (416)
45 46	23.	Freetext (item record) "body size" (45)
47 48	24.	Freetext (item record) fatness (51)
49 50	25.	Freetext (item record) thinness (31)
51 52	26.	21 OR 22 OR 23 OR 24 OR 25 (613)
53 54	27.	18 AND 26 (53)
55 56 57 58 59	28.	20 OR 27 (478)

British Library Integrated Catalogue (BLIC) Searched on 18.03.10. Search generated 113 records.

#1. Obes? AND adolescen? (in all text)

#2. Body? AND adolescen? (in all text)

#3. #1 OR #2

British Education Index (Dialog Datastar)

Searched on 9.2.10. Search generated 259 records.

(ti contains obesity OR body size OR body shape OR obese OR obesogenic OR body weight OR overweight OR body mass index OR thin OR thinness OR skinny OR body weight OR fat OR weight OR anorexia OR anorexic OR eating disorder)

AND

(ti contains child OR children OR childhood OR adolescent OR puberty OR schoolchild OR prepubescent OR prepubescence OR preadolescent OR preadolescence OR school OR schools OR pupil OR pupils OR (young people) OR youth OR youths)

British Index to Theses

Searched on 10.02.10. Search generated 94 records.

(ti contains obesity OR body size OR body shape OR obese OR obesogenic OR body weight OR overweight OR body mass index OR thin OR thinness OR skinny OR body weight OR fat OR weight OR anorexia OR anorexic OR eating disorder) AND (ti contains child OR children OR childhood OR adolescent OR puberty OR schoolchild OR prepubescent OR prepubescence OR preadolescent OR preadolescence OR school OR schools OR pupil OR pupils OR (young people) OR youth OR youths)

CINAHL (EBSCO host)

Searched on 15.02.10. Search generated 1477 records.

- S33 S24 and S32 (1477)
- S32 S31 NOT S30 (659693)
- S31 S25 or S26 or S27 or S28 or S29 (758214)

S30 TX "New Jersey" OR Alabama OR Ontario OR "New London" OR "New England" OR "New South Wales" OR "New York" (115228)

S29 TI English or AB English (13396)

S28 TX Hammersmith OR Hampshire OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helenus OR Hereford OR Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Inverclyde OR Inverness OR "Isle of Man" OR For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml



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Wight OR Islington OR Jersey OR Kensington OR Kent OR Kinross OR Knowles OR Lambeth OR Lanarkshire OR 1 Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Litchfield OR Lincoln OR 2 Lincolnshire OR Lilburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn 3 4 OR Manchester OR Merienda OR Merseyside OR Methyl OR Middlesbrough OR Midlands OR Midlothian OR 5 Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport OR 6 7 Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Ornery OR 8 Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd OR 9 Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Gipon OR Rushmore 10 OR Salford OR Salisbury OR Sandell OR Scarborough OR Silly OR Sheffield OR Shetland OR Shropshire OR Somerset 11 12 OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke OR Suffolk 13 OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Hurlock OR Toran OR Turro OR Tyne OR 14 Tynes ide OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western Isles" OR 15 16 Westminster OR Wiltshire OR Winchester OR Wirra OR Wolverhampton OR Worcester OR Worcestershire OR 17 Wareham OR "Ynys Mon" OR York OR (187349) 18

19 S27 TX "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International OR "U.K." OR "United 20 Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR Irish OR "EU Member" OR "district 21 22 council" OR "local council" OR "local authorities" OR "NHS Trust" OR "primary care trust" OR "borough council" OR 23 "county council" OR "local authority" OR "district councils" OR "local councils" OR "NHS Trusts" OR "primary care 24 25 trusts" OR "borough councils" OR "county councils" OR Eur OR "Social Care Trust" OR Aberdeen OR Aberdeenshire 26 OR "Abert awe Bro Morgan" OR Albas OR Alderney OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll 27 OR Armagh OR Arran OR Shield OR Ayrshire OR Bangor OR Barking OR Bedfordshire OR Belfast OR "Bets Cadwaladr" 28 29 OR Bexley OR Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridged OR Brighton OR Bristol OR 30 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Jannock OR Canterbury 31 OR Cardiff OR Carlisle OR Carmarthenshire OR Carmarthenshire shire OR Ceredigion OR Chelsea OR Cheshire OR 32 33 Chester OR Chichester OR Clackmannan shire OR Clwyd OR Conway OR Cornwall OR "County Down" OR Coventry OR 34 Croydon OR Cumbria OR "Cwm Taf" OR Canon OR Dagenham OR Hartford OR Davids OR Denbighshire OR Derby OR 35 Derbyshire OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbarton shire OR Dundee OR Durham OR Ealing OR 36 Edinburgh OR Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Finland OR Fermanagh OR Fife OR Flintshire OR Forth 37 38 OR Fulham OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR 39 Grampian OR Gresham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Alton OR Hamlets 40 (421966)41

43 44	S26	TX UK OR Scotl	land OR England OR Wales (501872)
44 45 46	S25	(MH "Europe")	or (MH "United Kingdom+") (161249)
47 48	S24	S18 or S20	Limiters - Published Date from: 19970101-20101231; English Language (3408)
49 50	S23	S18 or S20	Limiters - Published Date from: 19970101-20101231; English Language (0)
51 52 53	S22	S18 or S20	Limiters - Published Date from: 19970101-20101231 (3473)
53 54 55	S21	S18 or S20	(3689)
56 57	S20	S8 and S13	Limiters - Age Groups: Child, 6-12 years, Adolescence, 13-18 years (3281)
58 59	S19	S8 and S13	(9540)
60	S18	S15 or S17	(3408)
	S17	S9 and S16	(23)
	S16	(MH "Attitude For	to Obesity") (71) [.] peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

S15 Limiters - Published Date from: 19970101-20101231; English Language; Language: English (3402)

S14 S8 and S9 and S13 (3730)

S13 S11 or S12 (358620)

S12 (MH "Attitude to Health") or (MH "Attitude to Life") or (MH "Attitude") or (MH "Emotions") or (MH "Anxiety") or (MH "Adolescent Behavior") or (MH "Behavioral Research") or (MH "Social Attitudes") (37934)

S11 S3 or S10 (343979)

S10 (MH "Qualitative Studies+") or (MH "Participant Observation") or (MH "Observational Methods+") or (MH "Focus Groups") or (MH "Discourse Analysis") or (MH "Thematic Analysis") or (MH "Field Studies") or (MH "Constant Comparative Method") or (MH "Content Analysis") or (MH "Purposive Sample") or (MH "Qualitative Validity") or (MH "Ethnographic Research") or (MH "Ethnological Research") or (MH "Ethnology") or (MH "Cluster Sample") (70691)

- S9 S4 or S1 (274308)
- ² S8 S5 or S6 or S7 (49729)
- S7 (MH "Weight Control") (2921)
- S6 (MH "Body Image") (3373)

S5 (MH "Body Mass Index") or (MH "Body Weight") or (MH "Body Weight Changes") or (MH "Body Size") or
(MH "Obesity") or (MH "Weight Gain") or (MH "Weight Loss") or (MH "Thinness") or (MH "Cachexia") or (MH
"Anorexia") or (MH "Anorexia Nervosa") or (MH "Bulimia") or (MH "Bulimia Nervosa") or (MH "Eating Disorders") or
(MH "Body Constitution") or (MH "Body Dysmorphic Disorder") (46178)

S4 (MH "Child") or (MH "Adolescence") (220052)

S3 TI (ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR interpersonal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR overconcern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint 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 "constant comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic analyses" OR anxiety OR anxieties OR anxious) or AB (ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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"process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR 10 "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant 11 12 comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field 13 research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR 14 "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic 15 16 analyses" OR anxiety OR anxieties OR anxious) (326272) 17

18 TI ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight" OR S2 19 "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR 20 21 "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge 22 eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB ("body 23 composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight" OR "thinness" 24 25 OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR 26 fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR 27 "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") (34667)28

S1 TI (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) or AB (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) (162059)

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Searched on 16.02.10. Search generated 4234 records.

1 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (660673)

("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,ti. (284883)

3 (ethnolog* or stories or content analysis or ethnographic or audiorecording or "observational method?" or "participant observation" or "field notes" or experience? or narrative? or discourse or inter-personal or individuallevel or repertory grid or self-worth or self-identification or pre-occupation or preoccupation or acceptability or worry or worries or feelings or dissatisfied or satisfied or ideal shape or over-concern or concerns or concern or prejudice or prejudices or "process evaluations" or "process evaluation" or emotions or ethnopsychology or "focus groups" or "behavioral research" or "behavioural research" or narration or satisfaction or dissatisfaction or meanings or meaning or perspectives or perspective or ideas or idea or concepts or concept or beliefs or belief or attitudes or attitude or perceived or perceives or perceive or perceptions or perception or views or view or gualitative or interviewed or interviewing or interviewer or interviews or interview or comprehension or attitudinal or outlook or For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

"in depth" or "case studies" or "case study" or opinions or opinion or expectations or expectation or thoughts or narratives or standpoint or standpoints or viewpoints or viewpoint 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 "constant comparative" or "constant comparison" or "purposive sample" or "field study" or "field studies" or "field research" or "biographical method" or "theoretical sampl*" or "open-ended" or "open ended" or "life world" or "life-world" or "conversation analysis" or "conversation analyses" or "theoretical saturation" or "thematic analyses" or anxiety or anxieties or anxious).ti,ab. (1237966) groups by age/ or adolescent/ or child/ (699964) child/ or boy/ or girl/ (397076) adolescence/ or adrenarche/ or puberty/ (21675) 4 or 6 (707643) 1 or 7 (1026791) obesity/ or body weight disorder/ or overnutrition/ (100390) "weight, mass and size"/ or body weight/ or lean body weight/ or weight gain/ or weight/ or weight reduction/ or weight change/ (140407) underweight/ (1262) body image/ or body mass/ (78517) body mass/ or "weight, mass and size"/ (74150) body size/ or "weight, mass and size"/ (5350) body build/ (2160) body composition/ or body fat/ or body fat distribution/ (25975) eating disorder/ or binge eating disorder/ (8287) eating disorder/ or anorexia nervosa/ or bulimia/ (17268) overnutrition/ (1460) body image/ (4954) body weight/ or lean body weight/ or weight change/ or weight gain/ or weight reduction/ (136121) waist circumference/ (5368) 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 (280269) 2 or 23 (417092) 8 and 24 (60322) English.lg. (10416599) (UK or Scotland or England or Wales or Northern Ireland or Europe or British or Scottish or Welsh or

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local council? or local authorit* or NHS Trust? or primary care trust? or borough council? or county council? or Eur or 1 Social Care Trust? or Aberdeen or Aberdeenshire or Abertawe Bro Morgannwg or Albans or Alderney or Aneurin 2 3 Bevan or Anglesey or Angus or Antrim or Argyll or Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or 4 Bath or Bedfordshire or Belfast or Betsi Cadwaladr or Bexley or Birmingham or Borders or Bradford or Brecknock or 5 Brent or Bridgend or Brighton or Bristol or Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or 6 7 Camden or Cannock or Canterbury or Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea 8 or Cheshire or Chester or Chichester or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or 9 Coventry or Croydon or Cumbria or Cwm Taf or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby 10 or Derbyshire or Devon or Dorset or Dudley or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or 11 12 Edinburgh or Ely or Enfield or Essex or Exeter or Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or 13 Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucester or Gloucestershire or 14 Grampian or Gravesham or Greenwich or Guernsey or Gwent or Gwynedd or Hackney or Halton or Hamlets or 15 16 Hammersmith or Hampshire or Haringey or Harlow or Hartlepool or Harwell or Helens or Hereford or Hertfordshire 17 or Highland or Hounslow or Hull or Humber or Inverciyde or Inverness or "Isle of Man" or Wight or Islington or Jersey 18 or Kensington or Kent or Kinross or Knowsley or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or 19 20 Leicester or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Lisburn or Liverpool or London or 21 Londonderry or Lothian or Loughborough or Luton or Lynn or Manchester or Meirionnydd or Merseyside or Merthyr 22 or Middlesbrough or Midlands or Midlothian or Monmouth or Monmouthshire or Montgomery or Moray or Neath 23 24 or Newcastle or Newham or Newport or Norfolk or Northamptonshire or Northumberland or Norwich or 25 Nottingham or Nottinghamshire or Orkney or Oxford or Oxfordshire or Pembroke or Pembrokeshire or Perth or 26 Peterborough or Plymouth or Pontypridd or Portsmouth or Powys or Preston or Radnor or Redbridge or 27 28 Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury or Sandwell or Scarborough or Scilly or 29 Sheffield or Shetland or Shropshire or Somerset or "South Holland" or Southampton or Southwark or Staffordshire or 30 Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or Sussex or Swansea or Talbot or Tayside or 31 32 Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield or Walsall or Waltham or Warwickshire or 33 Wells or "Western Isles" or Westminster or Wiltshire or Winchester or Wirral or Wolverhampton or Worcester or 34 Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire).in,cp,ti,pb,jn,ab,ad,bt. (3877746) 35

3637 29 united kingdom/ or western europe/ (92841)

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31 ("New Jersey" or Alabama or Ontario or "New London" or "New England" or "New South Wales" or "New York").in,cp,ti,pb,jn,ab,ad,bt. (460137)

- 44 45 32 30 not 31 (3441954)
 - 33 qualitative analysis/ or qualitative research/ (24372)
- 49 34 qualitative validity/ (61)50
- 51 35 ethnography/ or ethnology/ (13750) 52
- 53 36 attitude to life/ or social attitude/ or attitude/ or attitude to health/ (27363)
- information processing/ or discourse analysis/ or speech analysis/ or thematic analysis/ (62098)
- 57 58 38 observational study/ (10860)
- 60 39 observational method/ (472)
 - 40 observational study/ (10860)
 - 41 discourse analysis/ (226)

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BMJ Open verbal communication/ or conversation/ or narrative/ or storytelling/ (6966) verbal memory/ (5451) psychology/ or behavioral science/ (14281) content analysis/ (1062) exp interview/ (54344) emotion/ (29132) experience/ (24648) self concept/ (16810) phenomenology/ (4607) awareness/ (16456) comprehension/ (8375) constant comparative method/ (23) field study/ (433) purposive sample/ (33) theoretical sample/ (64) personal experience/ (3416) cluster analysis/ (13255) repertory grid technique/ (2) case study/ (6816) 3 or 33 or 34 or 35 or 36 or 37 or 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 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 (1381904) 25 and 26 and 32 and 61 (4907) limit 62 to yr="1997 - 2010" (4234) ERIC (CSA)

Searched on 09.02.10. Search generated 1043 records.

(((TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*") or AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*")) or(DE=puberty or DE=adolescence) or(DE=("adolescents" or "youth" or "children" or "early adolescents" or "late adolescents" or "preadolescents")))

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((DE=("eating disorders" or "obesity" or "body composition" or "body weight")) or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders")))) 10

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14 ((DE=("attitude measures" or "attitudes" or "behavior" or "behavioral science research" or "behavioral sciences" or 15 "beliefs" or "case studies" or "child psychology" or "comparative analysis" or "comparative testing" or "discussion" 16 or "ethnography" or "ethnology" or "ethology" or "focus groups" or "grounded theory" or "group discussion" or 17 "interaction process analysis" or "interviews" or "measures individuals" or "negative attitudes" or "opinions" or 18 "participant observation" or "personal narratives" or "psychological patterns" or "psychological studies" or 19 "psychology" or "qualitative research" or "self concept" or "semantic differential" or "social attitudes" or "social 20 21 behavior" or "social psychology" or "social science research" or "sociology")) or((TI=(ethnolog* OR stories OR 22 content analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR 23 "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR 24 self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR 25 feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR 26 prejudices OR "process evaluations" OR "process evaluation" OR emotions OR ethnopsychology OR "focus groups" 27 28 OR "behavioral research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR 29 meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR 30 attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR 31 qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR 32 attitudinal OR outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR 33 expectation OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio 34 record" OR "audio recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "audio records" 35 OR "thematic analysis" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR 36 37 "purposive sampling" OR "constant comparative" OR "constant comparison" OR "purposive sample" OR "field study" 38 OR "field studies" OR "field research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR 39 "open ended" OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical 40 saturation" OR "thematic analyses" OR anxiety OR anxieties OR anxious)) or (AB=(ethnolog* OR stories OR content 41 analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field 42 notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-43 44 worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings 45 OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR 46 "process evaluations" OR "process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral 47 research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR 48 perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude 49 OR perceived OR perceives OR perceptions OR perception OR views OR view OR qualitative OR 50 interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR 51 52 outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR expectation 53 OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio 54 recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "audio records" OR "thematic 55 analysis" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive 56 sampling" OR "constant comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field 57 studies" OR "field research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" 58 59 OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" 60 OR "thematic analyses" OR anxiety OR anxieties OR anxious))))

Health Promis

- Searched on 22.02.10. Search generated 370 records.
- 1997 onwards

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Keywords: Young people OR adolescents OR children AND Keywords: obesity OR weight OR body mass index OR self-concept

International Bibliography of the Social Sciences (EBSCO host)

Searched on 12.02.10. Search generated 595 records.

S1 DE "Children" or DE "Youth" or DE "Adolescence" or DE "Adolescents" or DE "Childhood"

S2 TX child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen* OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*"

S3 S1 or S2

S4 TX "body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders"

S5 DE "Obesity" or DE "Representations of the body" or DE "Anorexia nervosa" or DE "Eating disorders

S6 S4 or S5

S7 (S4 or S5) and (S3 and S6). Limiters - Date Published: 19970101-20101231; Language: English

Physical Education Index (CSA)

Searched on 16.02.10. Search generated 801 records.

42 (((TI=(ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" OR 43 44 "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR 45 individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR 46 acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR 47 concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR emotions OR 48 ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR 49 satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR 50 51 concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR 52 perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR 53 interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case 54 study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR 55 standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio 56 recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR "grounded 57 theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant comparative" OR 58 59 "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field research" OR 60 "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic analyses" OR anxiety OR anxieties OR anxious) or AB=(ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied 1 OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR 2 "process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural 3 research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective 4 5 OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives 6 OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR 7 interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case 8 studies" OR "case study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR 9 standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" 10 OR "audio recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR 11 "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant 12 comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field 13 14 research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR 15 "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic 16 analyses" OR anxiety OR anxieties OR anxious)) or(DE=("analysis" or "anxiety" or "attitudes" or "case studies" or 17 "health attitudes" or "interviews" or "life satisfaction" or "observation" or "perception" or "psychology" or 18 "satisfaction"))) 19

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22 (((TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR 23 adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR 24 pubert* OR "secondary school*") OR AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR 25 preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" 26 OR youth OR youths OR adolescence OR pubert* OR "secondary school*")) or(DE=("adolescence" or "boys" or "girls" 27 28 or "puberty" or "youth" or "children"))) and((DE=("obesity" or "body composition" or "body concept" or "weight")) 29 or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 2 size) OR (body WITHIN 2 shape) OR 30 "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR 31 (weight WITHIN 2 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia 32 OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating 33 disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 2 size) OR (body WITHIN 2 shape) OR 34 "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR 35 (weight WITHIN 2 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia 36 37 OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating 38 disorders")))))

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41 (TI=(UK or Scotland or England or Wales or Northern Ireland or Europe or British or Scottish or Welsh or 42 43 International or United Kingdom or European or Britain or Channel Isl* or Irish or EU Member or district council? or 44 local council? or local authorit* or NHS Trust? or primary care trust? or borough council? or county council? or Eur or 45 Social Care Trust? or Aberdeen or Aberdeenshire or Abertawe Bro Morgannwg or Albans or Alderney or Aneurin 46 47 Bevan or Anglesey or Angus or Antrim or Argyll or Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or 48 Bath or Bedfordshire or Belfast or Betsi Cadwaladr or Bexley or Birmingham or Borders or Bradford or Brecknock or 49 Brent or Bridgend or Brighton or Bristol or Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or 50 51 Camden or Cannock or Canterbury or Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea 52 or Cheshire or Chester or Chichester or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or 53 Coventry or Croydon or Cumbria or Cwm Taf or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby 54 or Derbyshire or Devon or Dorset or Dudley or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or 55 56 Edinburgh or Ely or Enfield or Essex or Exeter or Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or 57 Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucester or Gloucestershire or 58 59 Grampian or Gravesham or Greenwich or Guernsey or Gwent or Gwynedd or Hackney or Halton or Hamlets or 60 Hammersmith or Hampshire or Haringey or Harlow or Hartlepool or Harwell or Helens or Hereford or Hertfordshire or Highland or Hounslow or Hull or Humber or Inverciyde or Inverness or "Isle of Man" or Wight or Islington or Jersey or Kensington or Kent or Kinross or Knowsley or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or Leicester or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Lisburn or Liverpool or London or

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S15 "Body Mass Index" or DE "Body Dysmorphic Disorder" or DE "Body Image" or DE "Body Image Disturbances" or DE "Body Size" or DE "Body Weight" or DE "Obesity" or DE "Underweight" or DE "Anorexia Nervosa" or DE "Eating Disorders" or DE "Bulimia" or DE "Hyperphagia" or DE "Pica" or DE "Purging (Eating Disorders)" or DE "Aphagia" or DE "Binge Eating" or DE "Weight Control" or DE "Weight Gain" or DE "Weight Loss" or DE "Weight Perception" or DE "Overweight"

S18 S3 or S15

S10 TI (ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" 54 OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR 55 individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR 56 acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR 57 58 concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR emotions OR 59 ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR 60 satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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34 S12 DE "Grounded Theory" or DE "Qualitative Research" or DE "Data Collection" or DE "Interviews" or DE 35 "Observation Methods" or DE "Interviewers" or DE "Interviewing" or DE "Questioning" or DE "Attitude 36 Measurement" or DE "Attitude Measures" or DE "Attitudes" or DE "Adolescent Attitudes" or DE "Obesity (Attitudes 37 38 Toward)" or DE "Attitude Change" or DE "Attitude Formation" or DE "Attribution" or DE "Prejudice" or DE "World 39 View" or DE "Eating Attitudes" or DE "Health Attitudes" or DE "Comprehension" or DE "Meaning" or DE "Self 40 Concept" or DE "Self Perception" or DE "Social Identity" or DE "Behavior Analysis" or DE "Cohort Analysis" or DE 41 42 "Discourse Analysis" or DE "Content Analysis" or DE "Ethnology" or DE "Ethnography" or DE "Ethnolinguistics" or DE 43 "Phenomenology" or DE "Behavioral Sciences" or DE "Social Sciences" or DE "Behavioral Medicine" or DE 44 "Psychology" or DE "Behavior" or DE "Sociology" or DE "Narratives" or DE "Storytelling" or DE "Comparative 45 46 Psychology" or DE "Emotions"DE "Grounded Theory" or DE "Qualitative Research" or DE "Data Collection" or DE 47 "Interviews" or DE "Observation Methods" or DE "Interviewers" or DE "Interviewing" or DE "Questioning" or DE 48 "Attitude Measurement" or DE "Attitude Measures" or DE "Attitudes" or DE "Adolescent Attitudes" or DE "Obesity 49 50 (Attitudes Toward)" or DE "Attitude Change" or DE "Attitude Formation" or DE "Attribution" or DE "Prejudice" or DE 51 "World View" or DE "Eating Attitudes" or DE "Health Attitudes" or DE "Comprehension" 52

S13 (((((DE "Content Analysis") or (DE "Biographical Data")) and (DE "Satisfaction" or DE "Dissatisfaction")) or (DE
 "Emotional States")) or (DE "Life Experiences")) or (DE "Conversation")

57 S14 S10 or S12 or S13 58

59 S19 S14 and S18 60

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S20 S14 and S18 Limiters - Publication Year from: 1997-2010; Language: English; Age Groups: Childhood (birth-12 yrs), School Age (6-12 yrs), Adolescence (13-17 yrs)

S21 TI (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) or AB (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youth OR youths OR adolescence OR pubert* OR schoolscent* OR schoolscent* OR adolescent* OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*)

- S24 S21 and S14 and S18
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S27 S21 and S18 Limiters-Methodology: FIELD STUDY, -Nonclinical Case Study, -Qualitative Study

- S28 S24 or S27
- 18 19 S29 DE "Adolescent Attitudes" and S18
 - S30 DE "Obesity (Attitudes Toward)" and S21
- 23 S31 S28 or S29 or S30
- 25 S32 S28 or S29 or S30 26
- 2728 TX UK OR Scotland OR England OR Wales

29 S42 TX "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International OR "U.K." OR "United 30 Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR Irish OR "EU Member" OR "district 31 32 council" OR "local council" OR "local authorities" OR "NHS Trust" OR "primary care trust" OR "borough council" OR 33 "county council" OR "local authority" OR "district councils" OR "local councils" OR "NHS Trusts" OR "primary care 34 trusts" OR "borough councils" OR "county councils" OR Eur OR "Social Care Trust" OR Aberdeen OR Aberdeenshire 35 36 OR "Abert awe Bro Morgan" OR Albas OR Alderney OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll 37 OR Armagh OR Arran OR Shield OR Avrshire OR Bangor OR Barking OR Bedfordshire OR Belfast OR "Bets Cadwaladr" 38 OR Bexley OR Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridged OR Brighton OR Bristol OR 39 40 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Jannock OR Canterbury 41 OR Cardiff OR Carlisle OR Carmarthenshire OR Carmarthenshire shire OR Ceredigion OR Chelsea OR Cheshire OR 42 Chester OR Chichester OR Clackmannan shire OR Clwyd OR Conway OR Cornwall OR "County Down" OR Coventry OR 43 44 Croydon OR Cumbria OR "Cwm Taf" OR Canon OR Dagenham OR Hartford OR Davids OR Denbighshire OR Derby OR 45 Derbyshire OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbarton shire OR Dundee OR Durham OR Ealing OR 46 Edinburgh OR Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Finland OR Fermanagh OR Fife OR Flintshire OR Forth 47 48 OR Fulham OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR 49 Grampian OR Gresham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Alton OR Hamlets 50

51 S45 TX Hammersmith OR Hampshire OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helenus OR Hereford 52 OR Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Inverceyde OR Inverness OR "Isle of Man" OR 53 54 Wight OR Islington OR Jersey OR Kensington OR Kent OR Kinross OR Knowles OR Lambeth OR Lanarkshire OR 55 Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Litchfield OR Lincoln OR 56 Lincolnshire OR Lilburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn 57 58 OR Manchester OR Merienda OR Merseyside OR Methyl OR Middlesbrough OR Midlands OR Midlothian OR 59 Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport OR 60 Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Ornery OR Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd OR Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Gipon OR Rushmore OR Salford OR Salisbury OR Sandell OR Scarborough OR Silly OR Sheffield OR Shetland OR Shropshire OR Somerset For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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BMJ Open

OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke OR Suffolk OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Hurlock OR Toran OR Turro OR Tyne OR Tynes ide OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western Isles" OR Westminster OR Wiltshire OR Winchester OR Wirra OR Wolverhampton OR Worcester OR Worcestershire OR Wareham OR "Ynys Mon" OR York OR Yorkshire

S46 S38 or S42 or S45

S47 (S38 or S42 or S45) or TI English or AB English

S48 ((S38 or S42 or S45) or TI English or AB English) and (S32 and S47) (1630)

Pubmed

Searched on 8.2.10. Search generated 4959 records.

(child[mh] OR adolescent[mh] OR minors[mh] OR puberty[mh] OR child*[TIAB] OR schoolchild*[TIAB] OR Boy[TIAB] OR boys[TIAB] OR Girl[TIAB] OR girls[TIAB] OR Minors[TIAB] OR preadolescence[TIAB] OR preadolescent*[TIAB] OR adolescent*[TIAB] OR teen*[TIAB] OR (school[TIAB] AND student*[TIAB]) OR pupil*[TIAB] OR young people[TIAB] OR youth[TIAB] OR youths[TIAB] OR adolescence[tiab] OR pubert*[TIAB] OR Secondary school*[TIAB])

AND

29 (body composition[tiab] OR body dismorph*[tiab] OR Body Weight[MeSH Terms:noexp] OR Body Size[MeSH 30 31 Terms:noexp] OR "body size"[TIAB] OR "body shape"[TIAB] OR "overweight"[TIAB] OR "thin"[TIAB] OR 32 "thinness"[TIAB] OR "skinny"[TIAB] OR "body mass index"[mh] OR "overnutrition"[mh] OR "body image"[mh] OR 33 "body image"[TIAB] OR "obese"[tiab] OR "obesogenic"[tiab] OR obesity[tiab] OR obesity[mh:noexp] OR 34 (weight[TIAB] AND body[TIAB]) OR weights[TIAB] OR "body fatness"[TIAB] OR fatness[TIAB] OR "weight gain"[TIAB] 35 OR body weight changes[mh:noexp] OR weight gain[mh] OR Weight loss[mh:noexp] OR Emaciation[mh:noexp] OR 36 Cachexia[mh:noexp] OR Overweight[mh:noexp] OR Obesity[mh:noexp] OR Thinness[mh] OR Ideal body weight[mh] 37 OR Bulimia[tw] OR Anorexia[tw] OR Binge-eating[tw] OR "binge eating" OR Eating disorders[mh:noexp] OR Waist 38 39 Circumference[mh] OR waist-hip ratio[mh] OR disordered eating[tiab] OR underweight[tiab] OR body 40 composition[mh:noexp] OR "weight loss"[TIAB] OR "weight change"[TIAB] OR "weight changes"[TIAB]) 41

AND

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43 (((ethnolog*[tiab]) OR (stories[tiab]) OR (content analysis[tiab]) OR (ethnographic[tiab]) OR (audiorecording[tw]) OR 44 (observational methods[tiab]) OR (participant observation[tiab]) OR (field notes[tiab]) OR "ethnopsychology"[mesh 45 46 terms] OR "focus groups"[mesh terms] OR "interviews as topic"[mesh terms] OR "empirical research"[mesh terms] 47 OR "emotions" [mesh terms] OR "awareness" [mesh terms] OR "comprehension" [mesh terms] OR "self 48 concept"[mesh terms:noexp] OR "health knowledge, attitudes, practice"[mesh terms] OR "attitude"[mesh 49 terms:noexp] OR "attitude to health"[mesh terms:noexp] OR "focus groups"[mesh terms] OR "qualitative 50 research"[mesh terms] OR experiences[tiab] OR experience[tiab] OR narratives[tiab] OR narrative[tiab] OR 51 discourse[tiab] OR inter-personal[tiab] OR individual-level[tiab] OR repertory grid[tiab] OR self-worth[tiab] OR self-52 identification[tiab] OR pre-occupation[tiab] OR preoccupation[tiab] OR acceptability[tiab] OR worry[tiab] OR 53 54 worries[tiab] OR feelings[tiab] OR dissatisfied[tiab] OR satisfied[tiab] OR ideal shape[tiab] OR over-concern[tiab] OR 55 concerns[tiab] OR concern[tiab] OR prejudice[tiab] OR prejudices[tiab] OR process evaluations[tiab] OR process 56 evaluation[tiab] OR emotions[tiab] OR ethnopsychology[tiab] OR focus groups[tiab] OR behavioral research[tiab] OR 57 behavioural research[tiab] OR narration[tiab] OR satisfaction[tiab] OR dissatisfaction[tiab] OR meanings[tiab] OR 58 meaning[tiab] OR perspectives[tiab] OR perspective[tiab] OR ideas[tiab] OR idea[tiab] OR concepts[tiab] OR 59 concept[tiab] OR beliefs[tiab] OR belief[tiab] OR attitudes[tiab] OR attitude[tiab] OR perceived[tiab] OR 60 perceives[tiab] OR perceive[tiab] OR perceptions[tiab] OR perception[tiab] OR views[tiab] OR views[tiab] OR qualitative[tiab] OR interviewed[tiab] OR interviewing[tiab] OR interviewer[tiab] OR interviews[tiab] OR interview[tiab] OR comprehension[tiab] OR attitudinal[tiab] OR outlook[tiab] OR in depth[tiab] OR case studies[tiab] OR case study[tiab] OR opinions[tiab] OR opinion[tiab] OR expectations[tiab] OR expectation[tiab] OR thoughts[tiab]

OR narratives[tiab] OR standpoint[tiab] OR standpoints[tiab] OR viewpoints[tiab] OR viewpoint[tiab] OR (audio record[tiab] OR audio recorded[tiab] OR audio recorder[tiab] OR audio recording[tiab] OR audio recordings[tiab] OR grounded theory[tiab] OR grounded theory[tiab] OR grounded research[tiab] OR purposive sampling[tiab] OR constant comparative[tiab] OR constant comparison[tiab] OR purposive sample[tiab] OR field study[tiab] OR field studies[tiab] OR field research[tiab] OR biographical method[tiab] OR theoretical sampl*[tiab] OR open-ended[tiab] OR "open ended"[tiab] OR "life world"[tiab] OR life-world[tiab] OR conversation analysis[tiab] OR conversation analyses[tiab] OR anxiety[tiab] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab])

AND ("1997"[PDat] : "3000"[PDat])

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15 AND (((Northern Ireland[PL]) OR (United Kingdom[PL]) OR (Britain[PL]) OR (Scotland[PL]) OR (Wales[PL]) OR 16 (England[PL]) OR (great britain[MeSH Terms] OR (europe[MeSH Terms:noexp]) OR (Northern Ireland[MeSH Terms]) 17 OR UK OR Scotland OR England OR Wales OR "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR 18 International OR U.K. OR "United Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR 19 English[tiab] OR Irish OR "EU Member"[tiab] OR "district council" OR "local council" OR "local authorities" OR "NHS 20 21 Trust" OR "primary care trust" OR "borough council" OR "county council" OR "local authority" OR "district councils" 22 OR "local councils" OR "NHS Trusts" OR "primary care trusts" OR "borough councils" OR "county councils" OR Eur)) 23 OR (("Social Care Trust" OR Aberdeen OR Aberdeenshire OR "Abertawe Bro Morgannwg" OR Albans OR 24 Alderney[tiab] OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll OR Armagh OR Arran OR Ashfield OR 25 Ayrshire OR Bangor OR Barking OR Bath[tiab] OR Bedfordshire OR Belfast OR "Betsi Cadwaladr" OR Bexley OR 26 Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridgend OR Brighton OR Bristol OR 27 28 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Cannock OR Canterbury 29 OR Cardiff OR Carlisle OR Carmarthen OR Carmarthenshire OR Ceredigion OR Chelsea OR Cheshire OR Chester OR 30 Chichester OR Clackmannanshire OR Clwyd OR Conwy OR Cornwall OR "County Down" OR Coventry OR Croydon OR 31 Cumbria OR "Cwm Taf" OR Cynon OR Dagenham OR Dartford OR Davids OR Denbighshire OR Derby OR Derbyshire 32 OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbartonshire OR Dundee OR Durham OR Ealing OR Edinburgh OR 33 Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Fenland OR Fermanagh OR Fife OR Flintshire OR Forth OR Fulham 34 OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR Grampian 35 OR Gravesham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Halton OR Hamlets OR 36 37 Hammersmith OR Hampshire[tiab] OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helens OR Hereford OR 38 Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Inverclyde OR Inverness OR "Isle of Man" OR Wight 39 OR Islington OR Jersey[tiab] OR Kensington OR Kent OR Kinross OR Knowsley OR Lambeth OR Lanarkshire OR 40 Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Lichfield OR Lincoln OR 41 Lincolnshire OR Lisburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn 42 OR Manchester OR Meirionnydd OR Merseyside OR Merthyr OR Middlesbrough OR Midlands OR Midlothian OR 43 44 Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport[tiab] 45 OR Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Orkney 46 OR Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd 47 OR Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Ripon OR 48 Rushmoor OR Salford OR Salisbury OR Sandwell OR Scarborough OR Scilly OR Sheffield OR Shetland OR Shropshire 49 OR Somerset OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke 50 OR Suffolk OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Thurrock OR Torfaen OR Truro 51 52 OR Tyne OR Tyneside OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western 53 Isles" OR Westminster OR Wiltshire OR Winchester OR Wirral OR Wolverhampton OR Worcester OR Worcestershire 54 OR Wrexham OR "Ynys Mon" OR York OR Yorkshire) NOT ("New Jersey" OR Alabama OR Ontario OR "New London" 55 OR "New England" OR "New South Wales" OR "New York"))) 56

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System for Information on Grey Literature in Europe (SIGLE)

Searched on 19.03.10. Search generated 12 records.

(("body image" OR "body size" OR "obesity" OR "obese" OR "body shape" "eating disorder" "eating disorders" "weight gain" "weight loss") AND ("young people" OR adolescent OR adolescents OR adolescence OR teens OR teenagers OR youth OR "young people's"))

Social Policy and Practice (OVID SP)

Searched on 16.02.10. Search generated 584 records.

1 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (116090)

2 ("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,de,ti. (2418)

3 ("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,ti. (1907)

4 1 and 2 (1430)

5 limit 4 to yr="1997 - 2010" (1270)

6 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (116090)

7 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,de,ti. (129461)

- 8 2 or 7 (130325)
- 49 9 2 and 8 (2418)
- 51 10 2 and 7 (1554)
- 53 11 limit 10 to yr="1997 - 2010" (1379)
- 55 12 (S11 not S5).mp. [mp=abstract, title, publication type, heading word, accession number] (5) 56
- 13 (#11 not #5).mp. [mp=abstract, title, publication type, heading word, accession number] (1075)
- 60 14 11 not 5 (109)
 - 15 (ethnolog* or stories or content analysis or ethnographic).ab,de,ti. (2239)
 - 16 11 and 15 (8)

17 (ethnolog* or stories or content analysis or ethnographic or audiorecording or "observational method?" or "participant observation" or "field notes" or experience? or narrative? or discourse or inter-personal or individuallevel or repertory grid or self-worth or self-identification or pre-occupation or preoccupation or acceptability or worry or worries or feelings or dissatisfied or satisfied or ideal shape or over-concern or concerns or concern or prejudice or prejudices or "process evaluations" or "process evaluation" or emotions or ethnopsychology or "focus groups" or "behavioral research" or "behavioural research" or narration or satisfaction or dissatisfaction or meanings or meaning or perspectives or perspective or ideas or idea or concepts or concept or beliefs or belief or attitudes or attitude or perceived or perceives or perceive or perceptions or perception or views or view or gualitative or interviewed or interviewing or interviewer or interviews or interview or comprehension or attitudinal or outlook or "in depth" or "case studies" or "case study" or opinions or opinion or expectations or expectation or thoughts or narratives or standpoint or standpoints or viewpoints or viewpoint 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 "constant comparative" or "constant comparison" or "purposive sample" or "field study" or "field studies" or "field research" or "biographical method" or "theoretical sampl*" or "open-ended" or "open ended" or "life world" or "life-world" or "conversation analysis" or "conversation analyses" or "theoretical saturation" or "thematic analyses" or anxiety or anxieties or anxious).ab,de,ti. (121315)

18 11 and 17 (584)

Social Science Citation Index

Searched on 18.02.10. Search generated 1028 records.

1. Topic=("body composition" OR "body dismorph*" OR "body size" OR "body shape" OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight SAME body) OR weights OR "body fatness" OR fatness OR "weight gain" OR Bulimia OR Anorexia OR "Binge eating" OR "disordered eating" OR underweight)

2. TS=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*)

3. #2 AND #1

4. TS=(ethnolog* OR stories OR content analys?s OR ethnographic OR audiorecording OR "observational method?"
OR "participant observation" OR "field notes" OR experience? OR narrate* OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR idea\$ OR over-concern OR concern\$ OR prejudice\$ OR "process evaluation\$" OR emotions OR ethnopsychology OR "focus groups" OR "behavio\$ral research" OR satisfaction OR dissatisfaction OR meaning\$ OR perspective\$ OR idea\$ OR concept\$ OR belief\$ OR attitude\$ OR perceive\$ OR perception\$ OR view\$) AND Language=(English)

5. #4 AND #3

6. TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*) AND Language=(English)

7. #6 AND #1

8. #7 AND #4

9. TI=("body composition" OR "body dismorph*" OR "body size" OR "body shape" OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight SAME body) OR weights OR "body fatness" OR fatness OR "weight gain" OR Bulimia OR Anorexia OR "Binge eating" OR "disordered eating" OR underweight) AND Language=(English)

10. #9 AND #6

11. #10 AND #4

12. TI=(child* OR schoolchild* OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*) AND Language=(English)

13. #12 AND #9

14. #13 AND #4

15. #13 AND #4

Refined by: Countries/Territories=(ENGLAND)

16. #12 AND #9

Refined by: Countries/Territories=(ENGLAND)

17. #4 AND #3

Refined by: Countries/Territories=(ENGLAND)

18. #17 OR #16

19. TS=(gualitative OR interview* OR interview\$ OR comprehension OR attitudinal OR outlook OR "in depth" OR "case stud*" OR opinion\$ OR expectation\$ OR thoughts OR standpoint\$ OR viewpoint\$ OR "audio record*" OR "thematic analys?s" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive sampl*" OR "constant compare*" OR "field stud*" OR "field research" OR "biographical method\$" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" OR "conversation analys?s" OR "theoretical saturation" OR anxiety* OR anxious) AND Language=(English)

20. #19 AND #3

21. #19 AND #3

Refined by: Countries/Territories=(ENGLAND)

22. #21 OR #18

23. #22 OR #16

24. #22 OR #17

25. #21 OR #17

26. #25 OR #16

27. #19 AND #3

Refined by: Countries/Territories=(ENGLAND OR SCOTLAND OR WALES OR NORTH IRELAND)

28. #4 AND #3

Refined by: Countries/Territories=(ENGLAND OR SCOTLAND OR WALES OR NORTH IRELAND)

29. #28 OR #27

Zetoc

Searched on 23.02.10. 736 titles from this search were scanned by eye and 0 relevant abstracts were uploaded.

Keywords: (Child* or Adolesce*) and (view* or attitude* or perspect*) and (weight or body or fat or obesity)

B. Internet search-engine searches

[Unless specified otherwise, records were scanned online and not uploaded automatically]

Clusty

Searched on 03.03.10. Scanned a total of 131 references clustered in groups: ac.uk, gov, org, shape, and "other URLs".

#1 (adolescent OR adolescents OR child OR children) AND (views OR attitudes OR perspective) AND (body OR weight OR obesity) AND (UK OR England OR British)

#2 (adolescent OR adolescents OR child OR children) AND qualitative AND (body OR weight OR obesity) AND (UK OR England OR British)

Google

Searched on 18.03.10. Scanned first 100 each time

#1 children* AND qualitative AND obes* AND UK

#2 children* AND qualitative AND obes*

#3 adolescen* AND qualitative AND obes* AND UK

#4 adolescen* AND qualitative AND obes*

Google Scholar

Searched on 18.03.10. Scanned first 100 each time. Date limit 1997-2010, English language, all articles (not patents)

A. All "intitle:",

#1. young people AND ("body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)#2. adolescent AND (body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)

B. Anywhere in the text:

12

3

4 5 6	#1 young people AND ("body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)#2. adolescent AND (body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)
7 8	C. Anywhere in the text:
9 10 11 12	#1. adolescent AND views AND UK AND body
13 14	SCIRUS
15 16	Searched on 19.03.10.
17 18	Sources: Abstracts, articles, books, conferences, theses and dissertations. Exclude Medline and Pubmed
19 20	Date range: 1997-2010
21 22	Records: 228 records (after duplicate removal): all uploaded.
23 24	
25 26	#1 (narrow)
27 28	(title:obesity OR title: "body image" OR title: "body size" OR title: "body weight" OR title: "eating disorder" OR
29	title:fatness OR title:obese OR title:thinness OR title: "weight gain" OR title: "weight loss") (title:views OR
30 31	title:attitudes OR title:appearance OR title:qualitative OR title: "focus groups" OR title:observational OR
32 33	title:attitudinal OR title:perspective OR title:perspectives OR title:concerns)
34 35	Refined by items classified as "childhood obesity"
36 37	31 items
38 39	#2 (broad, UK-focussed)
40 41	
42 43	Sources: Abstracts, articles, books, conferences, theses and dissertations. Exclude Medline and Pubmed
44 45 46 47 48 49	((((obesity OR "body size" OR "body shape" OR "body weight" OR "eating disorder" OR fatness OR obese OR thinness OR "weight gain" OR "weight loss") ("young people" OR youth OR adolescents OR adolescent OR adolescence OR teenage OR teenagers) (views OR attitudes OR qualitative OR "focus groups" OR observational OR attitudinal OR concerns OR perspectives OR perspective OR beliefs)))) (UK OR British OR Welsh OR Scottish OR England OR Scotland OR Wales OR) - couldn't take any more terms
50 51	Subject areas: Social and behavioural medicine
52 53	Websites all, except Hong Kong University, Humbodlt
54 55 56 57	Used first 100 results out of 2,723
58 59 60	#3 (broad search)
00	

((obesity OR "body size" OR "body shape" OR "body weight" OR "eating disorder" OR fatness OR obese OR thinness OR "weight gain" OR "weight loss") ("young people" OR youth OR adolescents OR adolescent OR adolescence OR teens OR teenage OR teenagers) (views OR attitudes OR qualitative OR "focus groups" OR observational OR attitudinal OR concerns OR perspectives OR perspective OR beliefs))

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Subject areas: Social and behavioural medicine

Websites: all, except Hong Kong University, Humbodlt

Used first 100 results out of 487,277

D. Journals hand-searched

[Unless specified otherwise, records were scanned online from 1997 onwards (or the Journal's first issue if this was later). Potentially relevant records were checked for duplication before uploading]

Children and Society (Wiley NCB): Searched on 29.03.10

Childrenz issues (Journal of the Childrens Issues Centre): 24.03.10: 97

Health Education: Searched on 24.03.10

International Journal of Paediatric Obesity: Searched on 29.03.10

The sociology of health and illness: Searched on 24.03.10

Men and Masculinities: Searched on 24.03.10: 20

D. Websites searched

URL
http://www.aeforum.org/index.shtml
http://www.aso.org.uk/
http://www.barnardos.org.uk/
http://www.gulbenkian.org.uk/
http://www.cdc.gov/
http://www.education.ed.ac.uk/cahru/
http://www.childgrowthfoundation.org/
http://www.cypnow.co.uk/
http://www.childreninscotland.org.uk/
http://www.childreninwales.org.uk/index.html
http://childrens-research-centre.open.ac.uk/
http://www.childrenscommissioner.gov.uk/
http://www.childrenssociety.org.uk/
http://www.esrc.ac.uk/ESRCInfoCentre/index.aspx
http://ec.europa.eu/index_en.htm
http://www.easoobesity.org/eco2012/
http://eip.iriss.org.uk/
http://www.fabians.org.uk/

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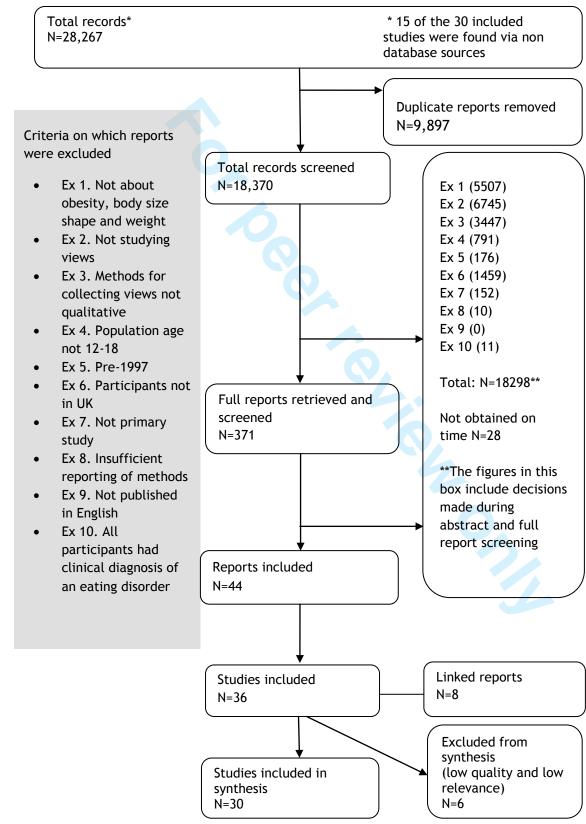
Girlguiding UK	http://www.girlguiding.org.uk/home.aspx
Healthy Weight for Children Hub	http://www.healthyweight4children.org.uk/
l'Institut national de santé publique du Québec	http://www.inspq.qc.ca/
Institute of Education Library	http://www.ioe.ac.uk/services/392.html
International Association for the Study of Obesity	http://www.iaso.org/
International Life Sciences Institute	http://www.ilsi.org/Pages/HomePage.aspx
International Obesity Taskforce	http://www.iotf.org/
International Physical Activity and the Environment network	http://www.ipenproject.org/
The King's Fund Library	http://www.kingsfund.org.uk/library/
National Conferences on Obesity and Health	http://obesityandhealth.co.uk/
National Obesity Forum	http://www.nationalobesityforum.org.uk/
National Obesity Observatory for England	http://www.noo.org.uk/
NHS Evidence – Child Health	http://www.library.nhs.uk/childhealth/
NHS Health Scotland Library	http://www.healthscotland.com/resources/library/index.aspx
NHS National Library for Public Health	http://www.library.nhs.uk/publichealth/
North West Grey Literature Service	http://www.fade.nhs.uk/
NSPCC	http://www.nspcc.org.uk/
NSPCC Inform	http://www.nspcc.org.uk/Inform/informhub_wda49931.html
Ofcom: Office of Communications	http://www.ofcom.org.uk/
Online Research Bank	http://www.ark.ac.uk/orb/
For peer review	only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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Policy Hub	http://www.nationalschool.gov.uk/policyhub/
Save the Children	http://www.savethechildren.org.uk/
School Food Trust	http://www.schoolfoodtrust.org.uk/
Schools and Students Health Education Unit	http://www.sheu.org.uk/
The Scottish Government	http://www.scotland.gov.uk/Home
Social Issues Research Centre	http://www.sirc.org/
Social Science Research Network	http://www.ssrn.com/
SPEEDY: Sport, Physical Activity and Eating Behaviour	http://www.mrc-epid.cam.ac.uk/Studies/Speedy2/speedy1.html
UK Faculty of Public Health	http://www.fph.org.uk/events/archive/2010
UK Preventive Medicine	http://www.ukpreventivemedicine.com/
UCL Department of Epidemiology and Public Health	http://www.ucl.ac.uk/hbrc/diet/projects.html
University of Kent Library	http://www.kent.ac.uk/library/
Welsh Assembly Government	http://wales.gov.uk/
World Advertising Research Centre	http://www.warc.com/
Young Minds	http://www.youngminds.org.uk/

Web only file 2. PRISMA Document Flow of studies through the review

Rees R, Caird J, Dickson K, Vigurs C, Thomas J (2013) *The views of young people in the UK about obesity, body size, shape and weight: a systematic review.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.



Web only file 4: Study quality descriptions

1

2

3

4

5 6 7

8 9 Rees R, Caird J, Dickson K, Vigurs C, Thomas J (2013) The views of young people in the UK about obesity, body size, shape and weight: a systematic review. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Table A: Weight of evidence judgements

	Study	Weight of evidence*Reliability of findingsUsefulness of findings					
		Low	Medium	igs High	Usefulne Low	Medium	gs High
*	Bhugra and Bhui (2003)	 ✓	medium	ingi	<u> </u>	medium	riigii
w1	Billings et al. (2008)		✓		 ✓ 		
w2	Bramham (2003)		✓			✓	
w3	Cockburn and Clarke (2002)		✓			✓	
w4	Curtis (2008)			✓			✓
w5	Daley et al. (2008)		✓				✓
w6	Flintoff and Scraton (2001)		✓			✓	
w7	Frost (2001)	 ✓ 				✓	
w8	Gorely et al. (2003)	✓				✓	
w9	Griffiths and Page (2008)		✓				✓
w10	Grogan et al. (2009)		✓		✓		
w11	Grogan and Richards (2002)		✓				✓
w12	Health Experience Research Group (2010)			~			~
w13	Hester et al. (2009b)		✓				✓
w14	Holt et al (2005)		√			✓	
*	Inchley et al (2008)	 ✓ 			✓		
*	Jackson and Harris (2007)	✓			✓		
*	Kaplan-Myrth (2000)	✓			✓		
w15	Krayer et al. (2008)		✓			✓	
w16	Kurtz and Thornes (2000)		 ✓ ✓ 		✓		
w17	Lloyd and Dittmar (1997)		✓			✓	
w18	Lucas and Lloyd (1999)		✓		✓		
w19	Ludvigsen and Sharma (2004)		✓		✓		
*	McAlister and Neill (2007)	✓			\checkmark		
w20	Mulvihill et al. (2000b)		✓			✓	
w21	Owen et al. (2009)		✓		1		
w22	Percy-Smith (2007)		✓		✓		
*	Reid (2009)	✓			 ✓ 		
w23	Reid and Hendry (2001)		✓		\checkmark		
w24	Shucksmith and Hendry (1998)		✓			✓	
w25	Velija and Kumar (2009)		✓			✓	
w26	Wallace et al. (2007)	1	✓		✓		
w27	Willett (2008)	✓				✓	
w28	Wills et al. (2006)	1		✓			✓
w29	Wills et al (2008a)	1	✓			✓	
w30	Wills (2005b)	1	✓		✓		1

58 59 60

*Studies rated low for both reliability and usefulness were not incorporated into the synthesis.

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Table B Quality of studies of young people's views: studies meeting each criterion

Quality appraisal question	Answer options (see Table A for key to study numbers)						
	Not at all/Not stated	Minimal steps	Several steps	A thorough attempt			
1) Were steps taken to increase rigour in sampling?	N = 9 w1, w4, w17, w19, w23, w24, w27, w28, w32	N = 18 w3, w5, w6, w7, w8, w9, w10, w11, w12, w14, w15, w16, w18, w21, w22, w31, w33, w36	N = 5 w20, w25, w26, w29, w35	N = 4 w2, w13, w30, w34			
2) Were steps taken to increase rigour in data collection?	N = 3 w1, w18, w28	N = 11 w7, w9, w15, w16, w17, w20, w22, w26, w27, w33, w36	N = 17 w3, w4, w6, w8, w10, w11, w12, w14, w19, w21, w23, w24, w25, w29, w32, w34, w35	N = 5 w2, w5, w13, w30, w31			
3) Were steps taken to increase rigour in data analysis?	N = 16 w1, w3, w4, w7, w8, w9, w12, w17, w18, w20, w23, w24, w25, w28, w32, w33	N = 8 w2, w14, w19, w22, w27, w30, w31, w36	N = 6 w6, w15, w16, w26, w29, w34	N = 6 w5, w10, w11, w13, w21 w35			
4) Were the findings of the study grounded in/supported by data?	No grounding N = 0	Limited grounding/support N = 7 w1, w22, w25, w26, w28, w32, w35	Fairly well grounded/ supported N = 22 w3, w4, w7, w8, w9, w12, w14, w15, w16, w17, w18, w19, w20, w21, w23, w24, w27, w29, w30, w31, w33, w36	Good grounding/support N = 7 w2, w5, w6, w10, w11, w13, w34			

Quality appraisal question	Answer options (see Table A for H	key to study numbers)		
5) Breadth and depth of	Limited breadth and depth	Good/fair breadth, limited depth	Good/fair depth, limited breadth	Good breadth and depth
findings	N = 13	N = 7	N = 6	N = 10
	w1, w2, w17, w18, w20, w22, w23, w26, w28, w29, w31, w32, w36	w4, w16, w21, w25, w30, w33, w35	w9, w11, w15, w19, w24, w27	w3, w5, w6, w7, w8, w10 w12, w13, w14, w34
6) To what extent did	Not at all	A little	Somewhat	A lot
the study privilege the perspectives and	N = 3	N = 10	N = 16	N = 7
experiences of young people?	w1, w8, w28	w7, w9, w11, w15, w16, w17, w22, w25, w26, w35	w2, w3, w4, w18, w19, w20, w21, w23, w24, w27, w29, w31, w32, w33, w34, w36	w5, w6, w10, w12, w13, w14, w30

Web only File 5 Th	eme	es ir	om	the	e syr	ithe	esis	: the	e co	ntr	Ibui	tion	010	eacr	1 STI	uay	(ке	es e	et al	l, pe	ersp	ect	ives	on	obe	esity	y in	you	ing	pe
Themes from the synthesis	Billings et al. (2008) w1	Bramham (2003) w2	Cockburn and Clarke (2002) w3	Curtis (2008) w4	Daley et al. (2008) w5	Flintoff and Scraton (2001) w6	Frost (2001) w7	Gorely et al. (2003) w8	Griffiths and Page (2008) w9	Grogan et al. (2009) w10	Grogan and Richards (2002) w11	Health Experience Research Group (2010) w12	Hester et al. (2009b) w13	Holt et al. (2005) w14	Krayer et al. (2008) w15	Kurtz and Thornes (2000) w16	Lloyd and Dittmar (1997) w17	-ucas and Lloyd (1999) w18	Ludvigsen and Sharma (2004) w19	Mulvihill et al. (2000) w20	0wen et al. (2009) w21	Percy-Smith (2007) w22	Reid and Hendry (2001) w23	Shucksmith and Hendry (1998) w24	Velija and Kumar (2009) w25	Wallace et al. (2007) w26	Willett (2008) w27	Wills et al. (2006) w28	Wills et al. (2008a) w29	Wills (2005b) w30
It's down to me													-	_	1	-					Ŭ			■	_					
It's like a girl thing?																														
If you're fat then they don't like you								•			•	-													•					
People that are right big have right dirty houses																6	-													
Being fat is really a bad thing		•															-					•								
Not wanting to stick out																	•													
Day after day, you're that terrified		•	•																											
Vicious circles				1									1																	F
Easier said than done																														
Yo-yos and pick-me- ups																														
Be nice. You've got to help																														

Web only File 5 Themes from the synthesis: the contribution of each study (Rees et al, perspectives on obesity in young people)

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PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	8
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	Last paragraph p8 (PICOS acronym not appropriate, but Population and two other phenomena are stated (views, body size)
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	10 – indication. Is available from authors. Has no

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PRISMA 2009 Checklist

Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	10
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	9
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Web only file 1
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	10
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	10
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	10
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	10
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	n/a
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I ²) for each meta-analysis.	n/a
		Page 1 of 2	
Section/topic	#	Checklist item	-
Section/topic Risk of bias across studies	# 15	Checklist item Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	Reported on page a Not done
-		Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective	on page and on pag
Risk of bias across studies Additional analyses	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating	on page a
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating	on pageNot done17 webonly file13 web
Risk of bias across studies Additional analyses RESULTS	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at	on page a Not done 17 web only file 4

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PRISMA 2009 Checklist

2				
4 5 6 7	Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	see Table 3 and web only file 4
8 9 1(1 ² 12	Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Summary of themes: bottom p17 and table 3
14 15 16	Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Web only file 3
17 18	Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	n/a
19	DISCUSSION			
20 22 22 24 24 26 27 28 28	4 5 6 7 8	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	Key messages section and initial sentences of first 3 paras in discussion
30 31 32) Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	28
33	Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	27-8
35	FUNDING			
36	[§] Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	Footnotes
	<i>From:</i> Moher D, Liberati A, Tetzlaff	J, Altm	an DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Met	d 6(6): e1000097.
41 42			For more information, visit: www.prisma-statement.org.	
43	3		Page 2 of 2	
44 48 48 47 48	5 6 7 8		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml	



'It's on your conscience all the time': a systematic review of qualitative studies examining views on obesity amongst young people aged 12-18 in the UK.

Journal:	BMJ Open
Manuscript ID:	bmjopen-2013-004404.R1
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Date Submitted by the Author:	31-Jan-2014
Complete List of Authors:	Rees, Rebecca; Institute of Education, University of London, Social Science Research Unit, Department of Children and Health Caird, Jenny; Institute of Education, University of London, Social Science Research Unit, Department of Children and Health Dickson, Kelly; Institute of Education, University of London,, Social Science Research Unit, Department of Children and Health Vigurs, Carol; Institute of Education, University of London, Social Science Research Unit, Department of Children and Health Thomas, James; Institute of Education, University of London, Social Science Research Unit, Department of Children and Health
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Secondary Subject Heading:	Public health
Keywords:	Health policy < HEALTH SERVICES ADMINISTRATION & MANAGEMENT, NUTRITION & DIETETICS, PAEDIATRICS

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'It's on your conscience all the time': a systematic review of qualitative studies examining views on obesity amongst young people aged 12-18 in the UK.

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4. MESH keywords: Obesity; Adolescent; Self concept; Public opinion; Review, systematic;

Qualitative research

5. Word count: 4552, not including abstract, Article summary, footnotes and references

Abstract (299 words)

Objective To explore the perspectives of young people in the UK on obesity, body size, shape and weight.

Design Systematic review of qualitative studies using thematic synthesis.

Data sources Sensitive searches of 18 electronic databases from 1997 – February 2010 supplemented by grey literature searches.

Study selection Studies produced since 1997 using qualitative methods to collect perspectives of people aged 12-18 in the UK, reporting methods for data collection or analysis. Studies of people with eating disorders and those rated low in reliability and usefulness were excluded.

Results Searches identified 30 studies involving over 1400 young people from a range of contexts. Young people of all sizes placed considerable emphasis on personal responsibility, and on the social, rather than health implications of being overweight. Young people with experience of obesity described severe, unrelenting, size-related abuse and isolation. Regardless of their own size, young people were judgemental of individuals who were overweight, but those with experience of obesity described an environment that contained multiple barriers to weight loss. Only one study asked young people directly what might support them to have a healthy body size. Study findings were configured under three main themes, labelled with quotes from included studies: general perceptions of size and society's responses ('It's on your conscience all the time'); the experiences of young people who were overweight ('If I had the choice I wouldn't be this size'); and these larger young people's experiences of trying to loose weight and suggestions for action ('Make sure, even when it's hard, you've got people there').

Conclusions The perspectives of young people in the UK, when synthesised across the spectrum of body sizes, paint a picture of a stigmatising and abusive social world. Research and policy need to engage young people actively so as to address the social implications of obesity.

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2	
3 4	'Article summary' section
5	
6	Article focus.
7	
8	 This study examines the views of young people in the UK aged 12-18 on
9	
10	obesity and body size.
11	
12	 It explores these young people's perspectives in the context of the values and
13	
14	norms held by their peers.
15	
16	 It asks what meanings are attributed to body size by young people , what
17	
18	factors they see influencing body size, what experiences they relate to body
19	
20	size and what changes they think may help them achieve or maintain a
21	
22	healthy weight
23	
24	Key messages
25	This review contributes to the study of chesity by siving a value to young
26 27	 This review contributes to the study of obesity by giving a voice to young
28	naanla
29	people.
30	. It finds that the young people in the LIK describe a social world that is
31	 It finds that the young people in the UK describe a social world that is
32	stigmatising, abusive and contains multiple social barriers for those who are
33	sugnations, abusive and contains induple social barriers for those who are
34	overweight.
35	over weight.
36	Research needs to engage young people more appropriately so as to help
37	• Research needs to engage young people more appropriately so as to help
38	identify means that can be used to address the negative social implications
39	
40	and other challenges of obesity.
41	
42	Strengths and limitations of this study
43	
44	• Together, the synthesised studies included a total of over a thousand young
45	
46 47	people with experience of a range of body sizes.
48	
49	 Comprehensive searches sought out less easily identifiable literature that
50	
51	increased the richness of data for analysis.
52	
53	 The review identified only a small body of studies that enabled young people
54	
55	to help identify priorities for study and analysis.
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BACKGROUND

Obesity in young people in the UK continues to be a public health issue. A recent Englandwide survey found that over 23 % of boys and 16 % of girls aged 11-15 would be grouped in this category.[1] Young people who are overweight can experience physical ill-health due to obesity while they are still young[2-3] and have an increased risk of being overweight as an adult.[4] Studies have found low levels of mental health in young people classified as obese.[5]

The influences on body weight are complex and multi-levelled. Highly complicated 'system maps' have been developed to try to describe the many links between body weight and biological and genetic factors, individual behaviour, and influences from individuals' social and physical surroundings. [6] Nonetheless, press coverage often emphasises individual choices over structural factors that might influence weight gain. [7-8] In contrast, weight gain in the population has been characterised in the field of public health as, 'the inevitable – and largely involuntary – consequence of exposure to a modern lifestyle', [9(p5)] or due to the 'obesogenic environment'.[10-11] It is also recognised that, once a certain weight is gained. multiple factors act to make that weight extremely difficult to lose, and even likely to increase.[11]

In terms of social values, despite its increasing prevalence, obesity still transgresses social norms. To be very overweight is seen as morally reprehensible.[12-13] Judgements in the general population about obesity are imbued with ideas about personal responsibility and stereotyping is common, with obesity linked with socially undesirable behaviours and other attributes, such as weakness of will, laziness and greed.[14-15] Such attitudes appear to be mirrored in people's behaviours and experiences; studies of adults who are very overweight

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show that they experience both stigma and discrimination and that this impacts negatively on their well-being.[16-18]

Research evidence to help us decide how to prevent or deal with obesity in young people is limited.[19-20] Intervention research regularly fails to consider what young people themselves think,[21] and yet young people are likely to have insights into factors that influence their own weight and that of their peers, and ideas about how they can be supported to keep their own weight within a healthy range. Research that explores these insights can inform initiatives that aim for positive outcomes.[22-23]

The techniques available for systematic reviews of research, perhaps better known for the aggregation of intervention effect sizes, also include those for meshing together, or configuring, study findings.[24] Configuration in systematic reviews can help make sense of multiple accounts from varied perspectives and so build theory about lived experience.[25-26] The authors know of only five previous systematic reviews that include views on body size. A companion review to this study explored children's views (aged 4-11).[27] The others all explore the views of adults,[28-31] with the first of these also including the perspectives of young people diagnosed as obese. The systematic review presented here examines recent research findings from the UK where young people aged from 12-18 provide views about their own body sizes or about the body sizes of others. It aims to help inform the development of practice and policy-based initiatives and the commissioning of further research in ways that put the perspectives of young people at the fore-front.

A note on language: Descriptive terms for body size are extremely value laden. We have tried to restrict our use of terms that could potentially further stigmatise individuals or cause

offence. We have avoided unqualified use of possibly pejorative terms unless young people or others are quoted as using them to describe themselves. It is also difficult to report body size variation in the literature with precision, since the body sizes of participating young people are often not explicitly specified by study authors, or identified by young people themselves. When authors have indicated a distinction, we have used the phrase 'healthy weight/size' to contrast young people who are not overweight with those who would be classified as overweight. We have used 'large', 'larger', or 'overweight' interchangeably to indicate that young people have a larger body size when this information is available in study reports. We have also used the phrases 'very overweight/ large' to indicate that a young person is identified as having been diagnosed as clinically obese, or as having a body mass index in excess of 30.

METHODS

We searched 18 electronic databases from the fields of health, public health, education, social science and social care in February / March 2010, taking care to include sources rich in UK-based journal and report literature. Controlled term and free-text searches were used that combined sets of terms for young people, body size, views research, and geographical location. We also searched six key journals and 54 websites by hand, used internet search engines, scanned reference lists, looked for papers that had cited key studies, and contacted key informants for relevant research (Web only file 1). We managed review data using the specialised online review software EPPI-Reviewer.[32]

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Study selection

We included studies that reported views about obesity, body size, shape or weight, sought from children in the UK aged 12 - 18. We defined *views* as attitudes, opinions, beliefs, feelings, understandings or experiences, and excluded studies that measured only health or weight status, behaviour or factual knowledge. Studies needed to have used qualitative data collection methods (e.g. in-depth or semi-structured interviews and/or focus groups) and, as a minimum, to have described one of two key aspects of a study's methods (data collection or analysis). We sought studies published in English since the start of 1997 (to cover a period of heightened interest in the topic of obesity). We excluded studies solely of young people with an eating disorder diagnosis, on the basis that this group may be considered exceptional in terms of their requirements for achieving or maintaining a healthy weight. This last criterion was the only one not set out in the review's protocol (for access to this see data sharing statement). These inclusion criteria were piloted by the first four authors of this study so as to develop shared understandings of the criteria. A sample of early screening decisions was double-checked by the first author. Screening was thereafter done individually.

Describing and appraising studies

We described the final set of included studies using a standardised classification system,[33] supplemented using frameworks from previous reviews of the views of children and young people.[25] The quality of included studies was appraised using criteria modified from a set developed for examining the findings of evaluations of intervention processes (Table 1).[34-35] The studies were each allocated a 'weight of evidence' with two dimensions. First, we rated the reliability of the findings (using criteria 1 to 4). Secondly, we rated the findings' usefulness (based on the richness and complexity of analysis, and the privileging of perspectives, e.g. methods encouraging young people to prioritise issues for discussion – using criteria 5 and 6). Two reviewers worked independently on each study, before reaching

consensus. We excluded studies from the synthesis if they were rated low on both dimensions.

[Table 1 to go about here]

 1 Were steps taken to increase rigour in the sampling? Consider whether: *the sampling strategy was appropriate to the questions posed in the study (e.g. was the strategy well reasoned and justified?); *attempts were made to obtain a diverse sample of the population in question (think about who might have been excluded; who may have had a diperspective to offer); *characteristics of the sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were made to obtain a diverse sample, basic socio-demographics, characteristics relevant to the context of the study, etc.). 2 Were steps taken to increase rigour in the data collected? Consider whether: *data collection tools were piloted/(and if quantitative) validated; *(if qualitative) data collection was comprehensive, flexible and/or sensitive enough to provide a complete and/or vivid and rich description of peopl perspectives and experiences (e.g. did the researchers spend sufficient time at the site/with participants? Did they keep 'following up'? Was more the method of data collection used?); * steps were taken to increase rigour in the analysis of the data? Consider whether: * data analysis methods were systematic (e.g. was a method described/can a method be discerned?); * diversity in perspective was explored; * (if qualitative) the analysis was balanced in the extent to which it was guided by preconceptions or by the data); * the analysis sought to rule out alternative explanations for findings (in qualitative research this could be done by, for example, searching for negat cases/exceptions, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity; in quantitative research this done by, for example, searching for negat cases/exceptions, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity; in	were in le's than one
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4 Were the findings of the study grounded in/ supported by the data?	
Consider whether:	
*enough data are presented to show how the authors arrived at their findings;	
*the data presented fit the interpretation/support claims about patterns in data;	
*the data presented illuminate/illustrate the findings;	
*(for qualitative studies) quotes are numbered or otherwise identified and the reader can see that they don't just come from one or two people.	
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2 3	5 Please rate the findings of the study in terms of their breadth and depth.	
3 4	Consider whether:	
5	(NB: it may be helpful to consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/analysed); *a range of issues are covered;	
6	* the perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective);	
7	*richness and complexity has been portrayed (e.g. variation explained, meanings illuminated);	
8	*there has been theoretical/conceptual development.	
9 10		
11	6 To what extent does the study privilege the perspectives and experiences of young people?	
12	Consider: * whether there was a balance between open-ended and fixed response options;	
13	*whether children were involved in designing the research;	
14	* whether there was a balance between the use of an a priori coding framework and induction in the analysis;	
15	*the position of the researchers (did they consider it important to listen to the perspectives of children?);	
16 17	* whether steps were taken to assure confidentiality and put young people at ease.	
18	7 Overall what weight would you agains to this study is terms of the valiability (tweetworthings) of its findings)	
19	7 Overall, what weight would you assign to this study in terms of the reliability/trustworthiness of its findings? Guidance:Think (mainly) about the answers you have given to guestions 1 to 4 above.	
20		
21		
22 23	9 What would you appian to this study in terms of the usefulness of its findings for this review?	
23 24	8 What weight would you assign to this study in terms of the usefulness of its findings for this review? Guidance: Think (mainly) about the answers you have given to questions 5 and 6 above and consider:	
25	*the match between the study aims and findings and the aims and purpose of the synthesis;	
26	*its conceptual depth/explanatory power.	
27		
28 29	\$ The following responses were available for these questions:1-3. Yes, a fairly thorough attempt was made; Yes, several steps were taken; Yes, a fe	
30	steps were taken; No, not at all/Not stated/Can't tell. 4. Good grounding/support; Fair grounding/support; Limited grounding/support. 5. Limited breadth or	
31	depth; Good/fair breadth but very little depth; Good/fair depth but very little breadth; Good/fair breadth and depth. 6. Not at all; A little; Somewhat; A lot	
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Analysis

Four reviewers worked on the analysis. We used thematic synthesis to examine each line of each study's findings and create codes that described meaning and content. This approach to synthesis is particularly suitable for systematic reviews, because the discipline of line-by-line coding requires that reviewers consider carefully each aspect of every study; and whether or not a finding from one study really does 'translate' into another [36] It also enables findings and new conceptualisations to emerge inductively from the included studies, and so is a good fit with one of the principles of our review which aimed to highlight young people's own perspectives. Findings were sought throughout the report, not just from results sections. We looked first at studies with views from young people described as having experience of being overweight, and then moved on to the remainder. We looked for similarities and differences between codes as the code set grew, and attempted to identify a smaller set of themes that captured the most recurrent and most emphasised ideas across the full range of studies' findings, while also looking for contradictory ideas. This smaller set of ideas was developed in the light of the review's questions, the themes identified in our earlier review of children's views, [27] and authors' descriptions of body size status (experience of overweight vs. otherwise). The lead author then wrote a narrative to describe the themes, with direct quotes from the included studies used both within the narrative and as theme headings so as to illustrate young people's own representations of their views. We also consulted a group of young people (PEAR), convened by the National Children's Bureau to enable young people's views and opinions to influence public health research.[37] We worked with the group for one and a half hours within a longer group residential. The group was presented with illustrations of the synthesis themes and asked whether this seemed believable and whether anything might be missing, as well as for ideas about how to present findings. The processes for consulting members of the PEAR group were approved by a Faculty Research Ethics Committee at the Institute of Education. Further detail on this group is available in the technical report (see Data sharing statement).

RESULTS

The state of the literature

We found and screened 28,267 citations and identified 30 studies for the review's synthesis (Web only file

2 presents the flow of studies through the review).

[Table 2 to go about here]

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Table 2: Details of included studies: aims and sample characteristics (N=30)

Study [reference no]	Aims	Sample size	Weight status	Data collection and analysis methods
Billings et al. 2008) [w1] ³⁸	To explore factors which motivate and create barriers to engagement in regular physical activity for 11-12 and 14-15 year old girls.	91	Not stated.	Group interviews Content analysis
Bramham (2003) [w2] ³⁹	To explore boys' perceptions and experiences of school-based PE and involvement in extra-curricular and out-of-school physical activities.	24	Mesomorphic (i.e. compact and muscular) (mainly).	Individual and group interviews Data analysis method not reported.
Cockburn and Clarke (2002) w3] ⁴⁰	To explore the cultural and sub-cultural aspects of teenage girls' and young women's lives which influence their involvement in sport and PE.	6	Not stated.	Individual interviews Reflexive interpretation and biographical analysis
Curtis (2008) w4] ⁴¹	To explore the experiences of young people with obesity within the secondary school environment in relation to areas of concern prioritised by the HSP (Healthy Schools Project)	17	Not stated. (participants recruited from community-based obesity intervention programme.)	Individual and group interviews Thematic analysis
Daley et al. 2008) [w5] ⁴²	A qualitative study nested within a randomised controlled trial explored obese adolescents' experiences of participation in an exercise therapy intervention.	25	Classified as obese or morbidly obese.	Individual interviews Thematic analysis
Flintoff and Scraton (2001) [w6] ⁴³	To explore young women's perspectives of and attitudes towards involvement in physical activity and physical education (PE). Explores the nature, purposes and experiences of involvement, both in and out of school and interface between identities, structures and cultural settings. Located within developing feminist theoretical debates.	21	Mesomorphic (mainly).	Individual interviews Thematic analysis
Frost (2001) [w7] ⁴⁴	A theoretical, feminist, sociological enquiry examining the direct perception of young women about how they, and their contemporaries, experience their bodies.	7	Not stated.	Group interviews before and after art clas plus questionnaire Data analysis method not stated
Gorely et al. (2003) [w8] ⁴⁵	To develop the concept of gender-relevant physical education combining the work of Pierre Bourdieu and his notion of the habitus and feminist philosopher Iris Marion's analysis of feminine motility by drawing on data generated from a study of young people's articulation of the relationships between muscularity, physicality and gender.	348	Not stated.	Group and individual interviews Data analysis method not stated
Griffiths and Page (2008) [w9] ⁴⁶	To examine the relationship between obesity and victimisation, and the impact it has on peer relationships.	5	Classified as obese.	Sequence of two to three individual interviews Interpretative phenomenological analysis
Grogan et al. 2009) [w10] ⁴⁷	To investigate how young men and women smokers and non-smokers talk about the impact of smoking on appearance, with the aim of using these accounts to inform anti-smoking campaigns targeted at young people	47	Not stated.	Group interviews Thematic analysis
Grogan and	To understand how men and boys construct body image including their views	12	none were notably over-	Group interviews

Richards (2002) [w11] ⁴⁸	on body dissatisfaction, body shape ideals and behavioural concomitants of body image.		or underweight as judged by the researchers	Thematic analysis
Health Experience Research Group (2010) [w12] ⁴⁹ (a-w: see note at table foot)	To examine a range of peoples' perspectives in terms of what someone might expect to experience when diagnosed with a particular condition or illness. All the young people and parents interviewed had been affected by weight issues. The research was done with the aim of populating a website 'youthhealthtalk.org', so as to help people 'share in young people's experiences of health and illness.'	24	Some of the young people had been told they were overweight or were in the medical category 'obese'	Individual interviews, sometimes with friend present Thematic analysis
Hester et al. (2009b) [w13] ⁵⁰	To uncover in-depth qualitative accounts of intervention impact from obese young people during a period of lifestyle change after attending a residential weight-loss camp.	5	Classified as obese.	Researcher participation in intervention pri to individual interviews Thematic analysis
Holt et al (2005) [w14] ⁵¹	To explore children's perceptions of attending a residential paediatric weight- loss camp.	15	Classified as obese.	Individual interviews Thematic analysis
Krayer et al. (2008) [w15] ⁵²	To describe the nature of social comparison processes mentioned spontaneously by boys and girls with a particular focus upon enhancement comparisons.	20	Not stated	Sequence of two individual interviews Grounded theory approach
Kurtz and Thornes (2000) [w16] ⁵³	To gather children's views about their health needs to inform policy and the strategic development of services for school-age children in England.	43	Not stated.	Group interviews Data analysis method not stated
Lloyd and Dittmar (1997) [w17] ⁵⁴	To broaden and deepen understanding of 'normal' adolescent boys' and girls' body image concerns, in order to provide an appropriate basis for interventions aimed at promoting healthier diet and lifestyle.	56	Not stated.	Individual and group interviews Thematic analysis
Lucas and Lloyd (1999) [w18] ²⁹	To explore adolescents' use of cigarettes to moderate negative emotions.	32 groups with 2-6 girls in each group	Not stated.	Group interview with a video presentation encourage discussion Thematic analysis
Ludvigsen and Sharma (2004) [w19] ⁵⁵	To examine the influences upon children and young people in their food choices during the school day.	54	Not stated.	Participant observation and questionnaires followed by group interviews using photographs as prompts Data analysis method not stated
Mulvihill et al. (2000b) [w20] ⁵⁶	To provide data on the reported drivers and barriers to physical activity among young people aged 5-15 years.	103	Not stated	Group interviews Data analysis method not stated
Owen et al. (2009) [w21] ⁵⁷	To explore children's (and parents') views and experiences of attending a hospital-based childhood obesity clinic, in order to inform the development of services in primary care.	11	Classified as overweight.	Individual interviews (parents not present) Thematic analysis
Percy-Smith (2007) [w22] ⁵⁸	To explore young people's understandings and experiences of health as experienced in their everyday lives and according to their own terms of reference rather than in response to policy priorities.	62	Not stated	Participative action research using: young people considering relevant research conducted by their peers, followed by interactions between young people and health professionals, group art work and plenary discussion

				Thematic analysis
Reid and Hendry (2001) [w23] ⁵⁹	To examine young people's health concerns within the context of young people's own perspectives.	37	Not stated	Series of two group interviews Thematic analysis
Shucksmith and Hendry (1998) [w24] ⁶⁰	To examine young people's views about diet, weight, their appearance and the impact of fashion norms.	50 group interviews, 44 individual interviews	Not stated	Group interviews Thematic analysis
Velija and Kumar (2009) [w25] ⁶¹	To explore, through focus group interviews with Year 10 girls, how girls' experiences of PE and GCSE PE are gendered.	16	Not stated	Group interviews Thematic analysis
Wallace et al. (2007) [w26] ⁶²	To explore adolescents' experience of the impact of having cancer, including the burden of illness, treatments and resultant appearance changes.	8	Not stated	Individual interviews Interpretative phenomenological analysis
Willett (2008) [w27] ⁶³	To provide empirical evidence which will look past the structure–agency dichotomy to see how human agency and social structure act through each other to influence pre-teen and teen girls' consumption of fashion and digital media.	26	Not stated	Art work and individual interviews Thematic analysis.
Wills et al. (2006) [w28] ⁶⁴	To explore the embodied perceptions of obese, overweight and 'normal' weight young teenagers [from socio-economicallydisadvantaged families living in Eastern Scotland], within the socio-cultural contexts in which these young teenagers live their everyday lives.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills et al. (2008a) [w29] ⁶⁵	To examine the dietary practices and health and weight conceptualisations of BMI-defined obese/overweight and non-obese/overweight young teenagers from middle-class families; to situate these observations within the 'habitus' of the family by exploring these issues from the perspectives of their parents; and to compare these data to the data already collected in an earlier study involving young working class teenagers.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills (2005b) [w30] ⁶⁶	To examine how the new social contexts experienced by young people after leaving school are related to everyday food practices and eating habits.	31	Not stated	Food diaries and individual interviews Thematic analysis

Note: The findings for the Health Experience Research Group (2010) study [w12], are contained in a series of webpages, which are represented in this paper's text by the

letters a-w. To save space in this paper, readers who want to follow the links to each webpage are referred to this study's full technical report at

http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395.

The 30 studies varied considerably in terms of their stated aims and data collection methods. Table 2 describes each study briefly and specifies the code that is used to reference the study in this paper (w1-w30). Thirteen studies focused directly on body size, shape or weight. Five of these focused on the views of young people who were or who had been overweight about their recent experience of an intervention for losing weight,[w4, w13-14, w21] or encouraging physical activity.[w5] The other eight asked young people to describe their own and others' experiences of being a certain body size, or for more general views about body size or image.[w7, w9, w11-12, w15, w17, w28-29] The remaining 17 studies focused on young people's overall health needs,[w16, w22-24] food,[w19, w30] smoking,[w10, w18] cancer,[w26] clothes and identity,[w27] physical education,[w2-3, w6, w8, w25] and physical activity.[w1, w20] Most, but not all of the findings from young people with experience of being overweight were identified from nine studies.[w4-5, w9, w12-14 w21, w28-29] It was often not possible, from these and other studies, to identify the extent to which participating young people were overweight (e.g. classifiable as obese, as opposed to overweight).

In terms of quality, only three studies, [w4, w12, w28] were judged to have highly reliable findings (Web only file 3). Seven studies were judged highly useful. [w4-5, w9, w12-14, w28] Six studies were excluded from the synthesis on quality grounds. [67-72] (For an indication of the contribution of each included study see Web only file 4.)

Young people's views

Analysis of the findings of each study resulted in three main themes, each with further sub-themes (Table 3): (i) general perceptions about different body sizes and society's responses to them – which were often couched in moral terms ('It's on your conscience all the time'); (ii) Overweight young people's experiences that they linked to their size ('If I had the choice, I wouldn't be this size'); and (iii) Overweight young people's experiences of trying to lose and maintain weight and their suggestions for action ('Make sure, even when it's hard, you've got people there'). The PEAR group considered these themes to be believable

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<text><text><text> but members were concerned by the severity of accounts that they read. They suggested that when writingup we should try to avoid further upset. In response, we attempted to avoid language that labelled young people, and included in the synthesis cases illustrating constructively resistant or positive attitudes. The rest of this section details the findings of the synthesis, with each of the above main themes addressed in turn.

[Table 3 to go about here]

Table 3 Quotations from study participants to illustrate each theme

Themes	Illustrative quotes from participants (also see quotes in the text) [Study reference no
It's on your	conscience all the time
It's down to me	I mean if you're the one that wants to lose weight, then you can't say "Right, mum, can you lose weight for me?" you're the one who has to go oot for exercise and cut doon on your foods and that eh? That's what I ken, its doon tae me. [Nick, male, 13yrs, ethnicity unspecified, very overweight][w28 p400] I would love to say it's all to do with genetics and I have nothing to do with it, but I know that
	what I do isn't particularly healthy and therefore it's due to me as well I think it's for me it's just the fact that I'm stubborn and lazy and that I like eating my food. [Holly, female, 18yrs, white, very overweight][w12m]
It's like a girl thing?	Tobias:I'm a couple of inches shorter than all my friends as well and I feel pressure. Tom: you've got friends who are like quite big in build you want to be the same as them. Although you might not be able to do anything about it, it's on your conscience all the time. You want to be that sort of size. [Tobias and Tom, male, 16-17yrs, ethnicity unspecified, healthy weight][w11 p229]
lf you're fat, then they don't like you	they (boys) think that if you look good then you're okay but if you're fat then they don't like you. [female, 11-14yrs, ethnicity and body size unspecified][w18 p24]
People that are right big have right dirty houses	Like when you start thinking ahead, like what are you going to be like, people just sit at home eating pizza all time, I wouldn't like to be one those boring people. I want to be a person that can go out, go on holiday, go to work, have lots of friends, get out of the house you watch lot of programmes all people that are right big have right dirty houses. [male, 14yrs, white, very overweight, BMI 31.3][w5 p814]
Being fat is really a bad thing	If you've got someone in your family who's quite fat, you see how they are and you think to yourself, I don't want to be like thatIt's a bit of a turnoff if you're fat, so you try not to get like that. [Tony, male, 16-17yrs, white, body size unspecified] [w11 p226]
[w23 p156]	I think it's all down to like your mental, your mental picture of yourself really it's when you'r like, "Oh I feel so bad and ugly today." That, that's when you become really bad, and so size isn't the thing, it's more the way you act, if you act like all closed and in a corner and not socialising, then I mean attractive is someone who is the life and soul of the party, dancing in the middle, having a good laugh.' [Huw, male, 17yrs, white, overweight] [w12j]
If I had the c	hoice, I wouldn't be this size
Not wanting to stick out [w12b]	But the places where I go most of the clientele are like a lot older than me And that's weird to think that, you know, you'll be, you're wearing the same clothes as like your 50 year old neighbour or whatever And it isn't nice you are always thinking about it, especially in public if I had the choice I wouldn't be this size. [Rachel, female, 17yrs, white,
	overweight][w12d] it makes you feel really bad 'cos if they're going, "Oh I'm too fat," how's that supposed to make you feel 'cos when you're like twice the size of 'em? [Huw, 17yrs, white, overweight][w12b]
Day after day, you're that terrified	it wasn't just a group thing, it was walk down the corridor, and I actually counted this one day how many people said something to me, just walking about a hundred yards twenty-three people I think, and you know every day in between every lesson and going, you know, it gets a lot. [Becca, female, 17yrs, white, overweight][w12c] Day after day, walking in you're that terrified that you don't want to go school, this is what
	my point of view were like three years I tried not going to school because I used to get bullied and my mum got took to court. [Eve, female, age and ethnicity unspecified, very overweight][w4 p414] I've put on the weight and I still want to do it [participate in PE classes] but it's the glances, it
	the sniggers, it's the laughs, stupid things that people were saying, "look at her running along

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	she can barely keep-up." [Sam, female, 15ys, overweight, BMI 38.0][w9 p41]
	I don't like having to walk into places where I don't know anyone or walking past a group of people; I don't like walking past because of things they might say and they are less likely to say if I've got Diane [sister] with me. [Jane, 17yrs, ethnicity unspecified, overweight, BMI 46.7][w4 p42]
Vicious	I was just getting bullied all the time and nobody wanted to be with me. I was always on my
circles -	own in my bedroom doing my own thing [For the first six weeks of a weight-loss programme] I just sat in a corner, didn't talk to anybody. I wouldn't even talk to any of the friends that I'd made. [Chelsea, female, 17yrs, white, overweight][w12s]
	When I cry I eat, but then I eat because I'm crying, but I'm crying because I'm getting bigger, and it's just a vicious circle. [Vicki, female, 18yrs, white, overweight][w12i]
Make sure ev	ven when it's hard, you've got people there
Easier said	I've got a younger brother and we've got all these sort of stuff in house for him and then
than done	that's just like a bit, a bit of a temptation And sometimes when he gets right nice stuff and I'm sat there eating, I don't know, fish, chips, and mushy peas and it's just not right. [Reg,
[w13 p5]	female, 13yrs, white, overweight][w12l]
[]	[after an exercise intervention] I felt healthier and better and stuff and I felt like I had actuall done something. Rather than going home and being a couch potato. [Male, 15yrs, white, very overweight, BMI 37.6][w5 p814]
Yo-yos and pick me ups	I was 14 years old and having so much like, being so unhappy being overweight, finally getting the weight off is amazing, then piling it all straight back on was just absolutely heartbreaking. Yo-yoing up and down in normal diets just, has just become a way of life really now It just makes you really doubt yourself. [Vicki, female, 18yrs, white, overweight][w12e]
	[commenting on experience of a community-based weight-loss intervention] You have people who are in the same situation as you who know what it's like and things like that. you have a problem or if you have like just a total collapse you've got people who will just pick you back up. And I think that's been the most thing about it, the most important thing that I've had for me. [Emily, female, 14yrs, white, overweight][w12I]
Be nice.	There's ways to be more tactful. As you know, the doctors that I've had haven't always been
You've got to	particularly nice about ityeah, there's ways to say things nicely, and although sometimes
help.	you need to go for the approach that says, "You need to do something about your weight now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p]
	I'd just say to like parents that without you, you won't be, your child won't be able to do it
	And you've got to help them as much as they're helping themself. And just, if you don't help
	them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale
	them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale female, 14yrs, ethnicity unspecified, overweight][w12a] Make sure that even when it is hard, you've got people there. [Cris, 14yrs, gender, ethnicity

It's on your conscience all the time

This first main theme included ideas about what can influence body size, who is accountable and

concerned, implications, and ideal, aspired to and acceptable bodies.

It's down to me

Some young people's accounts of what could influence their weight referred to relatively unchangeable physical phenomena, such as body metabolism, bone structure, puberty or genetics.[w1, w7, w12, w28-29] Young people of all sizes, however, emphasised the individual behaviours of being physically active and watching what you eat,[w5-7, w11-w12, w20, w23-24, w27-28] and considered body size was within their own control.[w11-12, w28]

One study reported that participants stated 'quite fervently' that a young person's size was their own responsibility,[w28] and in only two studies did young people suggest that some responsibility might lie elsewhere.[w12, w19] Young people who felt, or already were large made it clear that they knew they had to do something and tended to be critical of their own self-will.

It's like a girl thing?

Young people tended to identify young women as being more interested in body weight.[w7-8, w10-11, w12b, w15, w19, w29] As one put it, 'It's like a girl thing. It's like "oh she is wearing some tight jeans she looks awful." ' [Male, 13yrs, ethnicity and body size unspecified].[w15 p895] But accounts also identified young men's concerns, which had the additional focus of height and musculature.[w2, w7, w11, w17]

If you're fat, then they don't like you

Young people did not necessarily equate a large body size with ill-health,[w28-29] although the need to lose weight for their future health was identified by young people with a high weight.[w12k] In one study framed explicitly around body size, only a minority spontaneously mentioned improved health as a benefit of losing weight.[w28] Some (mainly young men) did report concern that an increased size might, or already was, reducing physical ability or performance.[w16]

Far more emphasis was placed on the impact of body size on relationships. Young people with a healthy size identified how overweight young people would not be respected,[w18] or would be picked on,[w7] or

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bullied.[w28] [see 'Day after day...' below.] Relations with the opposite sex were particularly pertinent.[w8, w11, w12j, w25, w30]

People that are right big have right dirty houses

Young people, many who were themselves a large size, attributed a consistently similar set of negative characteristics to people with large bodies, describing them as lazy, or unable to control their desire for food, or both,[w 5, w17, w29] While sometimes young people made efforts not to appear judgemental of people with large bodies, this was not always the case. This, and participants' emphasis on individual control are illustrated by one young women saying, 'Fat people, I hate fat people. I don't hate their personalities, I just don't like the way they look. I just don't know why folk would do that to themselves.' [Elspeth, female, 13-15yrs, white Scottish, body size unspecified] [w29 p7]

Being fat is really a bad thing

Young people's ideas about which body sizes were valued were consistent across studies. Both sexes characterised an ideal young woman's body as thin,[w12o, w24, w30] slim,[w17] or skinny.[w2010v, w22] For both sexes, the ideal for young men was muscular,[w2, w11, w15, w17] and looking fit.[w11, w17] Young men themselves added not too muscular,[w8, w11, w12b] and toned.[w12b] The aspirations of young people with healthy size bodies tended to refer to these ideals, or avoiding being very large.

In terms of unacceptable body sizes, over half the participants in one study of young women identified weight as the deciding factor for judging whether your appearance was acceptable or not.[w7 p148] A participant in another study was more specific, saying, 'Being fat is really a bad thing, more than anything. More than having a face that is not so good looking.' [14-17yrs, gender, ethnicity and body size unspecified][w23 p156]

Overweight young people expressed more complex views about size and acceptability,[w12, w28] for example explaining how valuing yourself was key to being found attractive by others.

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If I had the choice, I wouldn't be this size

This second main theme incorporated the views of young people who would be, or had been, classified as overweight about their experience of being that size. For views on attempting to lose weight or maintain weight-loss, see 'Make sure, even when it's hard, you've got people there', below.

Not wanting to stick out

Overweight young people described how everyday social activities could be difficult because of their size.[w4, w9, w12, w28] Shopping trips and other social events could leave them feeling excluded, marked out as different and ashamed and could lead to them questioning themselves,[w12d, w28] and spending a great deal of time on their own at home.[w4] One participant described this sense of feeling different, saying 'I ...just wanted to be part of the crowd and not to stick out like a sore thumb... Because sticking out... when someone sees the person who looks, who is bigger than... most of them, almost everyone there, that makes you feel really bad.' [Huw, male, 17yrs, white, overweight][w12b]

Interacting even with friends could be difficult. Some larger young people reported friends saying that they were ashamed to be seen with them,[w12] others described feeling more confident with peers who knew them before they became overweight.[w9 pS42] In addition to explicit cases of ridicule and abuse [see 'Day after day, you're that terrified'], young people described difficult conversations where their peers, who they judged not to be overweight, had described themselves as fat, solely to gain reassurance that they were not.[w4, w12, w17, w28]

Day after day, you're that terrified

In just over a third of studies, young people of varied sizes identified bullying as something that was experienced when you had a large body size.[w2-5, w9, w11-15, w24, w28] Young people classified as very overweight reported severe incidents of physical abuse, that included being threatened with a knife, beaten, kicked, pushed down stairs and having objects thrown at them.[w4, w9, w12s] Verbal abuse, such – 24 –

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as name-calling and using slurs, was described as more common, but, along with less direct abuse, such as deliberate and extended isolation, whispering, or sniggering, was the source of considerable distress.[w4, w9, w12c]

School was the setting for much of the abuse and it had become so serious for some that they were unable to attend. Young people identified physical education (PE) lessons as a particular source of exposure to humiliating ridicule.[w3, w9]

Size-related abuse was heavily implicated by young people as a negative factor for their emotional health, leading to reduced confidence, anxiety (especially around venturing into public spaces), loneliness and depression.[w9, w12c]

Vicious circles

Young people who would be classified as overweight described a variety of coping strategies. These included extreme withdrawal, as well as eating to reduce boredom, when stuck at home, and for comfort following bullying.[w12] Some described how these responses could leave them feeling worse and lead to other, additional difficulties, including further weight gain.

In contrast, others appeared to have developed more defiant coping strategies, as illustrated by one participant, who said,' I know more fat jokes than anybody else going. I'm better at it than they are. ... I got so low on so many occasions. Now it's just like "you have a problem with me, that's your problem." [Ann, female, 17 years, ethnicity unspecified, overweight, BMI 43.3][w9 pS42]

Make sure, even when it's hard, you've got people there

This third, and last, main theme incorporated the views of young people about what happens when they are overweight and try to lose weight. Also presented here are young people's suggestions as to what actions

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should be taken to support them in maintaining or reaching a healthy weight, and coping with related stresses and anxieties.

Easier said than done

Larger young people described difficulties modifying what they ate,[w12-14] and frustration at repeated weight-loss attempts.[w12] They were sensitive to the additional effort they felt they had to put into regulating their food intake compared to their peers.[w12-13, w24] As one participant in a residential camp put it, 'I thought "I've been good now surely I can't spend the rest of my life spending as much focus on my weight as I have been doing"... people manage to stay the same weight and they don't really focus on it. They have their food... and they live their life.' [Ashley, male, 16yrs, ethnicity unspecified, very overweight][w13p310]

These young people described various barriers to physical activity. In addition to the abuse described above when exercising in school, some said that getting tired, or out of breath too quickly, or other size-related physical complications, such as asthma, got in the way of their exercising.[w5, w12] The availability of calorie-dense foods sometimes made it difficult to stick to healthy eating plans, especially when others were enjoying different kinds of food.[w12, w14] Others reported difficulties with family and friends' own size-related beliefs. These included incorrect dietary advice,[w12-13] and unhelpful pressure to take, or not to take action.[w12-13, w28]

Again emphasising personal responsibility, young people who had taken action successfully over their size emphasised the central importance of avoiding laziness,[w5, w12, w28] and being proud about taking action.[w12-13, w21, w28]

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Yo-yos and pick me ups

Larger young people described frustration at the slow rate of substantial weight loss.[w12] They were preoccupied with the idea of weight rebounding,[w13-14, w28] and described being demoralised by regaining weight.[w12-13] When talking about things that were helpful for coping with this long-term process of weight loss, young people identified goals, and feedback from others in particular.[w12, w21] Also helpful was support from, and giving support to, others who were going through, or had gone through, the same experience.

Be nice. You've got to help.

Overweight young people tended to suggest things that they themselves could or should do to support themselves. Some stated that education regarding the benefits of healthy eating and exercise was important.[w12] They also encouraged other overweight young people to access their psychological resources.[w12, w22] When it came to their suggestions as to what others could do, these centred around the need for professionals and other people to be less judgemental.

They suggested that families could support and encourage them by joining in with their attempts to pursue a healthy lifestyle. Above all, these young people repeatedly emphasized the need for support.

DISCUSSION

This is the first systematic review of which we are aware that attempts to configure perspectives about obesity from young people with a range of body sizes. It finds that young people in the UK emphasise the social implications of having a large body size more than they do the consequences for health, an overweight body size being problematic for relations with the opposite sex, and, as in our review of children's views,[27] linked to having fewer friends in general and to being teased or bullied. This limited salience of the physical health outcomes of health behaviours has been found in previous reviews of other health-related topics.[73] Similarly, the moralistic attitudes towards obesity and the negative stereotyping of people with larger bodies expressed by young people of all body sizes in this review have both been reported in studies of young people from other countries.[74] -27-

But the reports of the young people in the current review not only emphasise social consequences, they also refer to key social influences in young people's day to day environments that relate to body size. These young people identify ways in which people who are overweight, and ultimately weight itself, can be affected by the attitudes and behaviours of those around them. The overweight young people in the current review describe in some detail how weight-related taunting and abuse, and being marked out as unacceptably different, can lead to them feeling ashamed, isolated and fearful. Studies from outside the UK have found that overweight and obesity serve as a gateway to mental and emotional health problems in young people, engendering low self-esteem, depression, anxiety and poor body image.[5,74-78] Some young people also gave personal accounts of vicious cycles of bullying or isolation leading to comfort eating and lowered mood, weight gain and further bullying or isolation. Weight-based teasing has also been associated with maladaptive eating and weight control behaviours, such as binge eating in studies of US adolescents.[79-80]

Despite these accounts of social environments that are far from conducive to losing or maintaining weight, the young people in this review placed an overwhelming emphasis, regardless of their size, on personal responsibility in achieving and maintaining and healthy weight. Far from abandoning this responsibility, young people of a high weight appeared all too aware of their perceived inadequacies. They described repeated failed attempts to maintain weight loss and blamed and doubted themselves when unsuccessful. When weight loss was successful, they were often proud at having conquered 'laziness'.

Confidence in this review's findings is bolstered by its comprehensive searches. Very sensitive searches of bibliographic databases were supplemented by other methods to seek out less easily found literature, including unpublished reports. As a result, the review also benefited from access to one study's excerpts from its interview transcripts (published online as part of a self-help website).[49,81] We were able to access some of this study's 'raw' data directly in some context as interviewer questions and the responses to these were presented together and often in sequence. The sample of this same study, which had a

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preponderance of overweight young people, along with the sampling approach of six other studies gives this review a good basis from which to study the views of overweight young people in particular. The consultation with young people about the review's findings adds confidence that the main themes are ones that would be recognised by young people.

A limitation of the review was that it identified only a small body of studies that could be characterised as being research 'for' young people, rather than 'of' them.[82] Only one study, for example, appears directly to have asked young people what they thought should be done to support them in developing or maintaining a healthy body size. There is a clear need for research to engage young people more actively in exploring the circumstances surrounding obesity. The time that has elapsed between the searches run in 2010 to identify studies for this review and the production of this paper might also mean that further includable studies now exist. We consider, however that the daily lived experiences of young people with respect to obesity are unlikely to have changed significantly in the UK over this time. New studies might be able to contribute further detail or explanations to our review's synthesis, but would be unlikely to change the main, relatively abstract, themes that we have identified.

The young people in this review help remind us that approaches that merely educate and admonish individuals about lifestyles and being overweight are not only insufficient but also potentially counterproductive. Increasingly practitioners at the front-line of care, along with members of the general public, researchers and policy-makers are signing up to coalitions that advocate for the inclusion in policy discussions of the perspectives of people who are very overweight.[83-84] This systematic review can contribute to such debates in the UK, in that the views synthesised include clear demands that larger young people be encouraged, supported and freed from persecution so that they can deal with the complex phenomenon of obesity in ways that are most appropriate for them.

FOOTNOTES

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Data Sharing Statement: The full technical report of this systematic review is available at: http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395. For the review's protocol see Web only file 5.

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Web only file 1: Full search strategy.

Web only file 3: Study quality descriptions

<text> Web only file 4: The contribution of each study to the synthesis themes

Web only file 5: Study protocol

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'It's on your conscience all the time': a systematic review of perspectives <u>qualitative studies examining views</u> on obesity amongst young people <u>aged 12-18</u> in the UKaged 12-18.

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4. **MESH keywords:** Obesity; Adolescent; Self concept; Public opinion; Review, systematic; Qualitative research

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Abstract (299 words)

Objective To synthesise explore the perspectives of young people in the UK on obesity, body size, shape and weight.

Design Systematic review of qualitative studies using thematic synthesis.

Data sources Sensitive searches of 18 electronic databases from 1997 – February 2010 supplemented by grey literature searches.

Study selection Studies produced since 1997 using qualitative methods to collect perspectives of people aged 12-18 in the UK, reporting methods for data collection or analysis. Studies of people with eating disorders and those rated low in reliability and usefulness were excluded.

Results Searches identified 30 studies involving <u>over 1400 young people from</u> a range of young people and contexts. Young people of all sizes placed considerable emphasis on personal responsibility, and on the social, rather than health implications of being overweight. Young people with experience of obesity described severe, unrelenting, sizerelated abuse and isolation. Regardless of their own size, young people were judgemental of individuals who were overweight, but those with experience of obesity described an environment that contained multiple barriers to weight loss. Only one study asked young people directly what might support them <u>in developing or maintainingto have</u> a healthy body size. Study findings were configured under three main themes, labelled with quotes from included studies: general perceptions of size and society's responses ('It's on your conscience all the time'); the experiences of young people who were overweight ('If I had the choice I wouldn't be this size'); and these larger young people's experiences of trying to loose weight and suggestions for action ('Make sure, even when it's hard, you've got people there').

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Conclusions The perspectives of young people in the UK, when synthesised across the spectrum of body sizes, paint a picture of a stigmatising and abusive social world. Research and policy need to engage young people actively so as to address the social implications of obesity.

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'Article summary' section

Article focus.

- This study examines the views of young people in the UK aged 12-18 on obesity and body size.
- It explores these young people's perspectives in the context of the values and norms held by their peers.
- It asks what meanings are attributed to body size by young people, what factors they see influencing body size, what experiences they relate to body size and what changes they think may help them achieve or maintain a healthy weight

Key messages

- This review contributes to the study of obesity by giving a voice to young people.
- It finds that the young people in the UK describe a social world that is stigmatising, abusive and contains multiple social barriers for those who are overweight.
- Research needs to engage young people more appropriately so as to help identify means that can be used to address the negative social implications and other challenges of obesity.

Strengths and limitations of this study

- Together, the synthesised studies included a total of over a thousand young people with experience of a range of body sizes.
- Comprehensive searches sought out less easily identifiable literature that increased the richness of data for analysis.
- The review identified only a small body of studies that enabled young people to help identify priorities for study and analysis.

BACKGROUND

Obesity in young people in the UK continues to be a public health issue. A recent Englandwide survey found that over 23 % of boys and 16 % of girls aged 11-15 would be grouped in this category.[1] Young people who are overweight can experience physical ill-health due to obesity while they are still young[2-3] and have an increased risk of being overweight as an adult.[4] Studies have found low levels of mental health in young people classified as obese.[5]

The influences on body weight are complex and multi-levelled. Highly complicated 'system maps' have been developed to try to describe the many links between body weight and biological and genetic factors, individual behaviour, and influences from individuals' social and physical surroundings. [6] Nonetheless, press coverage often emphasises individual choices over structural factors that might influence weight gain.[7-8] In contrast, weight gain in the population has been characterised in the field of public health as, 'the inevitable – and largely involuntary – consequence of exposure to a modern lifestyle',[9(p5)] or due to the 'obesogenic environment'.[10-11] It is also recognised that, once a certain weight is gained, multiple factors act to make that weight extremely difficult to lose, and even likely to increase.[11]

In terms of social values, despite its increasing prevalence, obesity still transgresses social norms. To be very overweight is seen as morally reprehensible.[12-13] Judgements in the general population about obesity are imbued with ideas about personal responsibility and stereotyping is common, with obesity linked with socially undesirable behaviours and other attributes, such as weakness of will, laziness and greed.[14-15] Such attitudes appear to be mirrored in people's behaviours and experiences; studies of adults who are very overweight

show that they experience both stigma and discrimination and that this impacts negatively on their well-being.[16-18]

Research evidence to help us decide how to prevent or deal with obesity in young people is limited.[19-20] Intervention research regularly fails to consider what young people themselves think,[21] and yet young people are likely to have insights into factors that influence their own weight and that of their peers, and ideas about how they can be supported to keep their own weight within a healthy range. Research that explores these insights can inform initiatives that aim for positive outcomes.[22-23]

The techniques available for systematic reviews of research, perhaps better known for the aggregation of intervention effect sizes, also include those for meshing together, or configuring, study findings.[24] Configuration in systematic reviews can help make sense of multiple accounts from varied perspectives and so build theory about lived experience.[25-26] The authors know of only five previous systematic reviews that include views on body size. A companion review to this study explored children's views (aged 4-11).[27] The others all explore the views of adults,[28-31] with the first of these also including the perspectives of young people diagnosed as obese. The systematic review presented here examines recent research findings from the UK where young people aged from 12-18 provide views about their own body sizes or about the body sizes of others. It aims to help inform the development of practice and policy-based initiatives and the commissioning of further research in ways that put the perspectives of young people at the fore-front.

A note on language: Descriptive terms for body size are extremely value laden. We have tried to restrict our use of terms that could potentially further stigmatise individuals or cause

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offence. We have avoided unqualified use of possibly pejorative terms unless young people or others are quoted as using them to describe themselves. It is also difficult to report body size variation in the literature with precision, since the body sizes of participating young people are often not explicitly specified by study authors, or identified by young people themselves. When authors have indicated a distinction, we have used the phrase 'healthy weight/size' to contrast young people who are not overweight with those who would be classified as overweight. We have used 'large', 'larger', or 'overweight' interchangeably to indicate that young people have a larger body size when this information is available in study reports. We have also used the phrases 'very overweight/ large' to indicate that a young person is identified as having been diagnosed as clinically obese, or as having a body mass index in excess of 30.

METHODS

We searched 18 electronic databases from the fields of health, public health, education, social science and social care in February / March 2010, taking care to include sources rich in UK-based journal and report literature. Controlled term and free-text searches were used that combined sets of terms for young people, body size, views research, and geographical location. We also searched six key journals and 54 websites by hand, used internet search engines, scanned reference lists, looked for papers that had cited key studies, and contacted key informants for relevant research (Web only file 1). We managed review data using the specialised online review software EPPI-Reviewer.[32]

Study selection

We included studies that reported views about obesity, body size, shape or weight, sought from children in the UK aged 12 - 18. We defined *views* as attitudes, opinions, beliefs, feelings, understandings or experiences, and excluded studies that measured only health or weight status, behaviour or factual knowledge. Studies needed to have used qualitative data collection methods (e.g. in-depth or semi-structured interviews and/or focus groups) and, as a minimum, to have described one of two key aspects of a study's methods (data collection or analysis). We sought studies published in English since the start of 1997 (to cover a period of heightened interest in the topic of obesity). We excluded studies solely of young people with an eating disorder diagnosis, on the basis that this group may be considered exceptional in terms of their requirements for achieving or maintaining a healthy weight. This last criterion was the only one not set out in the review's protocol (which is available from the authors for access to this see data sharing statement). These inclusion criteria were piloted by the first four authors of this study so as to develop shared understandings of the criteria. Aand a sample of early screening decisions was double-checked by the first author.

Describing and appraising studies

We described the final set of included studies using a standardised classification system,[33] supplemented using frameworks from previous reviews of the views of children and young people.[25] The quality of included studies was appraised using criteria modified from a set developed for examining the findings of evaluations of intervention processes (Table 1).[34-35] The studies were each allocated a 'weight of evidence' with two dimensions. First, we rated the reliability of the findings (using criteria 1 to 4). Secondly, we rated the findings' usefulness (based on the richness and complexity of analysis, and the privileging of perspectives, e.g. methods encouraging young people to prioritise issues for discussion – using criteria 5 and 6). Two reviewers worked independently on each study, before reaching

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rated low on both

2 3	consensus. We excluded studies from the synthesis if they were
2 3 4 5 6 7	dimensions.
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Criterion (with g	uidance for reviewers)
1 Were steps ta	ken to increase rigour in the sampling?
Consider whethe	r:
	ategy was appropriate to the questions posed in the study (e.g. was the strategy well reasoned and justified?);
	nade to obtain a diverse sample of the population in question (think about who might have been excluded; who may have had a different
perspective to of	
	f the sample critical to the understanding of the study context and findings were presented (i.e. do we know who the participants were in nple, basic socio-demographics, characteristics relevant to the context of the study, etc.).
Were steps ta	ken to increase rigour in the data collected?
consider whethe	
	pols were piloted/(and if quantitative) validated;
perspectives and	ata collection was comprehensive, flexible and/or sensitive enough to provide a complete and/or vivid and rich description of people's experiences (e.g. did the researchers spend sufficient time at the site/with participants? Did they keep 'following up'? Was more than one
	ollection used?);
	en to ensure that all participants were able and willing to contribute (e.g. processes for consent, language barriers, power relations betwee en/young people).
	ken to increase rigour in the analysis of the data?
Consider whethe	
	ethods were systematic (e.g. was a method described/can a method be discerned?);
	pective was explored; The analysis was balanced in the extent to which it was guided by preconceptions or by the data);
	ght to rule out alternative explanations for findings (in qualitative research this could be done by, for example, searching for negative
	s, feeding back preliminary results to participants, asking a colleague to review the data, or reflexivity; in quantitative research this may be
	nple, significance testing).
Were the find	ngs of the study grounded in/ supported by the data?
	presented to show how the authors arrived at their findings;
	ed fit the interpretation/support claims about patterns in data;
	red illuminate/illustrate the findings;
	tudies) quotes are numbered or otherwise identified and the reader can see that they don't just come from one or two people.

1		
2	5 Please rate the findings of the study in terms of their breadth and depth.	
3	Consider whether:	
4	(NB: it may be helpful to consider 'breadth' as the extent of description and 'depth' as the extent to which data has been transformed/analysed);	
5	*a range of issues are covered;	
6	* the perspectives of participants are fully explored in terms of breadth (contrast of two or more perspectives) and depth (insight into a single perspective);	
7	*richness and complexity has been portrayed (e.g. variation explained, meanings illuminated);	
8	*there has been theoretical/conceptual development.	
9		
10	6 To what extent does the study privilege the perspectives and experiences of young people?	_
11	Consider:	
12	* whether there was a balance between open-ended and fixed response options;	
13	*whether children were involved in designing the research;	
14	* whether there was a balance between the use of an a priori coding framework and induction in the analysis;	
15		
16	*the position of the researchers (did they consider it important to listen to the perspectives of children?);	
17	* whether steps were taken to assure confidentiality and put young people at ease.	
18	7 Overall, what weight would you assign to this study in terms of the reliability/trustworthiness of its findings?	
19	Guidance: Think (mainly) about the answers you have given to questions 1 to 4 above.	
20	Guidance. Think (mainly) about the answers you have given to questions 1 to 4 above.	
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22		
23	8 What weight would you assign to this study in terms of the usefulness of its findings for this review?	
24	Guidance: Think (mainly) about the answers you have given to questions 5 and 6 above and consider:	
25	*the match between the study aims and findings and the aims and purpose of the synthesis;	
26	*its conceptual depth/explanatory power.	
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29	\$ The following responses were available for these questions: 1-3. Yes, a fairly thorough attempt was made; Yes, several steps were taken; Yes, a few	N
30	steps were taken; No, not at all/Not stated/Can't tell. 4. Good grounding/support; Fair grounding/support; Limited grounding/support. 5. Limited breadth or	
31	depth; Good/fair breadth but very little depth; Good/fair depth but very little breadth; Good/fair breadth and depth. 6. Not at all; A little; Somewhat; A lot	
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Analysis

Four reviewers worked on the analysis. We used thematic synthesis to examine each line of each study's findings and create codes that described meaning and content. This approach to synthesis is particularly suitable for systematic reviews, because the discipline of line-by-line coding requires that reviewers consider carefully each aspect of every study; and whether or not a finding from one study really does 'translate' into another [36] It also enables findings and new conceptualisations to emerge inductively from the included studies, and so is a good fit with one of the principles of our review which aimed to highlight young people's own perspectives. Findings were sought throughout the report, not just from results sections. We looked first at studies with views from young people described as having experience of being overweight, and then moved on to the remainder. We looked for similarities and differences between codes as the code set grew, and attempted to identify a smaller set of themes that captured the most recurrent and most emphasised ideas across the full range of studies' findings, while also looking for contradictory ideas. This smaller set of ideas was developed in the light of the review's questions, the themes identified in our earlier review of children's views, [27] and authors' descriptions of body size status (experience of overweight vs. otherwise). The lead author then wrote a narrative to illustrate describe the themes, with direct guotes from the included studies used both within the narrative and as theme headings so as to illustrate young people's own representations of their views. We also consulted a group of young people (PEAR), convened by the National Children's Bureau to enable young people's views and opinions to influence public health research.[37] We worked with the group for one and a half hours within a longer group residential. The group was presented with illustrations of the synthesis themes and asked whether this seemed believable and whether anything might be missing, as well as for ideas about how to present findings. The processes for consulting members of the PEAR group were approved by a Faculty Research Ethics Committee at the Institute of Education. Further detail on this group is available in the technical report (see Data sharing statement).

RESULTS

The state of the literature

We found and screened 28,267 citations and identified 30 studies for the review's synthesis (Web only file

2 presents the flow of studies through the review).

[Table 2 to go about here]

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Table 2: Details of included studies: aims and sample characteristics (N=30)

(2008) [w1] ³⁸ regul Bramham (2003) To e: [w2] ³⁹ invol	explore factors which motivate and create barriers to engagement in ilar physical activity for 11-12 and 14-15 year old girls. explore boys' perceptions and experiences of school-based PE and lvement in extra-curricular and out-of-school physical activities.	91 24	Not stated. Mesomorphic (i.e.	Group interviews Content analysis Individual and group interviews
w2] ³⁹ invol	explore boys' perceptions and experiences of school-based PE and lvement in extra-curricular and out-of-school physical activities.	24		Individual and group interviews
Cockburn and To ex			compact and muscular) (mainly).	Data analysis method not reported.
Clarke (2002) wom	explore the cultural and sub-cultural aspects of teenage girls' and young nen's lives which influence their involvement in sport and PE.	6	Not stated.	Individual interviews Reflexive interpretation and biographical analysis
[w4] ⁴¹ scho	explore the experiences of young people with obesity within the secondary bol environment in relation to areas of concern prioritised by the HSP althy Schools Project)	17	Not stated. (participants recruited from community-based obesity intervention programme.)	Individual and group interviews Thematic analysis
	ualitative study nested within a randomised controlled trial explored obese escents' experiences of participation in an exercise therapy intervention.	25	Classified as obese or morbidly obese.	Individual interviews Thematic analysis
Scraton (2001) in ph [w6] ⁴³ purpo interf deve	explore young women's perspectives of and attitudes towards involvement hysical activity and physical education (PE). Explores the nature, boses and experiences of involvement, both in and out of school and face between identities, structures and cultural settings. Located within eloping feminist theoretical debates.	21	Mesomorphic (mainly).	Individual interviews Thematic analysis
	eoretical, feminist, sociological enquiry examining the direct perception of ng women about how they, and their contemporaries, experience their es.	7	Not stated.	Group interviews before and after art clas plus questionnaire Data analysis method not stated
(2003) [w8] ⁴⁵ work Iris M study phys	levelop the concept of gender-relevant physical education combining the < of Pierre Bourdieu and his notion of the habitus and feminist philosopher Marion's analysis of feminine motility by drawing on data generated from a y of young people's articulation of the relationships between muscularity, sicality and gender.	348	Not stated.	Group and individual interviews Data analysis method not stated
	examine the relationship between obesity and victimisation, and the act it has on peer relationships.	5	Classified as obese.	Sequence of two to three individual interviews Interpretative phenomenological analysis
(2009) [w10] ⁴⁷ abou	nvestigate how young men and women smokers and non-smokers talk ut the impact of smoking on appearance, with the aim of using these punts to inform anti-smoking campaigns targeted at young people	47	Not stated.	Group interviews Thematic analysis
Grogan and To u	inderstand how men and boys construct body image including their views	12	none were notably over-	Group interviews

Richards (2002) [w11] ⁴⁸	on body dissatisfaction, body shape ideals and behavioural concomitants of body image.		or underweight as judged by the researchers	Thematic analysis
Health Experience Research Group (2010) [w12] ⁴⁹ (a-w: see note at table foot)	To examine a range of peoples' perspectives in terms of what someone might expect to experience when diagnosed with a particular condition or illness. All the young people and parents interviewed had been affected by weight issues. The research was done with the aim of populating a website 'youthhealthtalk.org', so as to help people 'share in young people's experiences of health and illness.'	24	Some of the young people had been told they were overweight or were in the medical category 'obese'	Individual interviews, sometimes with friend present Thematic analysis
Hester et al. (2009b) [w13] ⁵⁰	To uncover in-depth qualitative accounts of intervention impact from obese young people during a period of lifestyle change after attending a residential weight-loss camp.	5	Classified as obese.	Researcher participation in intervention pri to individual interviews Thematic analysis
Holt et al (2005) [w14] ⁵¹	To explore children's perceptions of attending a residential paediatric weight- loss camp.	15	Classified as obese.	Individual interviews Thematic analysis
Krayer et al. (2008) [w15] ⁵²	To describe the nature of social comparison processes mentioned spontaneously by boys and girls with a particular focus upon enhancement comparisons.	20	Not stated	Sequence of two individual interviews Grounded theory approach
Kurtz and Thornes (2000) [w16] ⁵³	To gather children's views about their health needs to inform policy and the strategic development of services for school-age children in England.	43	Not stated.	Group interviews Data analysis method not stated
Lloyd and Dittmar (1997) [w17] ⁵⁴	To broaden and deepen understanding of 'normal' adolescent boys' and girls' body image concerns, in order to provide an appropriate basis for interventions aimed at promoting healthier diet and lifestyle.	56	Not stated.	Individual and group interviews Thematic analysis
Lucas and Lloyd (1999) [w18] ²⁹	To explore adolescents' use of cigarettes to moderate negative emotions.	32 groups with 2-6 girls in each group	Not stated.	Group interview with a video presentation encourage discussion Thematic analysis
Ludvigsen and Sharma (2004) [w19] ⁵⁵	To examine the influences upon children and young people in their food choices during the school day.	54	Not stated.	Participant observation and questionnaires followed by group interviews using photographs as prompts Data analysis method not stated
Mulvihill et al. (2000b) [w20] ⁵⁶	To provide data on the reported drivers and barriers to physical activity among young people aged 5-15 years.	103	Not stated	Group interviews Data analysis method not stated
Owen et al. (2009) [w21] ⁵⁷	To explore children's (and parents') views and experiences of attending a hospital-based childhood obesity clinic, in order to inform the development of services in primary care.	11	Classified as overweight.	Individual interviews (parents not present) Thematic analysis
Percy-Smith (2007) [w22] ⁵⁸	To explore young people's understandings and experiences of health as experienced in their everyday lives and according to their own terms of reference rather than in response to policy priorities.	62	Not stated	Participative action research using: young people considering relevant research conducted by their peers, followed by interactions between young people and health professionals, group art work and plenary discussion

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				Thematic analysis
Reid and Hendry (2001) [w23] ⁵⁹	To examine young people's health concerns within the context of young people's own perspectives.	37	Not stated	Series of two group interviews Thematic analysis
Shucksmith and Hendry (1998) [w24] ⁶⁰	To examine young people's views about diet, weight, their appearance and the impact of fashion norms.	50 group interviews, 44 individual interviews	Not stated	Group interviews Thematic analysis
Velija and Kumar (2009) [w25] ⁶¹	To explore, through focus group interviews with Year 10 girls, how girls' experiences of PE and GCSE PE are gendered.	16	Not stated	Group interviews Thematic analysis
Wallace et al. (2007) [w26] ⁶²	To explore adolescents' experience of the impact of having cancer, including the burden of illness, treatments and resultant appearance changes.	8	Not stated	Individual interviews Interpretative phenomenological analysis
Willett (2008) [w27] ⁶³	To provide empirical evidence which will look past the structure–agency dichotomy to see how human agency and social structure act through each other to influence pre-teen and teen girls' consumption of fashion and digital media.	26	Not stated	Art work and individual interviews Thematic analysis.
Wills et al. (2006) [w28] ⁶⁴	To explore the embodied perceptions of obese, overweight and 'normal' weight young teenagers [from socio-economicallydisadvantaged families living in Eastern Scotland], within the socio-cultural contexts in which these young teenagers live their everyday lives.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills et al. (2008a) [w29] ⁶⁵	To examine the dietary practices and health and weight conceptualisations of BMI-defined obese/overweight and non-obese/overweight young teenagers from middle-class families; to situate these observations within the 'habitus' of the family by exploring these issues from the perspectives of their parents; and to compare these data to the data already collected in an earlier study involving young working class teenagers.	36	Classified as overweight or obese (N=18), 'normal' weight (N=18).	Individual interviews Thematic analysis
Wills (2005b) [w30] ⁶⁶	To examine how the new social contexts experienced by young people after leaving school are related to everyday food practices and eating habits.	31	Not stated	Food diaries and individual interviews Thematic analysis

Note: The findings for the Health Experience Research Group (2010) study [w12], are contained in a series of webpages, which are represented in this paper's text by the

letters a-w. To save space in this paper, readers who want to follow the links to each webpage are referred to this study's full technical report at

http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395.

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The 30 studies varied considerably in terms of their stated aims and data collection methods. Table 2 describes each study briefly and specifies the code that is used to reference the study in this paper (w1-w30). Thirteen studies focused directly on body size, shape or weight. Five of these focused on the views of young people who were or who had been overweight about their recent experience of an intervention for losing weight, [w4, w13-14, w21] or encouraging physical activity.[w5] The other eight asked young people to describe their own and others' experiences of being a certain body size, or for more general views about body size or image.[w7, w9, w11-12, w15, w17, w28-29] The remaining 17 studies focused on young people's overall health needs, [w16, w22-24] food, [w19, w30] smoking, [w10, w18] cancer, [w26] clothes and identity, [w27] physical education, [w2-3, w6, w8, w25] and physical activity.[w1, w20] Most, but not all of the findings from young people with experience of being overweight were identified from nine studies.[w4-5, w9, w12-14 w21, w28-29] It was often not possible, from these and other studies, to identify the extent to which participating young people were overweight (e.g. classifiable as obese, as opposed to overweight).

In terms of quality, only three studies, [w4, w12, w28] were judged to have highly reliable findings (Web only file 3). Seven studies were judged highly useful. [w4-5, w9, w12-14, w28] Six studies were excluded from the synthesis on quality grounds. [67-72] (For an indication of the contribution of each included study see Web only file 4.)

Young people's views

Analysis of the findings of each study resulted in three main themes, each with further sub-themes (Table 3): (i) general perceptions about different body sizes and society's responses to them – which were often couched in moral terms ('It's on your conscience all the time'); (ii) Overweight young people's experiences that they linked to their size ('If I had the choice, I wouldn't be this size'); and (iii) Overweight young people's experiences of trying to lose and maintain weight and their suggestions for action ('Make sure, even when it's hard, you've got people there'). The PEAR group considered these themes to be believable

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<text><text><text> but members were concerned by the severity of accounts that they read. They suggested that when writingrest of this section details the findings of the synthesis, with each of the above main themes addressed in

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Table 3 Quotations from study participants to illustrate each theme

Themes	Illustrative quotes from participants (also see quotes in the text) [Study reference no
It's on your	conscience all the time
It's down to me	I mean if you're the one that wants to lose weight, then you can't say "Right, mum, can you lose weight for me?" you're the one who has to go oot for exercise and cut doon on your foods and that eh? That's what I ken, its doon tae me. [Nick, male, 13yrs, ethnicity unspecified, very overweight][w28 p400]
	I would love to say it's all to do with genetics and I have nothing to do with it, but I know that what I do isn't particularly healthy and therefore it's due to me as well I think it's for me it's just the fact that I'm stubborn and lazy and that I like eating my food. [Holly, female, 18yrs, white, very overweight][w12m]
It's like a girl thing?	Tobias:I'm a couple of inches shorter than all my friends as well and I feel pressure. Tom: you've got friends who are like quite big in build you want to be the same as them. Although you might not be able to do anything about it, it's on your conscience all the time. You want t be that sort of size. [Tobias and Tom, male, 16-17yrs, ethnicity unspecified, healthy weight][w11 p229]
If you're fat, then they don't like you	they (boys) think that if you look good then you're okay but if you're fat then they don't like you. [female, 11-14yrs, ethnicity and body size unspecified][w18 p24]
People that are right big have right dirty houses	Like when you start thinking ahead, like what are you going to be like, people just sit at home eating pizza all time, I wouldn't like to be one those boring people. I want to be a person that can go out, go on holiday, go to work, have lots of friends, get out of the house you watch lot of programmes all people that are right big have right dirty houses. [male, 14yrs, white, very overweight, BMI 31.3][w5 p814]
Being fat is really a bad thing	If you've got someone in your family who's quite fat, you see how they are and you think to yourself, I don't want to be like thatIt's a bit of a turnoff if you're fat, so you try not to get lil that. [Tony, male, 16-17yrs, white, body size unspecified] [w11 p226]
[w23 p156]	I think it's all down to like your mental, your mental picture of yourself really it's when you'r like, "Oh I feel so bad and ugly today." That, that's when you become really bad, and so size isn't the thing, it's more the way you act, if you act like all closed and in a corner and not socialising, then I mean attractive is someone who is the life and soul of the party, dancing in the middle, having a good laugh.' [Huw, male, 17yrs, white, overweight] [w12j]
If I had the c	hoice, I wouldn't be this size
Not wanting to stick out [w12b]	But the places where I go most of the clientele are like a lot older than me And that's weird to think that, you know, you'll be, you're wearing the same clothes as like your 50 year old neighbour or whatever And it isn't nice you are always thinking about it, especially in public if I had the choice I wouldn't be this size. [Rachel, female, 17yrs, white,
	overweight][w12d] it makes you feel really bad 'cos if they're going, "Oh I'm too fat," how's that supposed to make you feel 'cos when you're like twice the size of 'em? [Huw, 17yrs, white, overweight][w12b]
Day after day, you're that terrified	it wasn't just a group thing, it was walk down the corridor, and I actually counted this one day how many people said something to me, just walking about a hundred yards twenty-three people I think, and you know every day in between every lesson and going, you know, it gets a lot. [Becca, female, 17yrs, white, overweight][w12c]
	Day after day, walking in you're that terrified that you don't want to go school, this is what my point of view were like three years I tried not going to school because I used to get bullied and my mum got took to court. [Eve, female, age and ethnicity unspecified, very overweight][w4 p414] I've put on the weight and I still want to do it [participate in PE classes] but it's the glances, it
	e ve ou or de velou auc i sui vadi lo och dadicioale id PE Classesi dulli s de Glades. Il

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	she can barely keep-up." [Sam, female, 15ys, overweight, BMI 38.0][w9 p41]
	I don't like having to walk into places where I don't know anyone or walking past a group of
	people; I don't like walking past because of things they might say and they are less likely to
	say if I've got Diane [sister] with me. [Jane, 17yrs, ethnicity unspecified, overweight, BMI
	46.7][w4 p42]
	I was just getting bullied all the time and nobody wanted to be with me. I was always on my
circles	own in my bedroom doing my own thing [For the first six weeks of a weight-loss
	programme] I just sat in a corner, didn't talk to anybody. I wouldn't even talk to any of the
•	friends that I'd made. [Chelsea, female, 17yrs, white, overweight][w12s]
,	When I cry I eat, but then I eat because I'm crying, but I'm crying because I'm getting bigger,
	and it's just a vicious circle. [Vicki, female, 18yrs, white, overweight][w12i]
Make sure, ev	/en when it's hard, you've got people there
Easier said	I've got a younger brother and we've got all these sort of stuff in house for him and then
than done	that's just like a bit, a bit of a temptation And sometimes when he gets right nice stuff and
	I'm sat there eating, I don't know, fish, chips, and mushy peas and it's just not right. [Reg,
[w13 p5]	female, 13yrs, white, overweight][w12l]
	[after an exercise intervention] I felt healthier and better and stuff and I felt like I had actual
	done something. Rather than going home and being a couch potato. [Male, 15yrs, white,
	very overweight, BMI 37.6][w5 p814]
Yo-yos and	I was 14 years old and having so much like, being so unhappy being overweight, finally
pick me ups	getting the weight off is amazing, then piling it all straight back on was just absolutely
	heartbreaking. Yo-yoing up and down in normal diets just, has just become a way of life
	really now It just makes you really doubt yourself. [Vicki, female, 18yrs, white,
	overweight][w12e]
	[commenting on experience of a community-based weight-loss intervention] You have
	people who are in the same situation as you who know what it's like and things like that.
	you have a problem or if you have like just a total collapse you've got people who will jus
	pick you back up. And I think that's been the most thing about it, the most important thing
	that I've had for me. [Emily, female, 14yrs, white, overweight][w12l]
Be nice.	There's ways to be more tactful. As you know, the doctors that I've had haven't always bee
You've got to	particularly nice about ityeah, there's ways to say things nicely, and although sometimes
help.	you need to go for the approach that says, "You need to do something about your weight
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p]
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p] I'd just say to like parents that without you, you won't be, your child won't be able to do it
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p] [vd just say to like parents that without you, you won't be, your child won't be able to do it And you've got to help them as much as they're helping themself. And just, if you don't help
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p] [vd just say to like parents that without you, you won't be, your child won't be able to do it And you've got to help them as much as they're helping themself. And just, if you don't help them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p] [Yd just say to like parents that without you, you won't be, your child won't be able to do it And you've got to help them as much as they're helping themself. And just, if you don't help them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale female, 14yrs, ethnicity unspecified, overweight][w12a]
help.	now," there's, there's ways to be nice about it. [Holly, female, 18yrs, white, very overweight [w12p] [vd just say to like parents that without you, you won't be, your child won't be able to do it And you've got to help them as much as they're helping themself. And just, if you don't help them, they'll think, "Well, nobody's bothered, and, I do try but nobody sees difference." [Ale

It's on your conscience all the time

This first main theme included ideas about what can influence body size, who is accountable and

concerned, implications, and ideal, aspired to and acceptable bodies.

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It's down to me

Some young people's accounts of what could influence their weight referred to relatively unchangeable physical phenomena, such as body metabolism, bone structure, puberty or genetics.[w1, w7, w12, w28-29] Young people of all sizes, however, emphasised the individual behaviours of being physically active and watching what you eat,[w5-7, w11-w12, w20, w23-24, w27-28] and considered body size was within their own control.[w11-12, w28]

One study reported that participants stated 'quite fervently' that a young person's size was their own responsibility,[w28] and in only two studies did young people suggest that some responsibility might lie elsewhere.[w12, w19] Young people who felt, or already were large made it clear that they knew they had to do something and tended to be critical of their own self-will.

It's like a girl thing?

Young people tended to identify young women as being more interested in body weight.[w7-8, w10-11, w12b, w15, w19, w29] As one put it, 'It's like a girl thing. It's like "oh she is wearing some tight jeans she looks awful." ' [Male, 13yrs, ethnicity and body size unspecified].[w15 p895] But accounts also identified young men's concerns, which had the additional focus of height and musculature.[w2, w7, w11, w17]

If you're fat, then they don't like you

Young people did not necessarily equate a large body size with ill-health, [w28-29] although the need to lose weight for their future health was identified by young people with a high weight.[w12k] In one study framed explicitly around body size, only a minority spontaneously mentioned improved health as a benefit of losing weight.[w28] Some (mainly young men) did report concern that an increased size might, or already was, reducing physical ability or performance.[w16]

Far more emphasis was placed on the impact of body size on relationships. Young people with a healthy size identified how overweight young people would not be respected,[w18] or would be picked on,[w7] or

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bullied.[w28] [see 'Day after day...' below.] Relations with the opposite sex were particularly pertinent.[w8, w11, w12j, w25, w30]

People that are right big have right dirty houses

Young people, many who were themselves a large size, attributed a consistently similar set of negative characteristics to people with large bodies, describing them as lazy, or unable to control their desire for food, or both,[w 5, w17, w29] While sometimes young people made efforts not to appear judgemental of people with large bodies, this was not always the case. This, and participants' emphasis on individual control are illustrated by one young women saying, 'Fat people, I hate fat people. I don't hate their personalities, I just don't like the way they look. I just don't know why folk would do that to themselves.' [Elspeth, female, 13-15yrs, white Scottish, body size unspecified] [w29 p7]

Being fat is really a bad thing

Young people's ideas about which body sizes were valued were consistent across studies. Both sexes characterised an ideal young woman's body as thin,[w12o, w24, w30] slim,[w17] or skinny.[w2010v, w22] For both sexes, the ideal for young men was muscular,[w2, w11, w15, w17] and looking fit.[w11, w17] Young men themselves added not too muscular,[w8, w11, w12b] and toned.[w12b] The aspirations of young people with healthy size bodies tended to refer to these ideals, or avoiding being very large.

In terms of unacceptable body sizes, over half the participants in one study of young women identified weight as the deciding factor for judging whether your appearance was acceptable or not.[w7 p148] A participant in another study was more specific, saying, 'Being fat is really a bad thing, more than anything. More than having a face that is not so good looking.' [14-17yrs, gender, ethnicity and body size unspecified][w23 p156]

Overweight young people expressed more complex views about size and acceptability,[w12, w28] for example explaining how valuing yourself was key to being found attractive by others.

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If I had the choice, I wouldn't be this size

This second main theme incorporated the views of young people who would be, or had been, classified as overweight about their experience of being that size. For views on attempting to lose weight or maintain weight-loss, see 'Make sure, even when it's hard, you've got people there', below.

Not wanting to stick out

Overweight young people described how everyday social activities could be difficult because of their size.[w4, w9, w12, w28] Shopping trips and other social events could leave them feeling excluded, marked out as different and ashamed and could lead to them questioning themselves,[w12d, w28] and spending a great deal of time on their own at home.[w4] One participant described this sense of feeling different, saying 'I ...just wanted to be part of the crowd and not to stick out like a sore thumb... Because sticking out... when someone sees the person who looks, who is bigger than... most of them, almost everyone there, that makes you feel really bad.' [Huw, male, 17yrs, white, overweight][w12b]

Interacting even with friends could be difficult. Some larger young people reported friends saying that they were ashamed to be seen with them,[w12] others described feeling more confident with peers who knew them before they became overweight.[w9 pS42] In addition to explicit cases of ridicule and abuse [see 'Day after day, you're that terrified'], young people described difficult conversations where their peers, who they judged not to be overweight, had described themselves as fat, solely to gain reassurance that they were not.[w4, w12, w17, w28]

Day after day, you're that terrified

In just over a third of studies, young people of varied sizes identified bullying as something that was experienced when you had a large body size.[w2-5, w9, w11-15, w24, w28] Young people classified as very overweight reported severe incidents of physical abuse, that included being threatened with a knife, beaten, kicked, pushed down stairs and having objects thrown at them.[w4, w9, w12s] Verbal abuse, such -24 -

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as name-calling and using slurs, was described as more common, but, along with less direct abuse, such as deliberate and extended isolation, whispering, or sniggering, was the source of considerable distress.[w4, w9, w12c]

School was the setting for much of the abuse and it had become so serious for some that they were unable to attend. Young people identified physical education (PE) lessons as a particular source of exposure to humiliating ridicule.[w3, w9]

Size-related abuse was heavily implicated by young people as a negative factor for their emotional health, leading to reduced confidence, anxiety (especially around venturing into public spaces), loneliness and depression.[w9, w12c]

Vicious circles

Young people who would be classified as overweight described a variety of coping strategies. These included extreme withdrawal, as well as eating to reduce boredom, when stuck at home, and for comfort following bullying.[w12] Some described how these responses could leave them feeling worse and lead to other, additional difficulties, including further weight gain.

In contrast, others appeared to have developed more defiant coping strategies, as illustrated by one participant, who said,' I know more fat jokes than anybody else going. I'm better at it than they are. ... I got so low on so many occasions. Now it's just like "you have a problem with me, that's your problem." [Ann, female, 17 years, ethnicity unspecified, overweight, BMI 43.3][w9 pS42]

Make sure, even when it's hard, you've got people there

This third, and last, main theme incorporated the views of young people about what happens when they are overweight and try to lose weight. Also presented here are young people's suggestions as to what actions

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should be taken to support them in maintaining or reaching a healthy weight, and coping with related stresses and anxieties.

Easier said than done

Larger young people described difficulties modifying what they ate,[w12-14] and frustration at repeated weight-loss attempts.[w12] They were sensitive to the additional effort they felt they had to put into regulating their food intake compared to their peers.[w12-13, w24] As one participant in a residential camp put it, 'I thought "I've been good now surely I can't spend the rest of my life spending as much focus on my weight as I have been doing"... people manage to stay the same weight and they don't really focus on it. They have their food... and they live their life.' [Ashley, male, 16yrs, ethnicity unspecified, very overweight][w13p310]

These young people described various barriers to physical activity. In addition to the abuse described above when exercising in school, some said that getting tired, or out of breath too quickly, or other size-related physical complications, such as asthma, got in the way of their exercising.[w5, w12] The availability of calorie-dense foods sometimes made it difficult to stick to healthy eating plans, especially when others were enjoying different kinds of food.[w12, w14] Others reported difficulties with family and friends' own size-related beliefs. These included incorrect dietary advice,[w12-13] and unhelpful pressure to take, or not to take action.[w12-13, w28]

Again emphasising personal responsibility, young people who had taken action successfully over their size emphasised the central importance of avoiding laziness,[w5, w12, w28] and being proud about taking action.[w12-13, w21, w28]

Yo-yos and pick me ups

Larger young people described frustration at the slow rate of substantial weight loss.[w12] They were preoccupied with the idea of weight rebounding,[w13-14, w28] and described being demoralised by regaining weight.[w12-13] When talking about things that were helpful for coping with this long-term process of weight loss, young people identified goals, and feedback from others in particular.[w12, w21] Also helpful was support from, and giving support to, others who were going through, or had gone through, the same experience.

Be nice. You've got to help.

Overweight young people tended to suggest things that they themselves could or should do to support themselves. Some stated that education regarding the benefits of healthy eating and exercise was important.[w12] They also encouraged other overweight young people to access their psychological resources.[w12, w22] When it came to their suggestions as to what others could do, these centred around the need for professionals and other people to be less judgemental.

They suggested that families could support and encourage them by joining in with their attempts to pursue a healthy lifestyle. Above all, these young people repeatedly emphasized the need for support.

DISCUSSION

This is the first systematic review of which we are aware that attempts to configure perspectives about obesity from young people with a range of body sizes. It finds that young people in the UK emphasise the social implications of having a large body size more than they do the consequences for health, an overweight body size being problematic for relations with the opposite sex, and, as in our review of children's views,[27] linked to having fewer friends in general and to being teased or bullied. This limited salience of the physical health outcomes of health behaviours has been found in previous reviews of other health-related topics.[73] Similarly, the moralistic attitudes towards obesity and the negative stereotyping of people with larger bodies expressed by young people of all body sizes in this review have both been reported in studies of young people from other countries.[74] -27-

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But the reports of the young people in the current review not only emphasise social consequences, they also refer to key social influences in young people's day to day environments that relate to body size. These young people identify ways in which people who are overweight, and ultimately weight itself, can be affected by the attitudes and behaviours of those around them. The overweight young people in the current review describe in some detail how weight-related taunting and abuse, and being marked out as unacceptably different, can lead to them feeling ashamed, isolated and fearful. Studies from outside the UK have found that overweight and obesity serve as a gateway to mental and emotional health problems in young people, engendering low self-esteem, depression, anxiety and poor body image.[5,74-78] Some young people also gave personal accounts of vicious cycles of bullying or isolation leading to comfort eating and lowered mood, weight gain and further bullying or isolation. Weight-based teasing has also been associated with maladaptive eating and weight control behaviours, such as binge eating in studies of US adolescents.[79-80]

Despite these accounts of social environments that are far from conducive to losing or maintaining weight, the young people in this review placed an overwhelming emphasis, regardless of their size, on personal responsibility in achieving and maintaining and healthy weight. Far from abandoning this responsibility, young people of a high weight appeared all too aware of their perceived inadequacies. They described repeated failed attempts to maintain weight loss and blamed and doubted themselves when unsuccessful. When weight loss was successful, they were often proud at having conquered 'laziness'.

Confidence in this review's findings is bolstered by its comprehensive searches. Very sensitive searches of bibliographic databases were supplemented by other methods to seek out less easily found literature, including unpublished reports. As a result, the review also benefited from access to one study's excerpts from its interview transcripts (published online as part of a self-help website).[49,81] We were able to access some of this study's 'raw' data directly in some context as interviewer questions and the responses to these were presented together and often in sequence. The sample of this same study, which had a

preponderance of overweight young people, along with the sampling approach of six other studies gives this review a good basis from which to study the views of overweight young people in particular. <u>The</u> <u>consultation with young people about the review's findings adds confidence that the main themes are ones</u> that would be recognised by young people.

A limitation of the review was that it identified only a small body of studies that could be characterised as being research 'for' young people, rather than 'of' them.[82] Only one study, for example, appears directly to have asked young people what they thought should be done to support them in developing or maintaining a healthy body size. There is a clear need for research to engage young people more actively in exploring the circumstances surrounding obesity. The time that has elapsed between the searches run in 2010 to identify studies for this review and the production of this paper might also mean that further includable studies now exist. We consider, however that the daily lived experiences of young people with respect to obesity are unlikely to have changed significantly in the UK over this time. New studies might be able to contribute further detail or explanations to our review's synthesis, but would be unlikely to change the main, relatively abstract, themes that we have identified.

The young people in this review help remind us that approaches that merely educate and admonish individuals about lifestyles and being overweight are not only insufficient but also potentially counterproductive. Increasingly practitioners at the front-line of care, along with members of the general public, researchers and policy-makers are signing up to coalitions that advocate for the inclusion in policy discussions of the perspectives of people who are very overweight.[83-84] This systematic review can contribute to such debates in the UK, in that the views synthesised include clear demands that larger young people be encouraged, supported and freed from persecution so that they can deal with the complex phenomenon of obesity in ways that are most appropriate for them.

FOOTNOTES

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Data sharing: <u>The full technical appendix-report of this systematic review is</u> available at: <u>http://eppi.ioe.ac.uk/cms/Default.aspx?tabid=3395.</u> For the review's protocol see Web only file 5.

Web only file 1: Full search strategy.

Web only file 2: PRISMA flow chart

Web only file 3: Study quality descriptions

Web only file 4: The contribution of each study to the synthesis themes

Web only file 5: Study protocol

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Web only file 1. Search strategies and sources for

Rees R, Caird J, Dickson K, Vigurs C, Thomas J (2013) *The views of young people in the UK about obesity, body size, shape and weight: a systematic review*. London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

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A. Bibliographic databases

ASSIA (CSA)

Searched on 8.2.10. Search generated 980 records.

(((((DE=("adolescence" or "adolescent boys" or "adolescent girls" or "adolescents" or "boys" or "childhood" or "children" or "girls" or "older children" or "pupils" or "school leavers" or "young people")) or(TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*") or AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR pubert* OR "secondary school*"))) or(DE="puberty")) and((DE=("obesity" or "anorexia nervosa" or "binge eating" or "body mass index" or "body alteration" or "body dysmorphic disorder" or "body fat" or "body image" or "body image disturbances" or "body mass" or "body shape" or "body size" or "body weight" or "bulimia nervosa" or "compulsive eating" or "dysphagia" or "eating disorders" or "hyperphagia" or "pica" or "purging" or "rapid eating" or "thinness" or "underweight" or "weight")) or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders")))) and((DE=("emotion psychology" or "psychology" or "acceptability" or "affective experiences" or "analysis" or "analytical ethnography" or "analytical psychology" or "anecdotes" or "anxiety" or "applied behavioural analysis" or "applied ethnography" or "applied psychology" or "applied research" or "attitudes" or "authentic experience" or "autoethnography" or "behaviour studies" or "behavioural analysis" or "behaviourism" or "beliefs" or "biographical data" or "case studies" or "childhood experiences" or "cognitive interviews" or "community based research" or "community psychology" or "comparative research" or "complex theory" or "comprehension" or "concept analysis" or "concerns" or "connotative meaning" or "content analysis" or "contextual analysis" or "conversation" or "discourse" or "discourse analysis" or "discursive psychology" or "dissatisfaction" or "emotional experiences" or "emotions" or "ethnography" or "ethnomethodology" or "evaluative research" or "experiences" or "familiar stories" or "field research" or "focus group interviews" or "focus groups" or "frightening stories" or "grounded theory" or "group interviewing" or "health beliefs" or "health psychology" or "hermeneutics" or "historical narratives" or "ideals" or "implicit beliefs" or "individual psychology" or "interaction analysis" or "interpretative phenomenological analysis" or "interviewing" or "interviews" or "life satisfaction" or "liking" or "market research" or "meaning" or "narratives" or "negative beliefs" or "negative experiences" or "observation" or "observational research" or "opinions" or "participant observation" or "participatory research" or "perceptions" or "personal experiences" or "personal narratives" or "phenomenology" or "prejudice" or "process analysis" or "qualitative analysis" or "qualitative data" or "qualitative methods" or "qualitative research" or "research" or "satisfaction" or "self" or "selfbeliefs" or "selfconcept" or "semistructured interviews" or "sense of self" or "shared stories" or "short stories" or "single case studies" or "social analysis" or "social anxiety" or "social attitudes" or "social beliefs" or "social experiences" or "social meaning" or "social perception" or "social psychology" or "social satisfaction" or "social sciences research" or "sociocultural research" or 58 "sociological research" or "stories" or "structured behavioural interviews" or "structured interviews" or "subjective 59 experiences" or "videotaped interviews" or "viewpoint" or "worry")) or(TI=(ethnolog* OR stories OR content analysis 60 OR ethnographic OR audiorecording OR "observational method?" 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Bibliomap

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Searched on 09.02.10. Search generated 478 records.

Search of EPIC

1. Keywords: What type of study does this report describe?: case control study OR cohort study OR survey OR systematic review OR process evaluation OR other design OR not stated (7011)

- 2. Keywords: Focus of the report: obesity (576)
- 3. Keywords: Focus of the report: eating disorder (191)

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4. Keywords: Characteristics of the study population: children OR young people (8995) 5. 2. OR 3 (747) 6.1 AND 4 AND 5 (311) (412) 7. Freetext (item record) obesity 8. Freetext (item record) views (117) 9.7 AND 8 (2) 10.6 OR 9 (311) Search of Bibliomap Freetext (item record) child* 11. (1326) 12. Freetext (item record) youth (2963) 13. Freetext (item record) "young people" (2546) 14. Freetext (item record) adolescen* (1) 15. Freetext (item record) obesity (1203) 16. Freetext (item record) obese (507) 17. 15 OR 16 (1353) 18. 11 OR 12 OR 13 OR 14 (6281) 19. 17 AND 18 (172)20. 10 OR 19 (456) 21. Freetext (item record) "eating disorder" (122) 22. Freetext (item record) "body weight" (416) 23. Freetext (item record) "body size" (45) Freetext (item record) fatness (51) 24. 25. Freetext (item record) thinness (31) 21 OR 22 OR 23 OR 24 OR 25 26. (613) 27. 18 AND 26 (53) 28. 20 OR 27 (478) 58 59 60

4	British	Library Integrat	ted Catalogue (BLIC)	
1 2 3 4 5	Search	ned on 18.03.10.	Search generated 113 records.	
6 7	#1. O	bes? AND adoles	cen? (in all text)	
8 9 10	#2. Bo	ody? AND adoles	cen? (in all text)	
10 11 12 13 14	#3. #1	l OR #2		
15	British	education Inde	x (Dialog Datastar)	
16 17 18	Search	ned on 9.2.10. Se	earch generated 259 records.	
19 20 21 22	-	ndex OR thin OR	body size OR body shape OR obese OR obesogenic OR body weight OR overweight OR body thinness OR skinny OR body weight OR fat OR weight OR anorexia OR anorexic OR eating	
23 24 25	AND			
26	(ti con	tains child OR ch	ildren OR childhood OR adolescent OR puberty OR schoolchild OR prepubescent OR	
27 28	prepu	bescence OR pre	adolescent OR preadolescence OR school OR schools OR pupil OR pupils OR (young people)	
29 30 31	OR yo	uth OR youths)		
32 33	British	tish Index to Theses		
34 35	Search	ned on 10.02.10.	Search generated 94 records.	
36 37	(ti cor	ntains obesity OF	body size OR body shape OR obese OR obesogenic OR body weight OR overweight OR body	
38			thinness OR skinny OR body weight OR fat OR weight OR anorexia OR anorexic OR eating	
39 40			ains child OR children OR childhood OR adolescent OR puberty OR schoolchild OR	
41			ubescence OR preadolescent OR preadolescence OR school OR schools OR pupil OR pupils OR	
42 43 44	(youn	g people) OR you		
45 46	CINAHL (EBSCO host) Searched on 15 02 10. Search generated 1477 records			
47 48 49 50	19		Search generated 1477 records.	
51 52	S33	S24 and S32	(1477)	
53 54 55	S32	S31 NOT S30	(659693)	
56	S31	S25 or S26 or S	527 or S28 or S29 (758214)	
57 58	S30	TX "New Jersey	y" OR Alabama OR Ontario OR "New London" OR "New England" OR "New South Wales" OR	
59 60	"New	York" (11522	28)	
	S29	TI English or Al	B English (13396)	
	620	TV	ith OD Usersechies OD Useries and OD Usertland a OD Usersell OD Usersech OD Usersechies	

S28 TX Hammersmith OR Hampshire OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helenus OR Hereford OR Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Invercive OR Inverses OR "Isle of Man" OR For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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Wight OR Islington OR Jersey OR Kensington OR Kent OR Kinross OR Knowles OR Lambeth OR Lanarkshire OR Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Litchfield OR Lincoln OR Lincolnshire OR Lilburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn OR Manchester OR Merienda OR Merseyside OR Methyl OR Middlesbrough OR Midlands OR Midlothian OR Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport OR Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Ornery OR Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd OR Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Gipon OR Rushmore 10 OR Salford OR Salisbury OR Sandell OR Scarborough OR Silly OR Sheffield OR Shetland OR Shropshire OR Somerset 11 12 OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke OR Suffolk 13 OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Hurlock OR Toran OR Turro OR Tyne OR 14 Tynes ide OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western Isles" OR 15 16 Westminster OR Wiltshire OR Winchester OR Wirra OR Wolverhampton OR Worcester OR Worcestershire OR 17 Wareham OR "Ynys Mon" OR York OR (187349) 18

19 TX "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International OR "U.K." OR "United S27 20 Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR Irish OR "EU Member" OR "district 21 22 council" OR "local council" OR "local authorities" OR "NHS Trust" OR "primary care trust" OR "borough council" OR 23 "county council" OR "local authority" OR "district councils" OR "local councils" OR "NHS Trusts" OR "primary care 24 25 trusts" OR "borough councils" OR "county councils" OR Eur OR "Social Care Trust" OR Aberdeen OR Aberdeenshire 26 OR "Abert awe Bro Morgan" OR Albas OR Alderney OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll 27 OR Armagh OR Arran OR Shield OR Ayrshire OR Bangor OR Barking OR Bedfordshire OR Belfast OR "Bets Cadwaladr" 28 29 OR Bexley OR Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridged OR Brighton OR Bristol OR 30 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Jannock OR Canterbury 31 OR Cardiff OR Carlisle OR Carmarthenshire OR Carmarthenshire shire OR Ceredigion OR Chelsea OR Cheshire OR 32 33 Chester OR Chichester OR Clackmannan shire OR Clwyd OR Conway OR Cornwall OR "County Down" OR Coventry OR 34 Croydon OR Cumbria OR "Cwm Taf" OR Canon OR Dagenham OR Hartford OR Davids OR Denbighshire OR Derby OR 35 Derbyshire OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbarton shire OR Dundee OR Durham OR Ealing OR 36 Edinburgh OR Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Finland OR Fermanagh OR Fife OR Flintshire OR Forth 37 38 OR Fulham OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR 39 Grampian OR Gresham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Alton OR Hamlets 40 (421966)41

43 44	S26	TX UK OR Scot	and OR England OR Wales (501872)
45 46	S25	(MH "Europe")	or (MH "United Kingdom+") (161249)
47 48	S24	S18 or S20	Limiters - Published Date from: 19970101-20101231; English Language (3408)
49 50	S23	S18 or S20	Limiters - Published Date from: 19970101-20101231; English Language (0)
51 52	S22	S18 or S20	Limiters - Published Date from: 19970101-20101231 (3473)
53 54 55 56 57 58 59 60	S21	S18 or S20	(3689)
	S20	S8 and S13	Limiters - Age Groups: Child, 6-12 years, Adolescence, 13-18 years (3281)
	S19	S8 and S13	(9540)
	S18	S15 or S17	(3408)
	S17	S9 and S16	(23)
	S16	(MH "Attitude	to Obesity") (71)

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BMJ Open

S15 Limiters - Published Date from: 19970101-20101231; English Language; Language: English (3402)

S14 S8 and S9 and S13 (3730)

S13 S11 or S12 (358620)

S12 (MH "Attitude to Health") or (MH "Attitude to Life") or (MH "Attitude") or (MH "Emotions") or (MH "Anxiety") or (MH "Adolescent Behavior") or (MH "Behavioral Research") or (MH "Social Attitudes") (37934)

S11 S3 or S10 (343979)

S10 (MH "Qualitative Studies+") or (MH "Participant Observation") or (MH "Observational Methods+") or (MH "Focus Groups") or (MH "Discourse Analysis") or (MH "Thematic Analysis") or (MH "Field Studies") or (MH "Constant Comparative Method") or (MH "Content Analysis") or (MH "Purposive Sample") or (MH "Qualitative Validity") or (MH "Ethnographic Research") or (MH "Ethnological Research") or (MH "Ethnology") or (MH "Cluster Sample") (70691)

- 19 20 S9 S4 or S1 (274308)
- 22 S8 S5 or S6 or S7 (49729) 23
- 24 S7 (MH "Weight Control") (2921) 25

26 27 S6 (MH "Body Image") (3373)

S5 (MH "Body Mass Index") or (MH "Body Weight") or (MH "Body Weight Changes") or (MH "Body Size") or (MH "Obesity") or (MH "Weight Gain") or (MH "Weight Loss") or (MH "Thinness") or (MH "Cachexia") or (MH "Anorexia") or (MH "Anorexia Nervosa") or (MH "Bulimia") or (MH "Bulimia Nervosa") or (MH "Eating Disorders") or (MH "Body Constitution") or (MH "Body Dysmorphic Disorder") (46178)

34 35 S4 (MH "Child") or (MH "Adolescence") (220052)

36 37 S3 TI (ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational 38 method?" OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-39 personal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR 40 41 preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-42 concern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR 43 emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration 44 45 OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR 46 concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR 47 perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR 48 49 interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case 50 study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR 51 standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio 52 recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR "grounded 53 54 theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant comparative" OR 55 "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field research" OR 56 "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" 57 58 OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic analyses" OR 59 anxiety OR anxieties OR anxious) or AB (ethnolog* OR stories OR content analysis OR ethnographic OR 60 audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

"process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "grounded research" OR "purposive sampling" OR "constant comparative" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" OR "conversation analysis" OR anxieties OR anxieti

S2 TI ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") (34667)

S1 TI (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent*
 OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) or AB (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent*
 OR adolescent* OR teen* OR pupil* OR young people OR youth OR youth OR youths OR adolescence OR pubert* OR secondary school* OR secondary school* OR jeeple OR youth OR youth OR youths OR adolescence OR pubert* OR secondary school* OR jeeple OR youth OR youth OR youths OR adolescence OR pubert* OR jeeple OR youth OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) (162059)

EMBASE (OVID SP)

Searched on 16.02.10. Search generated 4234 records.

1 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (660673)

2 ("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,ti. (284883)

3 (ethnolog* or stories or content analysis or ethnographic or audiorecording or "observational method?" or "participant observation" or "field notes" or experience? or narrative? or discourse or inter-personal or individuallevel or repertory grid or self-worth or self-identification or pre-occupation or preoccupation or acceptability or worry or worries or feelings or dissatisfied or satisfied or ideal shape or over-concern or concerns or concern or prejudice or prejudices or "process evaluations" or "process evaluation" or emotions or ethnopsychology or "focus groups" or "behavioral research" or "behavioural research" or narration or satisfaction or dissatisfaction or meanings or meaning or perspectives or perceive or ideas or idea or concepts or concept or beliefs or belief or attitudes or attitude or perceived or perceives or perceive or perceptions or perception or views or view or qualitative or interviewed or interviewing or interviewer or interviews or interview or comprehension or attitudinal or outlook or For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

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$\begin{array}{c}1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\23\\14\\5\\16\\17\\18\\19\\20\\22\\23\\4\\25\\26\\27\\8\\9\\30\\1\\32\\33\\4\\5\\6\\7\\2\end{array}$	narr recc "grc com or " "cor	depth" or "case studies" or "case study" or opinions or opinion or expectations or expectation or thoughts or ratives or standpoint or standpoints or viewpoints or viewpoint or "audio record" or "audio recorded" or "audio order" or "audio recording" or "audio recordings" or "audio records" or "thematic analysis" or phenomenol* or bunded theory" or "grounded studies" or "grounded research" or "purposive sampling" or "constant uparative" or "constant comparison" or "purposive sample" or "field study" or "field studies" or "field research" biographical method" or "theoretical sampl*" or "open-ended" or "open ended" or "life world" or "life-world" or nversation analysis" or "conversation analyses" or "theoretical saturation" or "thematic analyses" or anxiety or eties or anxious).ti,ab. (1237966)
	4	groups by age/ or adolescent/ or child/ (699964)
	5	child/ or boy/ or girl/ (397076)
	6	adolescence/ or adrenarche/ or puberty/ (21675)
	7	4 or 6 (707643)
	8	1 or 7 (1026791)
	9	obesity/ or body weight disorder/ or overnutrition/ (100390)
	10 or w	"weight, mass and size"/ or body weight/ or lean body weight/ or weight gain/ or weight/ or weight reduction/ veight change/ (140407)
	11	underweight/ (1262)
	12	body image/ or body mass/ (78517)
	13	body mass/ or "weight, mass and size"/ (74150)
	14	body size/ or "weight, mass and size"/ (5350)
	15	body build/ (2160)
38 39 40	16	body composition/ or body fat/ or body fat distribution/ (25975)
41 42	17	eating disorder/ or binge eating disorder/ (8287)
43 44	18	eating disorder/ or anorexia nervosa/ or bulimia/ (17268)
45 46	19	eating disorder/ or anorexia nervosa/ or builmia/ (17268) overnutrition/ (1460) body image/ (4954)
47 48	20	body image/ (4954)
49 50 51	21	body weight/ or lean body weight/ or weight change/ or weight gain/ or weight reduction/ (136121)
52 53	22	waist circumference/ (5368)
54 55	23	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 (280269)
56 57	24	2 or 23 (417092)
58 59	25	8 and 24 (60322)
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International or United Kingdom or European or Britain or Channel Isl* or Irish or EU Member or district council? or For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

local council? or local authorit* or NHS Trust? or primary care trust? or borough council? or county council? or Eur or 1 Social Care Trust? or Aberdeen or Aberdeenshire or Abertawe Bro Morgannwg or Albans or Alderney or Aneurin 2 3 Bevan or Anglesey or Angus or Antrim or Argyll or Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or 4 Bath or Bedfordshire or Belfast or Betsi Cadwaladr or Bexley or Birmingham or Borders or Bradford or Brecknock or 5 Brent or Bridgend or Brighton or Bristol or Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or 6 7 Camden or Cannock or Canterbury or Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea 8 or Cheshire or Chester or Chichester or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or 9 Coventry or Croydon or Cumbria or Cwm Taf or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby 10 or Derbyshire or Devon or Dorset or Dudley or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or 11 12 Edinburgh or Ely or Enfield or Essex or Exeter or Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or 13 Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucester or Gloucestershire or 14 Grampian or Gravesham or Greenwich or Guernsey or Gwent or Gwynedd or Hackney or Halton or Hamlets or 15 16 Hammersmith or Hampshire or Haringey or Harlow or Hartlepool or Harwell or Helens or Hereford or Hertfordshire 17 or Highland or Hounslow or Hull or Humber or Invercive or Inverness or "Isle of Man" or Wight or Islington or Jersey 18 or Kensington or Kent or Kinross or Knowsley or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or 19 20 Leicester or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Lisburn or Liverpool or London or 21 Londonderry or Lothian or Loughborough or Luton or Lynn or Manchester or Meirionnydd or Merseyside or Merthyr 22 or Middlesbrough or Midlands or Midlothian or Monmouth or Monmouthshire or Montgomery or Moray or Neath 23 24 or Newcastle or Newham or Newport or Norfolk or Northamptonshire or Northumberland or Norwich or 25 Nottingham or Nottinghamshire or Orkney or Oxford or Oxfordshire or Pembroke or Pembrokeshire or Perth or 26 Peterborough or Plymouth or Pontypridd or Portsmouth or Powys or Preston or Radnor or Redbridge or 27 28 Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury or Sandwell or Scarborough or Scilly or 29 Sheffield or Shetland or Shropshire or Somerset or "South Holland" or Southampton or Southwark or Staffordshire or 30 Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or Sussex or Swansea or Talbot or Tayside or 31 32 Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield or Walsall or Waltham or Warwickshire or 33 Wells or "Western Isles" or Westminster or Wiltshire or Winchester or Wirral or Wolverhampton or Worcester or 34 Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire).in,cp,ti,pb,jn,ab,ad,bt. (3877746) 35

- 3637 29 united kingdom/ or western europe/ (92841)
 - 30 28 or 29 (3880977)

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31 ("New Jersey" or Alabama or Ontario or "New London" or "New England" or "New South Wales" or "New York").in,cp,ti,pb,jn,ab,ad,bt. (460137)

- 44 45 32 30 not 31 (3441954)
 - 33 qualitative analysis/ or qualitative research/ (24372)
- 49 34 qualitative validity/ (61)50
- 51 35 ethnography/ or ethnology/ (13750) 52
- 53 36 attitude to life/ or social attitude/ or attitude/ or attitude to health/ (27363)
- information processing/ or discourse analysis/ or speech analysis/ or thematic analysis/ (62098)
- 57 58 38 observational study/ (10860)
- 60 39 observational method/ (472)
 - 40 observational study/ (10860)
 - 41 discourse analysis/ (226)

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1	42	verbal communication/ or conversation/ or narrative/ or storytelling/ (6966)
2 3	43	verbal memory/ (5451)
4 5	44	psychology/ or behavioral science/ (14281)
6 7	45	content analysis/ (1062)
8 9 10	46	exp interview/ (54344)
10 11 12	47	emotion/ (29132)
13 14	48	experience/ (24648)
15 16	49	self concept/ (16810)
17 18	50	phenomenology/ (4607)
19 20 21	51	awareness/ (16456)
22 23	52	comprehension/ (8375)
24 25	53	constant comparative method/ (23)
26 27	54	field study/ (433)
28 29	55	purposive sample/ (33)
30 31 32	56	theoretical sample/ (64)
33 34	57	personal experience/ (3416)
35 36	58	cluster analysis/ (13255)
37 38	59	repertory grid technique/ (2)
39 40 41	60	case study/ (6816)
41	61	3 or 33 or 34 or 35 or 36 or 37 or 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 or 51
43 44	or 52	e or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 (1381904)
45 46	62	25 and 26 and 32 and 61 (4907)
47 48 49 50	63	limit 62 to yr="1997 - 2010" (4234)

ERIC (CSA)

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Searched on 09.02.10. Search generated 1043 records.

55 (((TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR 56 adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR 57 58 pubert* OR "secondary school*") or AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR 59 preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" 60 OR youth OR youths OR adolescence OR pubert* OR "secondary school*")) or(DE=puberty or DE=adolescence) or(DE=("adolescents" or "youth" or "children" or "early adolescents" or "late adolescents" or "preadolescents")))

and

((DE=("eating disorders" or "obesity" or "body composition" or "body weight")) or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "body dismorph*" OR (body WITHIN 3 size) OR (body WITHIN 3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight NEAR body) OR "body fatness" OR "atness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders"))))

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14 ((DE=("attitude measures" or "attitudes" or "behavior" or "behavioral science research" or "behavioral sciences" or 15 "beliefs" or "case studies" or "child psychology" or "comparative analysis" or "comparative testing" or "discussion" 16 or "ethnography" or "ethnology" or "ethology" or "focus groups" or "grounded theory" or "group discussion" or 17 "interaction process analysis" or "interviews" or "measures individuals" or "negative attitudes" or "opinions" or 18 "participant observation" or "personal narratives" or "psychological patterns" or "psychological studies" or 19 "psychology" or "qualitative research" or "self concept" or "semantic differential" or "social attitudes" or "social 20 behavior" or "social psychology" or "social science research" or "sociology")) or((TI=(ethnolog* OR stories OR 21 22 content analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR 23 "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR 24 self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR 25 feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR 26 prejudices OR "process evaluations" OR "process evaluation" OR emotions OR ethnopsychology OR "focus groups" 27 28 OR "behavioral research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR 29 meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR 30 attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR 31 qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR 32 attitudinal OR outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR 33 expectation OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio 34 record" OR "audio recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "audio records" 35 OR "thematic analysis" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR 36 37 "purposive sampling" OR "constant comparative" OR "constant comparison" OR "purposive sample" OR "field study" 38 OR "field studies" OR "field research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR 39 "open ended" OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical 40 saturation" OR "thematic analyses" OR anxiety OR anxieties OR anxious)) or (AB=(ethnolog* OR stories OR content 41 analysis OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field 42 notes" OR experience? OR narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-43 44 worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings 45 OR dissatisfied OR satisfied OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR 46 "process evaluations" OR "process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral 47 research" OR "behavioural research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR 48 perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude 49 OR perceived OR perceives OR perceptions OR perception OR views OR view OR qualitative OR 50 interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR 51 52 outlook OR "in depth" OR "case studies" OR "case study" OR opinions OR opinion OR expectations OR expectation 53 OR thoughts OR narratives OR standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio 54 recorded" OR "audio recorder" OR "audio recording" OR "audio recordings" OR "audio records" OR "thematic 55 analysis" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive 56 sampling" OR "constant comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field 57 studies" OR "field research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" 58 59 OR "life world" OR "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" 60 OR "thematic analyses" OR anxiety OR anxieties OR anxious))))

Health Promis

Searched on 22.02.10. Search generated 370 records.					
1997 onwards					
Keywords: Young people OR adolescents OR children AND Keywords: obesity OR weight OR body mass index OR self-concept					
Interr	national Bibliography of the Social Sciences (EBSCO host)				
Searc	hed on 12.02.10. Search generated 595 records.				
S1	DE "Children" or DE "Youth" or DE "Adolescence" or DE "Adolescents" or DE "Childhood"				
	TX child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* lolescent* OR teen* OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR scence OR pubert* OR "secondary school*"				
S3	S1 or S2				
"body	TX "body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge g" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders"				
S5	DE "Obesity" or DE "Representations of the body" or DE "Anorexia nervosa" or DE "Eating disorders				
S6	S4 or S5				
S7	(S4 or S5) and (S3 and S6). Limiters - Date Published: 19970101-20101231; Language: English				
Physi	cal Education Index (CSA)				
-	hed on 16.02.10. Search generated 801 records.				
(((TI=) "partii indivi accep conce ethno satisfa conce perce interv study stand recorv theor "cons "biog OR "c anxie audio	(ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" OR cipant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR dual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR tability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR errns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR emotions OR action OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR pto the statisfaction OR meanings OR meaning OR perspectives OR perceives OR perceive OR pto DR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR pto DR beliefs OR belief OR attitudes OR attitude OR interviewing OR interviewer OR riews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case " OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR points OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio ding" OR "audio recordings" OR "grounded research" OR "purposive sampling" OR "constant comparative" OR tant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field research" OR raphical method" OR "theoretical sampl*" OR "open ended" OR "life world" OR "life-world" onversation analysis" OR "conversation analyses" OR theoretical saturation" OR "thematic analysis OR ethnographic OR ty OR anxieties OR anxious) or AB=(ethnolog* OR stories OR content analysis OR ethnographic OR tecording OR "observational method?" OR "participant observation" OR "field notes" OR self-identification For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml				
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22 (((TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescence OR preadolescent* OR 23 adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" OR youth OR youths OR adolescence OR 24 pubert* OR "secondary school*") OR AB=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR 25 preadolescence OR preadolescent* OR adolescent* OR teen*OR (school N6 student*) OR pupil* OR "young people" 26 OR youth OR youths OR adolescence OR pubert* OR "secondary school*")) or(DE=("adolescence" or "boys" or "girls" 27 28 or "puberty" or "youth" or "children"))) and((DE=("obesity" or "body composition" or "body concept" or "weight")) 29 or(TI=("body composition" OR "body dismorph*" OR (body WITHIN 2 size) OR (body WITHIN 2 shape) OR 30 "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR 31 (weight WITHIN 2 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia 32 OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating 33 disorders") or AB=("body composition" OR "body dismorph*" OR (body WITHIN 2 size) OR (body WITHIN 2 shape) OR 34 "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR 35 (weight WITHIN 2 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia 36 37 OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating 38 disorders"))))) and

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41 (TI=(UK or Scotland or England or Wales or Northern Ireland or Europe or British or Scottish or Welsh or 42 43 International or United Kingdom or European or Britain or Channel Isl* or Irish or EU Member or district council? or 44 local council? or local authorit* or NHS Trust? or primary care trust? or borough council? or county council? or Eur or 45 Social Care Trust? or Aberdeen or Aberdeenshire or Abertawe Bro Morgannwg or Albans or Alderney or Aneurin 46 47 Bevan or Anglesey or Angus or Antrim or Argyll or Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or 48 Bath or Bedfordshire or Belfast or Betsi Cadwaladr or Bexley or Birmingham or Borders or Bradford or Brecknock or 49 Brent or Bridgend or Brighton or Bristol or Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or 50 51 Camden or Cannock or Canterbury or Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea 52 or Cheshire or Chester or Chichester or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or 53 Coventry or Croydon or Cumbria or Cwm Taf or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby 54 or Derbyshire or Devon or Dorset or Dudley or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or 55 56 Edinburgh or Ely or Enfield or Essex or Exeter or Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or 57 Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucester or Gloucestershire or 58 59 Grampian or Gravesham or Greenwich or Guernsey or Gwent or Gwynedd or Hackney or Halton or Hamlets or 60 Hammersmith or Hampshire or Haringey or Harlow or Hartlepool or Harwell or Helens or Hereford or Hertfordshire or Highland or Hounslow or Hull or Humber or Inverciyde or Inverness or "Isle of Man" or Wight or Islington or Jersey or Kensington or Kent or Kinross or Knowsley or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or Leicester or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Lisburn or Liverpool or London or

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Londonderry or Lothian or Loughborough or Luton or Lynn or Manchester or Meirionnydd or Merseyside or Merthyr 1 or Middlesbrough or Midlands or Midlothian or Monmouth or Monmouthshire or Montgomery or Moray or Neath 2 3 or Newcastle or Newham or Newport or Norfolk or Northamptonshire or Northumberland or Norwich or 4 Nottingham or Nottinghamshire or Orkney or Oxford or Oxfordshire or Pembroke or Pembrokeshire or Perth or 5 Peterborough or Plymouth or Pontypridd or Portsmouth or Powys or Preston or Radnor or Redbridge or 6 7 Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury or Sandwell or Scarborough or Scilly or 8 Sheffield or Shetland or Shropshire or Somerset or "South Holland" or Southampton or Southwark or Staffordshire or 9 Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or Sussex or Swansea or Talbot or Tayside or 10 Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield or Walsall or Waltham or Warwickshire or 11 12 Wells or "Western Isles" or Westminster or Wiltshire or Winchester or Wirral or Wolverhampton or Worcester or 13 Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire) OR AB=(UK or Scotland or England or Wales or 14 Northern Ireland or Europe or British or Scottish or Welsh or International or United Kingdom or European or Britain 15 16 or Channel Isl* or Irish or EU Member or district council? or local council? or local authorit* or NHS Trust? or primary 17 care trust? or borough council? or county council? or Eur or Social Care Trust? or Aberdeen or Aberdeenshire or 18 Abertawe Bro Morgannwg or Albans or Alderney or Aneurin Bevan or Anglesey or Angus or Antrim or Argyll or 19 20 Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or Bath or Bedfordshire or Belfast or Betsi Cadwaladr 21 or Bexley or Birmingham or Borders or Bradford or Brecknock or Brent or Bridgend or Brighton or Bristol or 22 Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or Camden or Cannock or Canterbury or 23 24 Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea or Cheshire or Chester or Chichester 25 or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or Coventry or Croydon or Cumbria or Cwm Taf 26 or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby or Derbyshire or Devon or Dorset or Dudley 27 28 or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or Edinburgh or Ely or Enfield or Essex or Exeter or 29 Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or Fulham or Furness or Galloway or Gateshead or 30 Glamorgan or Glasgow or Gloucester or Gloucestershire or Grampian or Gravesham or Greenwich or Guernsey or 31 32 Gwent or Gwynedd or Hackney or Halton or Hamlets or Hammersmith or Hampshire or Haringey or Harlow or 33 Hartlepool or Harwell or Helens or Hereford or Hertfordshire or Highland or Hounslow or Hull or Humber or 34 Inverclyde or Inverness or "Isle of Man" or Wight or Islington or Jersey or Kensington or Kent or Kinross or Knowsley 35 36 or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or Leicester or Leicestershire or Lewisham or Lichfield 37 or Lincoln or Lincolnshire or Lisburn or Liverpool or London or Londonderry or Lothian or Loughborough or Luton or 38 Lynn or Manchester or Meirionnydd or Merseyside or Merthyr or Middlesbrough or Midlands or Midlothian or 39 40 Monmouth or Monmouthshire or Montgomery or Moray or Neath or Newcastle or Newham or Newport or Norfolk 41 or Northamptonshire or Northumberland or Norwich or Nottingham or Nottinghamshire or Orkney or Oxford or 42 Oxfordshire or Pembroke or Pembrokeshire or Perth or Peterborough or Plymouth or Pontypridd or Portsmouth or 43 44 Powys or Preston or Radnor or Redbridge or Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury 45 or Sandwell or Scarborough or Scilly or Sheffield or Shetland or Shropshire or Somerset or "South Holland" or 46 Southampton or Southwark or Staffordshire or Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or 47 48 Sussex or Swansea or Talbot or Tayside or Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield 49 or Walsall or Waltham or Warwickshire or Wells or "Western Isles" or Westminster or Wiltshire or Winchester or 50 Wirral or Wolverhampton or Worcester or Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire) OR 51 52 AF=(UK or Scotland or England or Wales or Northern Ireland or Europe or British or Scottish or Welsh or 53 International or United Kingdom or European or Britain or Channel IsI* or Irish or EU Member or district council? 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or Derbyshire or Devon or Dorset or Dudley or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or 1 Edinburgh or Ely or Enfield or Essex or Exeter or Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or 2 3 Fulham or Furness or Galloway or Gateshead or Glamorgan or Glasgow or Gloucester or Gloucestershire or 4 Grampian or Gravesham or Greenwich or Guernsey or Gwent or Gwynedd or Hackney or Halton or Hamlets or 5 Hammersmith or Hampshire or Haringey or Harlow or Hartlepool or Harwell or Helens or Hereford or Hertfordshire 6 7 or Highland or Hounslow or Hull or Humber or Inverciyde or Inverness or "Isle of Man" or Wight or Islington or Jersey 8 or Kensington or Kent or Kinross or Knowsley or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or 9 Leicester or Leicestershire or Lewisham or Lichfield or Lincoln or Lincolnshire or Lisburn or Liverpool or London or 10 Londonderry or Lothian or Loughborough or Luton or Lynn or Manchester or Meirionnydd or Merseyside or Merthyr 11 12 or Middlesbrough or Midlands or Midlothian or Monmouth or Monmouthshire or Montgomery or Moray or Neath 13 or Newcastle or Newham or Newport or Norfolk or Northamptonshire or Northumberland or Norwich or 14 Nottingham or Nottinghamshire or Orkney or Oxford or Oxfordshire or Pembroke or Pembrokeshire or Perth or 15 16 Peterborough or Plymouth or Pontypridd or Portsmouth or Powys or Preston or Radnor or Redbridge or 17 Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury or Sandwell or Scarborough or Scilly or 18 Sheffield or Shetland or Shropshire or Somerset or "South Holland" or Southampton or Southwark or Staffordshire or 19 20 Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or Sussex or Swansea or Talbot or Tayside or 21 Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield or Walsall or Waltham or Warwickshire or 22 Wells or "Western Isles" or Westminster or Wiltshire or Winchester or Wirral or Wolverhampton or Worcester or 23 24 Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire)OR PB=(UK or Scotland or England or Wales or 25 Northern Ireland or Europe or British or Scottish or Welsh or International or United Kingdom or European or Britain 26 or Channel Isl* or Irish or EU Member or district council? or local council? or local authorit* or NHS Trust? or primary 27 28 care trust? or borough council? or county council? or Eur or Social Care Trust? or Aberdeen or Aberdeenshire or 29 Abertawe Bro Morgannwg or Albans or Alderney or Aneurin Bevan or Anglesey or Angus or Antrim or Argyll or 30 Armagh or Arran or Ashfield or Ayrshire or Bangor or Barking or Bath or Bedfordshire or Belfast or Betsi Cadwaladr 31 32 or Bexley or Birmingham or Borders or Bradford or Brecknock or Brent or Bridgend or Brighton or Bristol or 33 Buckinghamshire or Bute or Caerphilly or Cambridge or Cambridgeshire or Camden or Cannock or Canterbury or 34 Cardiff or Carlisle or Carmarthen or Carmarthenshire or Ceredigion or Chelsea or Cheshire or Chester or Chichester 35 36 or Clackmannanshire or Clwyd or Conwy or Cornwall or County Down or Coventry or Croydon or Cumbria or Cwm Taf 37 or Cynon or Dagenham or Dartford or Davids or Denbighshire or Derby or Derbyshire or Devon or Dorset or Dudley 38 or Dumfries or Dunbartonshire or Dundee or Durham or Ealing or Edinburgh or Ely or Enfield or Essex or Exeter or 39 40 Falkirk or Fenland or Fermanagh or Fife or Flintshire or Forth or Fulham or Furness or Galloway or Gateshead or 41 Glamorgan or Glasgow or Gloucester or Gloucestershire or Grampian or Gravesham or Greenwich or Guernsey or 42 Gwent or Gwynedd or Hackney or Halton or Hamlets or Hammersmith or Hampshire or Haringey or Harlow or 43 Hartlepool or Harwell or Helens or Hereford or Hertfordshire or Highland or Hounslow or Hull or Humber or 44 45 Inverclyde or Inverness or "Isle of Man" or Wight or Islington or Jersey or Kensington or Kent or Kinross or Knowsley 46 or Lambeth or Lanarkshire or Lancashire or Lancaster or Leeds or Leicester or Leicestershire or Lewisham or Lichfield 47 48 or Lincoln or Lincolnshire or Lisburn or Liverpool or London or Londonderry or Lothian or Loughborough or Luton or 49 Lynn or Manchester or Meirionnydd or Merseyside or Merthyr or Middlesbrough or Midlands or Midlothian or 50 Monmouth or Monmouthshire or Montgomery or Moray or Neath or Newcastle or Newham or Newport or Norfolk 51 or Northamptonshire or Northumberland or Norwich or Nottingham or Nottinghamshire or Orkney or Oxford or 52 53 Oxfordshire or Pembroke or Pembrokeshire or Perth or Peterborough or Plymouth or Pontypridd or Portsmouth or 54 Powys or Preston or Radnor or Redbridge or Renfrewshire or Rhondda or Ripon or Rushmoor or Salford or Salisbury 55 or Sandwell or Scarborough or Scilly or Sheffield or Shetland or Shropshire or Somerset or "South Holland" or 56 57 Southampton or Southwark or Staffordshire or Stirling or Stockton or Stoke or Suffolk or Sunderland or Surrey or 58 Sussex or Swansea or Talbot or Tayside or Thurrock or Torfaen or Truro or Tyne or Tyneside or Tyrone or Wakefield 59 or Walsall or Waltham or Warwickshire or Wells or "Western Isles" or Westminster or Wiltshire or Winchester or 60 Wirral or Wolverhampton or Worcester or Worcestershire or Wrexham or "Ynys Mon" or York or Yorkshire))

Proquest Dissertations and theses

Searched on 9.2.10. Search generated 38 records.

SCH("United Kingdom") AND (obesity OR body size OR body shape OR obese OR obesogenic OR body weight OR overweight OR "body mass index" OR thin OR thinness OR skinny OR body weight OR fat OR weight OR anorexia OR anorexic) AND (child* OR adolescent OR puberty OR schoolchild* OR prepubescen* OR preadolescen* OR school* OR pupil* OR young people OR youth OR youths) AND PDN(>1/1/1996)

Psycinfo (EBSCO host)

Searched on 9.2.10. Search generated 1630 records.

Search mode: Boolean /Phrase; Limiters - Publication Year from: 1997-2010; Language: English.

S3 TI ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders")TI ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight"OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders") or AB ("body composition" OR "body dismorph*" OR (body W3 size) OR (body W3 shape) OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight N8 body) OR "body fatness" OR fatness OR "weight gain" OR "body weights" OR Bulimia OR Anorexia OR Binge-eating OR "binge eating" OR "disordered eating" OR underweight OR "eating disorder" OR "eating disorders")

S15 "Body Mass Index" or DE "Body Dysmorphic Disorder" or DE "Body Image" or DE "Body Image Disturbances" or DE "Body Size" or DE "Body Weight" or DE "Obesity" or DE "Underweight" or DE "Anorexia Nervosa" or DE "Eating Disorders" or DE "Bulimia" or DE "Hyperphagia" or DE "Pica" or DE "Purging (Eating Disorders)" or DE "Aphagia" or DE "Binge Eating" or DE "Weight Control" or DE "Weight Gain" or DE "Weight Loss" or DE "Weight Perception" or DE "Overweight"

S18 S3 or S15

52 S10 TI (ethnolog* OR stories OR content analysis OR ethnographic OR audiorecording OR "observational method?" 53 54 OR "participant observation" OR "field notes" OR experience? OR narrative? OR discourse OR inter-personal OR 55 individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR 56 acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR ideal shape OR over-concern OR 57 58 concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR "process evaluation" OR emotions OR 59 ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural research" OR narration OR 60 satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case studies" OR "case For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR standpoint OR 1 standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" OR "audio 2 recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR "grounded 3 4 theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant comparative" OR 5 "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field research" OR 6 7 "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" 8 OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic analyses" OR 9 anxiety OR anxieties OR anxious) and AB (ethnolog* OR stories OR content analysis OR ethnographic OR 10 audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR 11 12 narrative? OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification 13 OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied 14 OR ideal shape OR over-concern OR concerns OR concern OR prejudice OR prejudices OR "process evaluations" OR 15 16 "process evaluation" OR emotions OR ethnopsychology OR "focus groups" OR "behavioral research" OR "behavioural 17 research" OR narration OR satisfaction OR dissatisfaction OR meanings OR meaning OR perspectives OR perspective 18 OR ideas OR idea OR concepts OR concept OR beliefs OR belief OR attitudes OR attitude OR perceived OR perceives 19 20 OR perceive OR perceptions OR perception OR views OR view OR qualitative OR interviewed OR interviewing OR 21 interviewer OR interviews OR interview OR comprehension OR attitudinal OR outlook OR "in depth" OR "case 22 studies" OR "case study" OR opinions OR opinion OR expectations OR expectation OR thoughts OR narratives OR 23 24 standpoint OR standpoints OR viewpoints OR viewpoint OR "audio record" OR "audio recorded" OR "audio recorder" 25 OR "audio recording" OR "audio recordings" OR "audio records" OR "thematic analysis" OR phenomenol* OR 26 "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive sampling" OR "constant 27 28 comparative" OR "constant comparison" OR "purposive sample" OR "field study" OR "field studies" OR "field 29 research" OR "biographical method" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR 30 "life-world" OR "conversation analysis" OR "conversation analyses" OR "theoretical saturation" OR "thematic 31 32 analyses" OR anxiety OR anxieties OR anxious) 33

34 S12 DE "Grounded Theory" or DE "Qualitative Research" or DE "Data Collection" or DE "Interviews" or DE 35 "Observation Methods" or DE "Interviewers" or DE "Interviewing" or DE "Questioning" or DE "Attitude 36 Measurement" or DE "Attitude Measures" or DE "Attitudes" or DE "Adolescent Attitudes" or DE "Obesity (Attitudes 37 38 Toward)" or DE "Attitude Change" or DE "Attitude Formation" or DE "Attribution" or DE "Prejudice" or DE "World 39 View" or DE "Eating Attitudes" or DE "Health Attitudes" or DE "Comprehension" or DE "Meaning" or DE "Self 40 Concept" or DE "Self Perception" or DE "Social Identity" or DE "Behavior Analysis" or DE "Cohort Analysis" or DE 41 42 "Discourse Analysis" or DE "Content Analysis" or DE "Ethnology" or DE "Ethnography" or DE "Ethnolinguistics" or DE 43 "Phenomenology" or DE "Behavioral Sciences" or DE "Social Sciences" or DE "Behavioral Medicine" or DE 44 "Psychology" or DE "Behavior" or DE "Sociology" or DE "Narratives" or DE "Storytelling" or DE "Comparative 45 46 Psychology" or DE "Emotions"DE "Grounded Theory" or DE "Qualitative Research" or DE "Data Collection" or DE 47 "Interviews" or DE "Observation Methods" or DE "Interviewers" or DE "Interviewing" or DE "Questioning" or DE 48 "Attitude Measurement" or DE "Attitude Measures" or DE "Attitudes" or DE "Adolescent Attitudes" or DE "Obesity 49 50 (Attitudes Toward)" or DE "Attitude Change" or DE "Attitude Formation" or DE "Attribution" or DE "Prejudice" or DE 51 "World View" or DE "Eating Attitudes" or DE "Health Attitudes" or DE "Comprehension" 52

S13 (((((DE "Content Analysis") or (DE "Biographical Data")) and (DE "Satisfaction" or DE "Dissatisfaction")) or (DE
 "Emotional States")) or (DE "Life Experiences")) or (DE "Conversation")

57 S14 S10 or S12 or S13 58

59 S19 S14 and S18 60

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S20 S14 and S18 Limiters - Publication Year from: 1997-2010; Language: English; Age Groups: Childhood (birth-12 yrs), School Age (6-12 yrs), Adolescence (13-17 yrs)

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S21 TI (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*) or AB (child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR preadolescent* OR adolescent* OR teen* OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school* OR school N5 student*)

- S24 S21 and S14 and S18
- 9 S25 S20 or S24 10
- 12 S26 S21 and S18 13

S27 S21 and S18 Limiters-Methodology: FIELD STUDY, -Nonclinical Case Study, -Qualitative Study

- 16 S28 S24 or S27
- 18 S29 DE "Adolescent Attitudes" and S18 19
- 20 S30 DE "Obesity (Attitudes Toward)" and S21
- 23 S31 S28 or S29 or S30
- 25 S32 S28 or S29 or S30 26
- 27 S38 TX UK OR Scotland OR England OR Wales 28

29 S42 TX "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International OR "U.K." OR "United 30 Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR Irish OR "EU Member" OR "district 31 32 council" OR "local council" OR "local authorities" OR "NHS Trust" OR "primary care trust" OR "borough council" OR 33 "county council" OR "local authority" OR "district councils" OR "local councils" OR "NHS Trusts" OR "primary care 34 trusts" OR "borough councils" OR "county councils" OR Eur OR "Social Care Trust" OR Aberdeen OR Aberdeenshire 35 36 OR "Abert awe Bro Morgan" OR Albas OR Alderney OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll 37 OR Armagh OR Arran OR Shield OR Avrshire OR Bangor OR Barking OR Bedfordshire OR Belfast OR "Bets Cadwaladr" 38 OR Bexley OR Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridged OR Brighton OR Bristol OR 39 40 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Jannock OR Canterbury 41 OR Cardiff OR Carlisle OR Carmarthenshire OR Carmarthenshire shire OR Ceredigion OR Chelsea OR Cheshire OR 42 Chester OR Chichester OR Clackmannan shire OR Clwyd OR Conway OR Cornwall OR "County Down" OR Coventry OR 43 44 Croydon OR Cumbria OR "Cwm Taf" OR Canon OR Dagenham OR Hartford OR Davids OR Denbighshire OR Derby OR 45 Derbyshire OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbarton shire OR Dundee OR Durham OR Ealing OR 46 Edinburgh OR Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Finland OR Fermanagh OR Fife OR Flintshire OR Forth 47 48 OR Fulham OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR 49 Grampian OR Gresham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Alton OR Hamlets 50

51 S45 TX Hammersmith OR Hampshire OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helenus OR Hereford 52 OR Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Inverceyde OR Inverness OR "Isle of Man" OR 53 54 Wight OR Islington OR Jersey OR Kensington OR Kent OR Kinross OR Knowles OR Lambeth OR Lanarkshire OR 55 Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Litchfield OR Lincoln OR 56 Lincolnshire OR Lilburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn 57 58 OR Manchester OR Merienda OR Merseyside OR Methyl OR Middlesbrough OR Midlands OR Midlothian OR 59 Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport OR 60 Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Ornery OR Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd OR Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Gipon OR Rushmore OR Salford OR Salisbury OR Sandell OR Scarborough OR Silly OR Sheffield OR Shetland OR Shropshire OR Somerset For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke OR Suffolk OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Hurlock OR Toran OR Turro OR Tyne OR Tynes ide OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western Isles" OR Westminster OR Wiltshire OR Winchester OR Wirra OR Wolverhampton OR Worcester OR Worcestershire OR Wareham OR "Ynys Mon" OR York OR Yorkshire

S46 S38 or S42 or S45

S47 (S38 or S42 or S45) or TI English or AB English

S48 ((S38 or S42 or S45) or TI English or AB English) and (S32 and S47) (1630)

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Searched on 8.2.10. Search generated 4959 records.

(child[mh] OR adolescent[mh] OR minors[mh] OR puberty[mh] OR child*[TIAB] OR schoolchild*[TIAB] OR Boy[TIAB] OR boys[TIAB] OR Girl[TIAB] OR girls[TIAB] OR Minors[TIAB] OR preadolescence[TIAB] OR preadolescent*[TIAB] OR adolescent*[TIAB] OR teen*[TIAB] OR (school[TIAB] AND student*[TIAB]) OR pupil*[TIAB] OR young people[TIAB] OR youth[TIAB] OR youths[TIAB] OR adolescence[tiab] OR pubert*[TIAB] OR Secondary school*[TIAB])

AND

29 (body composition[tiab] OR body dismorph*[tiab] OR Body Weight[MeSH Terms:noexp] OR Body Size[MeSH 30 31 Terms:noexp] OR "body size"[TIAB] OR "body shape"[TIAB] OR "overweight"[TIAB] OR "thin"[TIAB] OR 32 "thinness"[TIAB] OR "skinny"[TIAB] OR "body mass index"[mh] OR "overnutrition"[mh] OR "body image"[mh] OR 33 "body image"[TIAB] OR "obese"[tiab] OR "obesogenic"[tiab] OR obesity[tiab] OR obesity[mh:noexp] OR 34 (weight[TIAB] AND body[TIAB]) OR weights[TIAB] OR "body fatness"[TIAB] OR fatness[TIAB] OR "weight gain"[TIAB] 35 OR body weight changes[mh:noexp] OR weight gain[mh] OR Weight loss[mh:noexp] OR Emaciation[mh:noexp] OR 36 Cachexia[mh:noexp] OR Overweight[mh:noexp] OR Obesity[mh:noexp] OR Thinness[mh] OR Ideal body weight[mh] 37 OR Bulimia[tw] OR Anorexia[tw] OR Binge-eating[tw] OR "binge eating" OR Eating disorders[mh:noexp] OR Waist 38 39 Circumference[mh] OR waist-hip ratio[mh] OR disordered eating[tiab] OR underweight[tiab] OR body 40 composition[mh:noexp] OR "weight loss"[TIAB] OR "weight change"[TIAB] OR "weight changes"[TIAB]) 41

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43 (((ethnolog*[tiab]) OR (stories[tiab]) OR (content analysis[tiab]) OR (ethnographic[tiab]) OR (audiorecording[tw]) OR 44 (observational methods[tiab]) OR (participant observation[tiab]) OR (field notes[tiab]) OR "ethnopsychology"[mesh 45 46 terms] OR "focus groups"[mesh terms] OR "interviews as topic"[mesh terms] OR "empirical research"[mesh terms] 47 OR "emotions" [mesh terms] OR "awareness" [mesh terms] OR "comprehension" [mesh terms] OR "self 48 concept"[mesh terms:noexp] OR "health knowledge, attitudes, practice"[mesh terms] OR "attitude"[mesh 49 terms:noexp] OR "attitude to health"[mesh terms:noexp] OR "focus groups"[mesh terms] OR "qualitative 50 research"[mesh terms] OR experiences[tiab] OR experience[tiab] OR narratives[tiab] OR narrative[tiab] OR 51 discourse[tiab] OR inter-personal[tiab] OR individual-level[tiab] OR repertory grid[tiab] OR self-worth[tiab] OR self-52 identification[tiab] OR pre-occupation[tiab] OR preoccupation[tiab] OR acceptability[tiab] OR worry[tiab] OR 53 54 worries[tiab] OR feelings[tiab] OR dissatisfied[tiab] OR satisfied[tiab] OR ideal shape[tiab] OR over-concern[tiab] OR 55 concerns[tiab] OR concern[tiab] OR prejudice[tiab] OR prejudices[tiab] OR process evaluations[tiab] OR process 56 evaluation[tiab] OR emotions[tiab] OR ethnopsychology[tiab] OR focus groups[tiab] OR behavioral research[tiab] OR 57 behavioural research[tiab] OR narration[tiab] OR satisfaction[tiab] OR dissatisfaction[tiab] OR meanings[tiab] OR 58 meaning[tiab] OR perspectives[tiab] OR perspective[tiab] OR ideas[tiab] OR idea[tiab] OR concepts[tiab] OR 59 concept[tiab] OR beliefs[tiab] OR belief[tiab] OR attitudes[tiab] OR attitude[tiab] OR perceived[tiab] OR 60 perceives[tiab] OR perceive[tiab] OR perceptions[tiab] OR perception[tiab] OR views[tiab] OR views[tiab] OR qualitative[tiab] OR interviewed[tiab] OR interviewing[tiab] OR interviewer[tiab] OR interviews[tiab] OR interview[tiab] OR comprehension[tiab] OR attitudinal[tiab] OR outlook[tiab] OR in depth[tiab] OR case studies[tiab] OR case study[tiab] OR opinions[tiab] OR opinion[tiab] OR expectations[tiab] OR expectation[tiab] OR thoughts[tiab] Page 99 of 137

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OR narratives[tiab] OR standpoint[tiab] OR standpoints[tiab] OR viewpoints[tiab] OR viewpoint[tiab] OR (audio record[tiab] OR audio recorded[tiab] OR audio recorder[tiab] OR audio recording[tiab] OR audio recordings[tiab] OR grounded theory[tiab] OR grounded studies[tiab] OR grounded research[tiab] OR purposive sampling[tiab] OR constant comparative[tiab] OR purposive sample[tiab] OR field study[tiab] OR field studies[tiab] OR field research[tiab] OR biographical method[tiab] OR theoretical sampl*[tiab] OR open-ended[tiab] OR "open ended"[tiab] OR "life world"[tiab] OR life-world[tiab] OR conversation analysis[tiab] OR conversation analyses[tiab] OR theoretical saturation[tiab] OR "thematic analyses"[tiab] OR anxiety[tiab] OR anxieties[tiab] OR anxious[tiab] OR anxious[tiab] OR "thematic analyses"[tiab] OR anxiety[tiab] OR anxiety[tiab] OR anxious[tiab] OR anxious[tiab] OR anxious[tiab] OR anxiety[tiab] OR anxiety[ti

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15 AND (((Northern Ireland[PL]) OR (United Kingdom[PL]) OR (Britain[PL]) OR (Scotland[PL]) OR (Wales[PL]) OR 16 (England[PL]) OR (great britain[MeSH Terms] OR (europe[MeSH Terms:noexp]) OR (Northern Ireland[MeSH Terms]) 17 OR UK OR Scotland OR England OR Wales OR "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR 18 International OR U.K. OR "United Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR 19 English[tiab] OR Irish OR "EU Member"[tiab] OR "district council" OR "local council" OR "local authorities" OR "NHS 20 21 Trust" OR "primary care trust" OR "borough council" OR "county council" OR "local authority" OR "district councils" 22 OR "local councils" OR "NHS Trusts" OR "primary care trusts" OR "borough councils" OR "county councils" OR Eur)) 23 OR (("Social Care Trust" OR Aberdeen OR Aberdeenshire OR "Abertawe Bro Morgannwg" OR Albans OR 24 Alderney[tiab] OR "Aneurin Bevan" OR Anglesey OR Angus OR Antrim OR Argyll OR Armagh OR Arran OR Ashfield OR 25 Ayrshire OR Bangor OR Barking OR Bath[tiab] OR Bedfordshire OR Belfast OR "Betsi Cadwaladr" OR Bexley OR 26 Birmingham OR Borders OR Bradford OR Brecknock OR Brent OR Bridgend OR Brighton OR Bristol OR 27 28 Buckinghamshire OR Bute OR Caerphilly OR Cambridge OR Cambridgeshire OR Camden OR Cannock OR Canterbury 29 OR Cardiff OR Carlisle OR Carmarthen OR Carmarthenshire OR Ceredigion OR Chelsea OR Cheshire OR Chester OR 30 Chichester OR Clackmannanshire OR Clwyd OR Conwy OR Cornwall OR "County Down" OR Coventry OR Croydon OR 31 Cumbria OR "Cwm Taf" OR Cynon OR Dagenham OR Dartford OR Davids OR Denbighshire OR Derby OR Derbyshire 32 OR Devon OR Dorset OR Dudley OR Dumfries OR Dunbartonshire OR Dundee OR Durham OR Ealing OR Edinburgh OR 33 Ely OR Enfield OR Essex OR Exeter OR Falkirk OR Fenland OR Fermanagh OR Fife OR Flintshire OR Forth OR Fulham 34 OR Furness OR Galloway OR Gateshead OR Glamorgan OR Glasgow OR Gloucester OR Gloucestershire OR Grampian 35 OR Gravesham OR Greenwich OR Guernsey OR Gwent OR Gwynedd OR Hackney OR Halton OR Hamlets OR 36 37 Hammersmith OR Hampshire[tiab] OR Haringey OR Harlow OR Hartlepool OR Harwell OR Helens OR Hereford OR 38 Hertfordshire OR Highland OR Hounslow OR Hull OR Humber OR Inverclyde OR Inverness OR "Isle of Man" OR Wight 39 OR Islington OR Jersey[tiab] OR Kensington OR Kent OR Kinross OR Knowsley OR Lambeth OR Lanarkshire OR 40 Lancashire OR Lancaster OR Leeds OR Leicester OR Leicestershire OR Lewisham OR Lichfield OR Lincoln OR 41 Lincolnshire OR Lisburn OR Liverpool OR London OR Londonderry OR Lothian OR Loughborough OR Luton OR Lynn 42 OR Manchester OR Meirionnydd OR Merseyside OR Merthyr OR Middlesbrough OR Midlands OR Midlothian OR 43 44 Monmouth OR Monmouthshire OR Montgomery OR Moray OR Neath OR Newcastle OR Newham OR Newport[tiab] 45 OR Norfolk OR Northamptonshire OR Northumberland OR Norwich OR Nottingham OR Nottinghamshire OR Orkney 46 OR Oxford OR Oxfordshire OR Pembroke OR Pembrokeshire OR Perth OR Peterborough OR Plymouth OR Pontypridd 47 OR Portsmouth OR Powys OR Preston OR Radnor OR Redbridge OR Renfrewshire OR Rhondda OR Ripon OR 48 Rushmoor OR Salford OR Salisbury OR Sandwell OR Scarborough OR Scilly OR Sheffield OR Shetland OR Shropshire 49 OR Somerset OR "South Holland" OR Southampton OR Southwark OR Staffordshire OR Stirling OR Stockton OR Stoke 50 OR Suffolk OR Sunderland OR Surrey OR Sussex OR Swansea OR Talbot OR Tayside OR Thurrock OR Torfaen OR Truro 51 52 OR Tyne OR Tyneside OR Tyrone OR Wakefield OR Walsall OR Waltham OR Warwickshire OR Wells OR "Western 53 Isles" OR Westminster OR Wiltshire OR Winchester OR Wirral OR Wolverhampton OR Worcester OR Worcestershire 54 OR Wrexham OR "Ynys Mon" OR York OR Yorkshire) NOT ("New Jersey" OR Alabama OR Ontario OR "New London" 55 OR "New England" OR "New South Wales" OR "New York"))) 56

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System for Information on Grey Literature in Europe (SIGLE)

Searched on 19.03.10. Search generated 12 records.

(("body image" OR "body size" OR "obesity" OR "obese" OR "body shape" "eating disorder" "eating disorders" "weight gain" "weight loss") AND ("young people" OR adolescent OR adolescents OR adolescence OR teens OR teenagers OR youth OR "young people's"))

Social Policy and Practice (OVID SP)

Searched on 16.02.10. Search generated 584 records.

1 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (116090)

2 ("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,de,ti. (2418)

3 ("body composition" or "body dismorph*" or (body adj3 size) or (body adj3 shape) or "overweight" or "thin" or "thinness" or "skinny" or "body image" or "obese" or "obesogenic" or obesity or (weight adj8 body) or "body fatness" or fatness or "weight gain" or "body weights" or Bulimia or Anorexia or Binge-eating or "binge eating" or "disordered eating" or underweight or "eating disorder" or "eating disorders").ab,ti. (1907)

4 1 and 2 (1430)

5 limit 4 to yr="1997 - 2010" (1270)

6 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,ti. (116090)

7 (child* or schoolchild* or Boy or boys or Girl or girls or Minors or preadolescence or preadolescent* or adolescent* or teen* or (school adj6 student*) or pupil* or "young people" or youth or youths or adolescence or pubert* or "secondary school*").ab,de,ti. (129461)

- 8 2 or 7 (130325)
- 9 2 and 8 (2418)
- 10 2 and 7 (1554)
- 3 11 limit 10 to yr="1997 2010" (1379)
- 12 (S11 not S5).mp. [mp=abstract, title, publication type, heading word, accession number] (5)
- 13 (#11 not #5).mp. [mp=abstract, title, publication type, heading word, accession number] (1075)
- 60 14 11 not 5 (109)
 - 15 (ethnolog* or stories or content analysis or ethnographic).ab,de,ti. (2239)
 - 16 11 and 15 (8)

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17 (ethnolog* or stories or content analysis or ethnographic or audiorecording or "observational method?" or "participant observation" or "field notes" or experience? or narrative? or discourse or inter-personal or individuallevel or repertory grid or self-worth or self-identification or pre-occupation or preoccupation or acceptability or worry or worries or feelings or dissatisfied or satisfied or ideal shape or over-concern or concerns or concern or prejudice or prejudices or "process evaluations" or "process evaluation" or emotions or ethnopsychology or "focus groups" or "behavioral research" or "behavioural research" or narration or satisfaction or dissatisfaction or meanings or meaning or perspectives or perspective or ideas or idea or concepts or concept or beliefs or belief or attitudes or attitude or perceived or perceives or perceive or perceptions or perception or views or view or gualitative or 10 interviewed or interviewing or interviewer or interviews or interview or comprehension or attitudinal or outlook or 11 12 "in depth" or "case studies" or "case study" or opinions or opinion or expectations or expectation or thoughts or 13 narratives or standpoint or standpoints or viewpoints or viewpoint or "audio record" or "audio recorded" or "audio 14 recorder" or "audio recording" or "audio recordings" or "audio records" or "thematic analysis" or phenomenol* or 15 16 "grounded theory" or "grounded studies" or "grounded research" or "purposive sampling" or "constant 17 comparative" or "constant comparison" or "purposive sample" or "field study" or "field studies" or "field research" 18 or "biographical method" or "theoretical sampl*" or "open-ended" or "open ended" or "life world" or "life-world" or 19 20 "conversation analysis" or "conversation analyses" or "theoretical saturation" or "thematic analyses" or anxiety or 21 anxieties or anxious).ab,de,ti. (121315) 22

11 and 17 (584) 18

Social Science Citation Index

Searched on 18.02.10. Search generated 1028 records.

1. Topic=("body composition" OR "body dismorph*" OR "body size" OR "body shape" OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight SAME body) OR weights OR "body fatness" OR fatness OR "weight gain" OR Bulimia OR Anorexia OR "Binge eating" OR "disordered eating" OR underweight)

2. TS=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*)

3. #2 AND #1

4. TS=(ethnolog* OR stories OR content analys?s OR ethnographic OR audiorecording OR "observational method?" OR "participant observation" OR "field notes" OR experience? OR narrate* OR discourse OR inter-personal OR individual-level OR repertory grid OR self-worth OR self-identification OR pre-occupation OR preoccupation OR acceptability OR worry OR worries OR feelings OR dissatisfied OR satisfied OR idea\$ OR over-concern OR concern\$ OR prejudice\$ OR "process evaluation\$" OR emotions OR ethnopsychology OR "focus groups" OR "behavio\$ral research" OR satisfaction OR dissatisfaction OR meaning\$ OR perspective\$ OR idea\$ OR concept\$ OR belief\$ OR attitude\$ OR perceive\$ OR perception\$ OR view\$) AND Language=(English)

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6. TI=(child* OR schoolchild* OR Boy OR boys OR Girl OR girls OR Minors OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*) AND Language=(English)

7. #6 AND #1

8. #7 AND #4

9. TI=("body composition" OR "body dismorph*" OR "body size" OR "body shape" OR "overweight" OR "thin" OR "thinness" OR "skinny" OR "body image" OR "obese" OR "obesogenic" OR obesity OR (weight SAME body) OR weights OR "body fatness" OR fatness OR "weight gain" OR Bulimia OR Anorexia OR "Binge eating" OR "disordered eating" OR underweight) AND Language=(English)

10. #9 AND #6

11. #10 AND #4

12. TI=(child* OR schoolchild* OR Prepubescen* OR preadolescent* OR adolescent* OR teen* OR (school SAME student*) OR pupil* OR young people OR youth OR youths OR adolescence OR pubert* OR secondary school*) AND Language=(English)

13. #12 AND #9

14. #13 AND #4

15. #13 AND #4

Refined by: Countries/Territories=(ENGLAND)

16. #12 AND #9

Refined by: Countries/Territories=(ENGLAND)

17. #4 AND #3

Refined by: Countries/Territories=(ENGLAND)

18. #17 OR #16

19. TS=(gualitative OR interview* OR interview\$ OR comprehension OR attitudinal OR outlook OR "in depth" OR "case stud*" OR opinion\$ OR expectation\$ OR thoughts OR standpoint\$ OR viewpoint\$ OR "audio record*" OR "thematic analys?s" OR phenomenol* OR "grounded theory" OR "grounded studies" OR "grounded research" OR "purposive sampl*" OR "constant compare*" OR "field stud*" OR "field research" OR "biographical method\$" OR "theoretical sampl*" OR "open-ended" OR "open ended" OR "life world" OR "life-world" OR "conversation analys?s" OR "theoretical saturation" OR anxiety* OR anxious) AND Language=(English)

20. #19 AND #3

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      Refined by: Countries/Territories=( ENGLAND )
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22. #21 OR #18

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27. #19 AND #3

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Refined by: Countries/Territories=(ENGLAND OR SCOTLAND OR WALES OR NORTH IRELAND)

28. #4 AND #3

Refined by: Countries/Territories=(ENGLAND OR SCOTLAND OR WALES OR NORTH IRELAND)

29. #28 OR #27

Zetoc

Searched on 23.02.10. 736 titles from this search were scanned by eye and 0 relevant abstracts were uploaded.

Keywords: (Child* or Adolesce*) and (view* or attitude* or perspect*) and (weight or body or fat or obesity)

B. Internet search-engine searches

[Unless specified otherwise, records were scanned online and not uploaded automatically]

Clusty

Searched on 03.03.10. Scanned a total of 131 references clustered in groups: ac.uk, gov, org, shape, and "other URLs".

#1 (adolescent OR adolescents OR child OR children) AND (views OR attitudes OR perspective) AND (body OR weight OR obesity) AND (UK OR England OR British)

#2 (adolescent OR adolescents OR child OR children) AND qualitative AND (body OR weight OR obesity) AND (UK OR England OR British)

Google

Searched on 18.03.10. Scanned first 100 each time

#1 children* AND qualitative AND obes* AND UK

#2 children* AND qualitative AND obes*

#3 adolescen* AND qualitative AND obes* AND UK

#4 adolescen* AND qualitative AND obes*

Google Scholar

Searched on 18.03.10. Scanned first 100 each time. Date limit 1997-2010, English language, all articles (not patents)

A. All "intitle:",

#1. young people AND ("body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)#2. adolescent AND (body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)

B. Anywhere in the text:

#1 young people AND ("body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)#2. adolescent AND (body size" OR obesity OR obese OR "weight gain" OR "body shape" OR eating)

C. Anywhere in the text:

#1. adolescent AND views AND UK AND body

SCIRUS

Searched on 19.03.10.

Sources: Abstracts, articles, books, conferences, theses and dissertations. Exclude Medline and Pubmed

Date range: 1997-2010

Records: 228 records (after duplicate removal): all uploaded.

#1 (narrow)

(title:obesity OR title: "body image" OR title: "body size" OR title: "body weight" OR title: "eating disorder" OR title:fatness OR title:obese OR title:thinness OR title: "weight gain" OR title: "weight loss") (title:views OR title:attitudes OR title:appearance OR title:qualitative OR title: "focus groups" OR title:observational OR title:attitudinal OR title:perspective OR title:perspectives OR title:concerns)

Refined by items classified as "childhood obesity"

31 items

#2 (broad, UK-focussed)

Sources: Abstracts, articles, books, conferences, theses and dissertations. Exclude Medline and Pubmed

((((obesity OR "body size" OR "body shape" OR "body weight" OR "eating disorder" OR fatness OR obese OR thinness OR "weight gain" OR "weight loss") ("young people" OR youth OR adolescents OR adolescent OR adolescence OR teens OR teenage OR teenagers) (views OR attitudes OR qualitative OR "focus groups" OR observational OR attitudinal OR concerns OR perspectives OR perspective OR beliefs)))) (UK OR British OR Welsh OR Scottish OR England OR Scotland OR Wales OR) - couldn't take any more terms

Subject areas: Social and behavioural medicine

Websites all, except Hong Kong University, Humbodlt

Used first 100 results out of 2,723

#3 (broad search)

((obesity OR "body size" OR "body shape" OR "body weight" OR "eating disorder" OR fatness OR obese OR thinness OR "weight gain" OR "weight loss") ("young people" OR youth OR adolescents OR adolescent OR adolescence OR teens OR teenage OR teenagers) (views OR attitudes OR qualitative OR "focus groups" OR observational OR attitudinal OR concerns OR perspectives OR perspective OR beliefs))

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- Subject areas: Social and behavioural medicine
- Websites: all, except Hong Kong University, Humbodlt
- Used first 100 results out of 487,277

D. Journals hand-searched

[Unless specified otherwise, records were scanned online from 1997 onwards (or the Journal's first issue if this was later). Potentially relevant records were checked for duplication before uploading]

Children and Society (Wiley NCB): Searched on 29.03.10

Childrenz issues (Journal of the Childrens Issues Centre): 24.03.10: 97

Health Education: Searched on 24.03.10

International Journal of Paediatric Obesity: Searched on 29.03.10

The sociology of health and illness: Searched on 24.03.10

Men and Masculinities: Searched on 24.03.10: 20

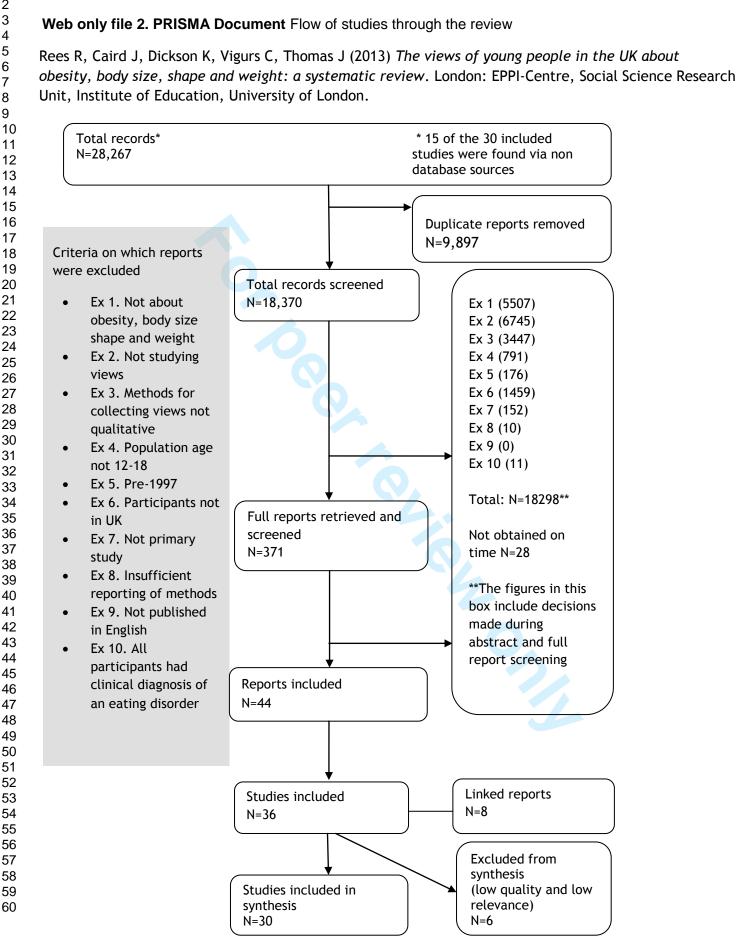
D. Websites searched

Website	URL
Advertising Education Forum (AEF)	http://www.aeforum.org/index.shtml
Association for the Study of Obesity	http://www.aso.org.uk/
Barnardo's Children's Charity	http://www.barnardos.org.uk/
Calouste Gulbenkian Foundation	http://www.gulbenkian.org.uk/
Centers for Disease Control and Prevention	http://www.cdc.gov/
Child and Adolescent Health Research Unit	http://www.education.ed.ac.uk/cahru/
Child Growth Foundation	http://www.childgrowthfoundation.org/
Children and Young People Now	http://www.cypnow.co.uk/
Children in Scotland	http://www.childreninscotland.org.uk/
Children in Wales	http://www.childreninwales.org.uk/index.html
Children's Research Centre	http://childrens-research-centre.open.ac.uk/
The Children's Commissioner	http://www.childrenscommissioner.gov.uk/
The Children's Society	http://www.childrenssociety.org.uk/
Economic and Social Research Council	http://www.esrc.ac.uk/ESRCInfoCentre/index.aspx
European Commission	http://ec.europa.eu/index_en.htm
European Congress on Obesity	http://www.easoobesity.org/eco2012/
Evidence Informed Practice Portal	http://eip.iriss.org.uk/
The Fabian Society	http://www.fabians.org.uk/
	http://www.fabians.org.uk/

For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Girlguiding UK	http://www.girlguiding.org.uk/home.aspx
Healthy Weight for Children Hub	http://www.healthyweight4children.org.uk/
l'Institut national de santé publique du Québec	http://www.inspq.qc.ca/
Institute of Education Library	http://www.ioe.ac.uk/services/392.html
International Association for the Study of Obesity	http://www.iaso.org/
International Life Sciences Institute	http://www.ilsi.org/Pages/HomePage.aspx
International Obesity Taskforce	http://www.iotf.org/
International Physical Activity and the Environment network	http://www.ipenproject.org/
The King's Fund Library	http://www.kingsfund.org.uk/library/
National Conferences on Obesity and Health	http://obesityandhealth.co.uk/
National Obesity Forum	http://www.nationalobesityforum.org.uk/
National Obesity Observatory for England	http://www.noo.org.uk/
NHS Evidence – Child Health	http://www.library.nhs.uk/childhealth/
NHS Health Scotland Library	http://www.healthscotland.com/resources/library/index.aspx
NHS National Library for Public Health	http://www.library.nhs.uk/publichealth/
North West Grey Literature Service	http://www.fade.nhs.uk/
NSPCC	http://www.nspcc.org.uk/
NSPCC Inform	http://www.nspcc.org.uk/Inform/informhub_wda49931.html
Ofcom: Office of Communications	http://www.ofcom.org.uk/
Online Research Bank	http://www.ark.ac.uk/orb/
For near review	/ only - http://bmjopen.bmj.com/site/about/guidelines.xhtml

Policy Hub	http://www.nationalschool.gov.uk/policyhub/
Save the Children	http://www.savethechildren.org.uk/
School Food Trust	http://www.schoolfoodtrust.org.uk/
Schools and Students Health Education Unit	http://www.sheu.org.uk/
The Scottish Government	http://www.scotland.gov.uk/Home
Social Issues Research Centre	http://www.sirc.org/
Social Science Research Network	http://www.ssrn.com/
SPEEDY: Sport, Physical Activity and Eating Behaviour	http://www.mrc-epid.cam.ac.uk/Studies/Speedy2/speedy1.html
UK Faculty of Public Health	http://www.fph.org.uk/events/archive/2010
UK Preventive Medicine	http://www.ukpreventivemedicine.com/
UCL Department of Epidemiology and Public Health	http://www.ucl.ac.uk/hbrc/diet/projects.html
University of Kent Library	http://www.kent.ac.uk/library/
Welsh Assembly Government	http://wales.gov.uk/
World Advertising Research Centre	http://www.warc.com/
Young Minds	http://www.youngminds.org.uk/



3

4

5 6 7

Web only file 3: Study quality descriptions

Rees R, Caird J, Dickson K, Vigurs C, Thomas J (2013) *The views of young people in the UK about obesity, body size, shape and weight: a systematic review.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Table A: Weight of evidence judgements

	Study		t of evidence				
		Reliab	ility of findir	ngs	Usefulne	ess of findin	gs
		Low	Medium	High	Low	Medium	High
*ex1	Bhugra and Bhui (2003)	✓			✓		
w1	Billings et al. (2008)		\checkmark		✓		
w2	Bramham (2003)		✓			✓	
w3	Cockburn and Clarke (2002)		✓			✓	
w4	Curtis (2008)			✓			✓
w5	Daley et al. (2008)		✓				✓
w6	Flintoff and Scraton (2001)		✓			✓	
w7	Frost (2001)	✓				✓	
w8	Gorely et al. (2003)	✓				✓	
w9	Griffiths and Page (2008)		✓				\checkmark
w10	Grogan et al. (2009)		✓		✓		
w11	Grogan and Richards (2002)		✓				\checkmark
w12	Health Experience Research Group (2010)			✓			~
w13	Hester et al. (2009b)		✓				✓
w14	Holt et al (2005)		\checkmark			✓	
*ex2	Inchley et al (2008)	 ✓ 			✓		
*ex3	Jackson and Harris (2007)	✓			✓		
*ex4	Kaplan-Myrth (2000)	✓			✓		
w15	Krayer et al. (2008)		✓			✓	
w16	Kurtz and Thornes (2000)		V		✓		
w17	Lloyd and Dittmar (1997)		 ✓ 			✓	
w18	Lucas and Lloyd (1999)		✓		✓		
w19	Ludvigsen and Sharma (2004)		✓		✓		
*ex5	McAlister and Neill (2007)	✓			~		
w20	Mulvihill et al. (2000b)		✓			 ✓ 	
w21	Owen et al. (2009)		✓		1		
w22	Percy-Smith (2007)		✓		 ✓ 		
*ex6	Reid (2009)	✓			~		
w23	Reid and Hendry (2001)		✓		~		
w24	Shucksmith and Hendry (1998)		✓			✓	
w25	Velija and Kumar (2009)		✓			 ✓ 	
w26	Wallace et al. (2007)		✓		✓		
w27	Willett (2008)	✓				 ✓ 	
w28	Wills et al. (2006)			✓			✓
w29	Wills et al (2008a)		✓			✓	
w30	Wills (2005b)		✓		✓		

59

 $_{60}$ *Studies rated low for both reliability and usefulness were not incorporated into the synthesis.

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Table B Quality of studies of young people's views: studies me	eeting each criterion
--	-----------------------

Quality appraisal question	Answer options (see Table A for k	ey to study numbers)		
	Not at all/Not stated	Minimal steps	Several steps	A thorough attempt
1) Were steps taken to increase rigour in sampling?	N = 9 ex1, w3, ex3, w15, w19, ex5, w22, ex6, w26	N = 18 w2, w4, w5, w6, w7, w8, w9, w10, w11, w13, w14, ex2, ex4, w17, w18, w25, w27, w30	N = 5 W16, w20, w21, w23, w29	N = 4 w1, w12, w24, w28
2) Were steps taken to increase rigour in data collection?	N = 3 ex1, ex4, ex6	N = 11 w6, w8, w14, ex2, ex3, w16, w18, w21, w22, w27, w30	N = 17 w2, w3, w5, w7, w9, w10, w11, w13, w15, w17, w19, ex5, w20, w23, w26, w28, w29	N = 5 w1, w4, w12, w24, w25
3) Were steps taken to increase rigour in data analysis?	N = 16 ex1, w2, w3, w6, w7, w8, w11, ex3, ex4, w16, w19, ex5, w20, ex6, w26, w27	N = 8 w1, w13, w15, w18, w22, w24, w25, w30	N = 6 w5, w14, ex2, w21, w23, w28	N = 6 w4, w9, w10, w12, w17, w29
4) Were the findings of the study grounded in/supported by data?	No grounding N = 0	Limited grounding/support N = 7 ex1, w18, w20, w21, ex6, w26, w29	Fairly well grounded/ supported N = 22 w2, w3, w6, w7, w8, w11, w13, w14, ex2, ex3, ex4, w15, w16, w17, w19, ex5, w22, w23, w24, w25, w27, w30	Good grounding/support N = 7 w1, w4, w5, w9, w10, w12, w28

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Quality appraisal question	Answer options (see Table A for k	key to study numbers)		
5) Breadth and depth of	Limited breadth and depth	Good/fair breadth, limited depth	Good/fair depth, limited breadth	Good breadth and depth
findings	N = 13	N = 7	N = 6	N = 10
	ex1, w1, ex3, ex4, w16, w18, w19, w21, ex6, w23, w25, w26, w30	w3, ex2, w17, w20, w24, w27, w29	w8, w10, w14, w15, ex5, w22	w2, w4, w5, w6, w7, w9 w11, w12, w13, w28
6) To what extent did	Not at all	A little	Somewhat	A lot
the study privilege the perspectives and	N = 3	N = 10	N = 16	N = 7
experiences of young people?	ex1, w7, ex6	w6, w8, w10, w14, ex2, ex3, w18, w20, w21, w29	w1, w2, w3, ex4, w15, w16, w17, w19, ex5, w22, w23, w25, w26, w27, w28, w30	w4, w5, w9, w11, w12, w13, w24

web only the 5 th		. 5 II	om		, J J		.010				Du	cion	UI	cuci	100	lug	(, pc	n op			, 011	UD	Jon ,	, 111	J 0 0	9	peo
Themes from the synthesis	Billings et al. (2008) w1	Bramham (2003) w2	Cockburn and Clarke (2002) w3	Curtis (2008) w4	Daley et al. (2008) w5	Flintoff and Scraton (2001) w6	Frost (2001) w7	Gorely et al. (2003) w8	Griffiths and Page (2008) w9	Grogan et al. (2009) w10	Grogan and Richards (2002) w11	Health Experience Research Group (2010) w12	Hester et al. (2009b) w13	Holt et al. (2005) w14	Krayer et al. (2008) w15	Kurtz and Thornes (2000) w16	Lloyd and Dittmar (1997) w17	Lucas and Lloyd (1999) w18	Ludvigsen and Sharma (2004) w19	Mulvihill et al. (2000) w20	Owen et al. (2009) w21	Percy-Smith (2007) w22	Reid and Hendry (2001) w23	Shucksmith and Hendry (1998) w24	Velija and Kumar (2009) w25	Wallace et al. (2007) w26	Willett (2008) w27	Wills et al. (2006) w28	Wills et al. (2008a) w29	Wills (2005b) w30
It's down to me													_																	
It's like a girl thing?																														
If you're fat then they don't like you												-																		
People that are right big have right dirty houses																6	7													
Being fat is really a bad thing												•					-		C			•								
Not wanting to stick out				-																								•		
Day after day, you're that terrified		•	•										•											•				•		
Vicious circles		1	1					1			1		1											1				1		
Easier said than done																														
Yo-yos and pick-me- ups																														
Be nice. You've got to help																														

Web only File 5 Themes from the synthesis: the contribution of each study (Rees et al, perspectives on obesity in young people)

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Leading education and social research Institute of Education University of London

Young people's views relating to obesity and body size, shape and weight: a systematic review

REVIEW PROTOCOL

February 2010

This protocol should be cited as:

Rees R, Caird J, Stansfield C, Dickson K, Kavanagh J, Thomas J (2010) *Young people's views relating to obesity and body size, shape and weight: protocol for a systematic review.* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

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Authors

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Review team membership

Jenny Caird, Kelly Dickson, Josephine Kavanagh, Rebecca Rees, Claire Stansfield, James Thomas

Advisory Group membership

The Steering Group for the EPPI-Centre's Health Promotion and Public Health Reviews Facility forms the Advisory Group for this review.

Your comments on the methods and scope of this review are very welcome, as are suggestions for completed or ongoing pieces of research that might be relevant - please contact us via the address on the front page of this protocol.

Acknowledgements and conflict of interest

The work described in this protocol is being undertaken by the EPPI-Centre, which receives funding from the Department of Health for England. The views expressed are those of the authors and not necessarily those of the Department of Health.

We are not aware of conflicts of interest amongst members of the review team.

Aims

To undertake a systematic review of qualitative and other types of research that explores young people's views about obesity, body size, shape and weight. The review will explore the understandings of young people aged 11-18 of body size, the factors they identify as influencing overweight and the kinds of changes in these factors they think might help them to avoid being overweight. As well as being of value in their own right, the review's findings will supplement those from a recently completed systematic review of the views of children (aged 4-11) on these same topics.

The work outlined in this protocol will:

- Search systematically for, and then describe, studies of young people's views about obesity, body size and weight;
- Consult with UK-based policy-makers, practitioners and researchers on the methods of the review and priorities for in-depth review and synthesis in this area;
- Conduct a synthesis of the findings of this research, or a sub-set of studies, depending on the results of the consultation and the size of the literature; and
- Develop recommendations for research, policy and practice in public health and other areas of social policy.

1.Background

1.1 Young people and obesity

This review is being done in the context of concern over levels of obesity in the UK (Butland et al. 2007). A large number of young people in the UK are experiencing a body weight that is above the range considered to be healthy. Annual estimates are available for young people aged 11 to 15 in England. These show an almost year-on-year rise in weight in both boys and girls over the ten years up to 2005. The latest data from England (from 2007) indicate that over one in six boys in this age group (17.6%), and nearly one in five girls (19.0%) would have been classed as obese (Health and Social Care Information Centre, 2009). An additional 15% of young people in this age group would have been classed as overweight (15.3% of girls and 14.8% of boys). The latest data from the Scottish Health Survey provided estimates for girls and boys aged 12-15 in 2008. This found 19.1% and 15.8% of boys and girls respectively would have

been classified obese and 19.1% and 16.3% would have been classified as overweight (Corbett et al, 2009).

There are potential physical, psychological and social impacts on the young people concerned. These levels of obesity, however, also represent considerable financial costs to health care systems and the economy, both in the present and the future. The costs of obesity amongst young people are frequently seen as including the likely continuation of obesity, or associated problems, into adulthood.

Children themselves clearly also have a stake, and their ideas about and constructions of their health and other aspects of their lives are increasingly seen as potentially valid contributions to the development of social policy. The right of children to participate in decision-making that relates to them is enshrined in the United Nations Convention of the Rights of the Child and recognised in Governmental policy in the UK (Department for Education and Skills 2003, Department of Health 2004, UNICEF 2009). Recent initiatives that act on this include one that has involved young people as advisors to a Nation-wide public health research programme (PEAR, 2010).

The UK government has identified obesity as a policy priority. The policy document 'Healthy weight, healthy lives' sets out framework for action in five main areas: 'promoting children's health; promoting healthier food choices; building activity into our lives, creating incentives for better health and personalised advice and support (Cross-Government Obesity Unit et al. 2008).

Researchers have recently constructed 'system maps' to describe the complex and multi-levelled pathways which influence body weight. The most ambitious of such models have sought to integrate biological and genetic factors, individual behaviour, and influences from individuals' social and physical surroundings to provide a complete picture of the 'obesogenic environment' (Butland et al. 2007, Swinburn et al. 1999, Swinburn and Egger 2004). There has recently been particular interest from both policy-makers and researchers in the social and environmental determinants of obesity, including factors related to the physical environment, social values, technology and the economy.

Young people's experiences of body weight and the factors influencing it are likely to differ from those of the general population: for example, the influence of other family members on young people's dietary and physical activity behaviours and leisure-time activities can be considerable, especially at the younger end of the 11-18 age range focused on in this review. These influences might include parental rules and controls over food and television and young people's experiences of role models amongst adults and younger relatives. A small number of young people aged 18 or under will also be parents, and so may be experiencing a further set of influences to do with parenthood, food provision and other food practices. The Foresight group's main report provides a version of their model adapted for children but notes that data are too sparse and fragmented to provide a reliable indicator of the relative importance of these links to changes in body weights (Butland et al. 2007, map 34 and page 89).

There is greater certainty about obesity and inequality. As rates of obesity have increased among young people, so have inequalities in obesity. Rates have increased the most among young people from poorer backgrounds. Socioeconomic inequalities in obesity are also stronger in girls than in boys. Asian children are more likely to be obese than white children (Law et al. 2007). Again, these authors emphasise the importance of looking at environmental influences, noting that the speed at which the

prevalence and the social patterning of obesity in the UK have changed suggests adverse environmental factors as the primary cause.

1.2 Existing research

In the current policy climate of concern about rising levels of obesity, the evidence available to inform effective approaches to both treatment and prevention is infused with much enthusiasm, but marred by poorly conducted studies using restricted populations and inconsistent methods of assessing and measuring outcome (Oude Luttikhuis et al. 2009; Summerbell et al. 2005).

Another weakness of much existing research evidence is its failure to interrogate what young people themselves think about the importance of body size, factors influencing this and ways in which they can be supported to keep their own weight down to 'healthy' levels. Young people's own views play an important part in the process of designing and implementing interventions. Young people themselves will attach a range of meanings to body size and weight that will influence the ways in which they act and communicate around weight and health. They will have insights into factors that influence their own weight and that of their peers, and ideas about how they can be supported to keep their own weight within a healthy range. Research that explores how young people experience and make sense of their lives can inform the ways that interventions aim to bring about positive outcomes. Systematic reviews of this research can help policy-makers gain a broader and deeper understanding of obesity from young people's perspectives (Harden et al. 2004). Other than our recently completed review of children's views (Rees et al. 2009), our preliminary searches have located only one systematic review focused on lay views about body size. This focuses on the growth of infants and explored the views of adults (Lucas et al. 2007).

1.3 Developing the evidence-base for interventions

A series of reviews conducted at the EPPI-Centre has examined research into children's and young people's views of health and health-related behaviour so as to identify ways in which interventions might build upon young people's experience and knowledge (Brunton et al. 2003; Brunton et al. 2006; Harden et al. 2001; Rees et al. 2006; Shepherd et al. 2006; Thomas et al. 2003). This approach aims both to identify ways in which people's views are reflected in interventions that have been evaluated, and to identify gaps where views have yet to be incorporated.

As an example of this approach, one of these reviews synthesized the findings of research on young people's views about healthy eating (Shepherd et al. 2006). The review identified a number of themes in young people's views, including, for example, the importance of the cost and poor availability of healthy eating foods and the association of these foods with adults/parents. In contrast, 'fast foods' were widely available, tastier, and were associated with pleasure, friendship and being able to exercise choice. The review team found evaluated interventions had often neglected the views of young people, especially in terms of their concerns about the taste, cost and availability of healthy foods. When issues raised by young people had not been addressed by evaluated interventions, the review team noted this was a gap in research and recommended such an evaluation.

Our recent review of children's views of body size used two distinct approaches to synthesize findings from studies conducted in the UK with children aged between 4 and 11 (Rees et al, 2009). One synthesis, labeled 'interpretive', used findings from studies that had asked children open ended questions. The other, labeled 'aggregative', pooled findings from studies that presented children with pre-specified answer options. The main findings were that:

- Children experience obesity largely as a social problem. Children, whatever their body size, often may not consider the health consequences of obesity to be important.
- Body size varies in relevance. Children who have a healthy body size often may not have body size very high on their everyday agendas. Very overweight children in contrast, experience body size as a big problem. They are likely to experience unhelpful responses to their own body sizes from other children, as well as adults. Fat-related name calling and bullying is considered to be a normal occurrence.
- Children are highly aware about body size and our society's attitudes towards it. Children appear to be aware of the actual size of their own bodies and are likely to have judged the acceptability of their own body. Many are dissatisfied and some feel anxious despite having a healthy body size. Girls are likely to want to be leaner, regardless of their size. Many boys and girls aspire to very lean body shapes that are unattainable and likely to be unhealthy.
- Very overweight children encounter many barriers, and a lack of support, when they try to take action to reduce their size. Parents and friends appear to be the most helpful source of support, but this is not always unproblematic.
- While very overweight children and girls bear the brunt, the combined impact of our obesogenic environment and our society's ongoing preoccupation with body size appears now to be affecting the body image ideals and body satisfaction of boys as well. Girls and boys aged under 12, however, differ considerably, both in their aspirations for their bodies and ideas about others' bodies.

For the review outlined in this protocol, we plan to conduct an interpretive synthesis, similar to the one used in Rees et al (2009), to develop findings from existing studies of young people's views on obesity, body size, shape and weight. This will have a view to drawing out implications for appropriate policies and interventions to promote healthy body weight and counteract obesity.

In terms of specific areas of interest, to address recent policy-level interest, the review will have a particular, but not exclusive, focus on social and environmental factors that have the potential to influence body weight. We will also explore the ways in which the evidence base includes the views of those young people most likely

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to experience inequalities in health and, where possible, examine whether views differ between different groups of young people. As well as using these and other theoretical frameworks outlined in this protocol, however, we will be allowing conceptual issues to emerge from the studies of young people's views themselves. This part inductive approach to analysis of study findings is similar to that taken in the reviews of children's and young people's views listed above and has similarities to the 'qualitative' analysis methods used in studies that analyse directly the statements of study participants (e.g. Wills et al. 2006).

This review is the fifth in a series of EPPI-Centre reviews in the area of children, young people and obesity. In addition to a systematic review exploring the views of children aged 4-11 on body size (Rees et al, 2009), three systematic maps have also been conducted. One describes review-level evidence on the effectiveness of social and environmental interventions for childhood obesity, one describes current schemes to promote healthy weight among obese and overweight children and young people in the UK, and one describes research into the relationships between obesity and sedentary behavior (Aicken et al. 2008; Kalra and Newman, 2009; Woodman et al. 2009).

2. Aims, review questions and scope

This systematic review aims to identify, appraise and synthesise published and unpublished research on young people's views about obesity, body size, shape and weight. The review will focus upon young people aged 11 to 18 living in the UK and will address the following questions:

- What are young people's views about the meanings of obesity or body size, shape or weight (including what are their perceptions of their own body size?), and what experiences do they describe relating to these issues?
- What are young people's views about influences on body size?
- What are young people's views about changes that may help them to achieve or maintain a healthy weight?

The review will seek and examine studies involving young people from the UK and aged 11 to 18 that examine their attitudes, opinions, beliefs, feelings, understanding or experiences about obesity, body size, shape or weight.

- Studies that solely examine young people's health status, behaviour or factual knowledge will not be included.
- The review will only cover studies published from 1997 onwards. This date is shortly before the WHO identified obesity as a 'global epidemic'

(WHO, 2000) and will provide a picture of just over a decade's worth of research conducted within a relatively current context.

• The review's focus on studies from the UK aims to maximize the relevance of the review for the development of UK policy.

We anticipate that data about young people's views might be available from a wide range of different studies including both qualitative and quantitative designs:

- Data about views may have been collected through observation, interactive interviews, focus groups or questionnaires using both openended and closed questions. Unless studies are very scarce, we intend to use questionnaire-based data only when this is collected as part of a study that also uses at least one other data collection method.
- Some study reports may be framed explicitly by their authors around obesity, size or weight. Others may contain young people's views on obesity, body size, shape or weight, but be framed around something else, for example around possible influences or related experiences, such as physical activity, eating, stressors, social networks or bullying. It will be important to seek out both kinds of study so as to explore the ways in which young people talk about obesity, body size or weight independently of whether these concepts are introduced by researchers or young people themselves.
- One common feature of the studies is that they should all privilege young people's views, in that they should present views directly as data that are valuable and interesting in themselves. This review will not seek data on views from studies that collect them solely in order to generate variables that are then tested in a predictive or causal model (often people's beliefs, attitudes or experiences are explored as possible risk or protective factors, or are measured as outcomes of an intervention).

3. Review Methods

The review throughout will use methods developed during the previous reviews of studies of children's and young people's views mentioned above.

3.1 Structure of the review

The review will have one stage:

1. An in-depth review that synthesizes the findings of studies. If necessary because of the size of the literature, this synthesis may focus on a sub-set of the studies found (for example solely on studies rated as having a high quality, or on those that examine findings related to specified groups of young people, or specific aspects of obesity, body size or weight).

3.2 User involvement

We will seek feedback on our proposed questions and methods from the Steering Group, which oversees all of the work conducted by the EPPI-Centre's Health Promotion and Public Health Reviews Facility. The group will be consulted at the beginning of the review by email. If necessary, we may seek further guidance at a later stage of the review as well.

We are also planning to engage the assistance of PEAR (Public Health, Education, Awareness, Research), a Young People's Public Health Reference Group (PEAR, 2010), but this is yet to be negotiated at the time of writing. PEAR consists of two young people's groups which aim to support children and young people to contribute to the UK public health agenda. This work would build on the relationships developed in 2009, when PEAR assisted the EPPI-Centre with its related review of children's views of obesity, body size, shape and weight (see Rees et al, 2009 for further details).

3.3 Information management

We will use EPPI-Reviewer, the in-house software (Thomas, 2007) to keep track of studies during the review. This software will record the bibliographic details of each study considered by the review, where studies were found and how, reasons for their inclusion or exclusion, descriptive and evaluative codes and text about each included study, and the data used and produced during synthesis.

3.4 Search methods

Search methods will include sensitive searches of the databases listed below, website searches, searching by hand of selected journals, contact with key experts, citation tracking and contact with authors for included studies, and

screening of previous EPPI-Centre reviews and the reference lists of included studies. A particularly wide range of techniques to identify studies will be used in this review as studies of people's views are frequently not indexed on commercially available databases and it may not be easy to identify that a study contains data about views on obesity and body weight, shape and size by scanning study summaries. Some of these techniques may be brought into play later in the review. For example, our synthesis may identify influential factors viewed as important by young people. We may then carry out further searches of the literature about these factors in particular.

Sets of database search terms will be developed to cover the three concepts of: (i) young people; (ii) obesity and body size/weight and (iii) views. Where feasible and appropriate, an additional set of terms will be used to restrict the search to studies conducted in the UK. Search strategies will be developed for each database using combinations of controlled vocabulary and free-text terms (the latter restricted to the title or abstract fields) in order to retrieve a high volume of references. Methodological filters developed for the retrieval of specific study designs will not be used.

A MEDLINE (PUBMED) search has been developed (see Appendix A) and will be translated for use in the other databases listed below. Also listed below are a set of websites of gateways that we intend to handsearch.

Database source	es	Websites and gate	eways	
 PUBMED CINAHL Physical Education Index PSYCINFO ERIC International Bibliograpy of the Social Sciences SOCIAL SCIENCE CITATION INDEX ZETOC (British Library database of journals and 	 ASSIA BIBLIOMAP British Library Integrated Catalogue British Education Index British Index to Theses Child Data and Social Care Online (Social Policy) and Practice) EMBASE ETHOS (UK) theses) 	 Association for the Study of obesity Barnardo's Center for Obesity Research and Education Child Health Library - obesity and adolescents Children's Research Centre (Open University) Clusty EU Commission: Research 	 Public Health Conferences.org. uk MINTEL reports NHS National Library for Health National Obesity Forum OFCOM (Office of Communications) Preventive medicine UK The International Association for the Study of Obesity (IASO) 	 SCIRUS (science- specific search engine) SPEEDY (Sport, Physical activity and Eating behaviour: Environment al Determinants in Young people) World Advertising Research Centre

conference	• SIGLE	• European	
abstracts)	(System for	Congress of	
	Information	Obesity	
	on Grey	• ESRC	
	Literature in	 Girlguiding 	
	Europe)	UK	
	HealthPromis	0005.0	
		• Google	
		Scholar	
		 International 	
		Obesity task	
		force	
		International	
		Physical	
		Activity and the	
		Environment	
		Network	

Topic-relevant journals to be hand searched will include: Health Education; Health Education Research as these are not well indexed by the databases we plan to search. Members of the EPPI-Centre Steering Group will be asked to identify additional key journals for us to search by hand.

3.5 Screening studies for inclusion in the review

Inclusion and exclusion criteria (see Appendix B) will be applied successively to titles and abstracts. Full reports will be obtained for those studies that appear to meet the criteria or where there is insufficient information to be sure. The criteria will be piloted on a sample of studies before being applied. A sample of studies will be screened independently by two reviewers at several stages during the screening process, to identify potential differences in interpretation of the criteria and refine guidance for reviewers.

A second stage of screening may need to be undertaken if a large number of studies are found to meet the inclusion criteria listed above.

3.6 Describing and synthesising data from studies

Studies that fit the scope of the review will be described using a standardized classification system for health promotion and public health research (Peersman and Oliver, 1997). Codes cover study design (e.g. survey); the focus of the study (e.g. obesity, healthy eating, physical activity); the study population (e.g. sex, age group).

Additional codes will include those that further describe the study's focus (e.g. whether framed by the author around obesity and/or body weight/size/shape or another issue), the study population and sample (e.g. young people's weight status, socio-economic status, ethnicity), study type and method (e.g. questionnaire-based survey, individual interviews, focus groups), and the type of views sought (e.g. attitudes, intentions, experiences).

For an initial sample of studies, reviewers will work independently and then compare their decisions and come to a consensus. For the remaining studies, coding will be conducted by individual reviewers.

Simple frequency counts and cross-tabulations will be conducted where appropriate to describe these studies. If we find a large number of studies of young people's views, final decisions about which kinds of studies to synthesise will then be made in consultation with the Steering Group, on the basis of the results of this process of systematic description.

We will use a standard framework to further describe included studies in detail, appraise studies and collect data for the synthesis. This framework has been used in the EPPI-Centre reviews described above.

The tool that will be used for assessing study quality (see Rees et al, 2009) was developed by Harden (2007) and built upon work conducted in the EPPI-Centre reviews listed above. The tool uses eight criteria which cover: i) methods (the rigour of study sampling, data collection and analysis); ii) findings (the grounding/support of study findings by data and the breadth and depth of the findings themselves) and iii) the use of methods/approaches to privilege young people's views. To help assure the review's quality at this stage, pairs of reviewers will first work independently and will then compare their decisions before coming to a consensus. If necessary, a third reviewer will add their independent judgment.

Study findings will be synthesised thematically using methods developed in previous reviews (Thomas and Harden, 2007). Two reviewers will a) read and re-read study findings; b) apply codes to capture the content of data; and c) group and organise codes into higher order themes. These themes will be used to answer our review questions and to develop hypotheses about factors related to intervention effectiveness. Where possible, themes will be examined to see if they are found consistently across the time period covered by the synthesised studies, or are more prominent in earlier or later time periods.

3.7 The completed review

The final stage of writing the review will involve drawing up recommendations for policy, practice and future research.

There will be three products: a full technical report, an executive summary and a shorter evidence briefing which each aim to be useful and accessible to different kinds of audience:

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- The full technical report will contain:
 - detailed background and methods of the study (including full search strategies);
 - o detailed accounts of the synthesis; and
 - conclusions and implications.
- The **executive summary** will explain the purpose of the review, outline its methods and present its main messages.
- The **evidence briefing** will describe the purpose and findings of the review but without detailing the methods used.

All three reports will be downloadable from the EPPI-centre website and the full technical report will be available in hard copy. We will also use searchable web-page formats for people who access the website but do not want to download materials.

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5. Appendices

Appendix 1: Search strategy for MEDLINE (PubMed)

(("1997"[PDat] : "3000"[PDat]) AND (English[lang]))

AND

(child[mh] OR adolescent[mh] OR minors[mh] OR puberty[mh] OR child*[TIAB] OR schoolchild*[TIAB] OR Boy[TIAB] OR boys[TIAB] OR Girl[TIAB] OR girls[TIAB] OR Minors[TIAB] OR Prepubescen*[TIAB] OR preadolescent*[TIAB] OR adolescent*[TIAB] OR teen*[TIAB] OR (school[TIAB] AND student*[TIAB]) OR pupil*[TIAB] OR young people[TIAB] OR youth[TIAB] OR youths[TIAB] OR adolescence[tiab] OR pubert*[TIAB] OR Secondary school*[TIAB])

AND

(body composition[tiab] OR body dismorph*[tiab] OR Body Weight[MeSH Terms:noexp] OR Body Size[MeSH Terms:noexp] OR "body size"[TIAB] OR "body shape"[TIAB] OR "overweight"[TIAB] OR "thin"[TIAB] OR "thinness"[TIAB] OR "skinny"[TIAB] OR "body mass index"[mh] OR "overnutrition"[mh] OR "body image"[mh] OR "body image"[TIAB] OR "obese"[tiab] OR "obesogenic"[tiab] OR obesity[tiab] OR obesity[mh:noexp] OR (weight[TIAB] AND body[TIAB]) OR "body fatness"[TIAB] OR fatness[TIAB] OR "weight gain"[TIAB] OR "body weights"[TIAB] OR body weight changes[mh:noexp] OR weight gain[mh] OR Weight loss[mh:noexp] OR Emaciation[mh:noexp] OR Cachexia[mh:noexp] OR Overweight[mh:noexp] OR Obesity[mh:noexp] OR Thinness[mh] OR Ideal body weight[mh] OR Bulimia[tw] OR Anorexia[tw] OR Binge-eating[tw] OR Eating disorders[mh:noexp] OR underweight[tiab] OR body composition[mh:noexp] OR eating disorder[tiab] OR eating disorders[tiab])

AND

((ethnolog*[tiab]) OR (stories[tiab]) OR (content analysis[tiab]) OR (ethnographic[tiab]) OR (audiorecording[tw]) OR (observational methods[tiab]) OR (participant observation[tiab]) OR (field notes[tiab]) OR "ethnopsychology"[mesh terms] OR "focus groups"[mesh terms] OR "interviews as topic"[mesh terms] OR "empirical research"[mesh terms] OR "emotions"[mesh terms] OR "awareness"[mesh terms] OR "comprehension"[mesh terms] OR "self concept"[mesh terms:noexp] OR "health knowledge, attitudes, practice"[mesh terms] OR "attitude"[mesh terms:noexp] OR

"attitude to health"[mesh terms:noexp] OR "focus groups"[mesh terms] OR "gualitative research"[mesh terms] OR experiences[tiab] OR experience [tiab] OR narratives[tiab] OR narrative[tiab] OR discourse[tiab] OR inter-personal[tiab] OR individual-level[tiab] OR repertory grid[tiab] OR self-worth[tiab] OR self-identification[tiab] OR preoccupation[tiab] OR preoccupation[tiab] OR acceptability[tiab] OR worry[tiab] OR worries[tiab] OR feelings[tiab] OR dissatisfied[tiab] OR satisfied[tiab] OR ideal shape[tiab] OR over-concern[tiab] OR concerns[tiab] OR concern[tiab] OR prejudice[tiab] OR prejudices[tiab] OR process evaluations[tiab] OR process evaluation[tiab] OR emotions[tiab] OR ethnopsychology[tiab] OR focus groups[tiab] OR behavioral research[tiab] OR behavioural research[tiab] OR narration[tiab] OR satisfaction[tiab] OR dissatisfaction[tiab] OR meanings[tiab] OR meaning[tiab] OR perspectives[tiab] OR perspective[tiab] OR ideas[tiab] OR idea[tiab] OR concepts[tiab] OR concept[tiab] OR beliefs[tiab] OR belief[tiab] OR attitudes[tiab] OR attitude[tiab] OR perceived[tiab] OR perceives[tiab] OR perceive[tiab] OR perceptions[tiab] OR perception[tiab] OR views[tiab] OR view[tiab] OR qualitative[tiab] OR interviewed[tiab] OR interviewing[tiab] OR interviewer[tiab] OR interviews[tiab] OR interview[tiab] OR comprehension[tiab] OR attitudinal[tiab] OR outlook[tiab] OR in depth[tiab] OR case studies[tiab] OR case study[tiab] OR opinions[tiab] OR opinion[tiab] OR expectations[tiab] OR expectation[tiab] OR thoughts[tiab] OR narratives[tiab] OR standpoint[tiab] OR standpoints[tiab] OR viewpoints[tiab] OR viewpoint[tiab] OR (audio record[tiab] OR audio recorded[tiab] OR audio recorder[tiab] OR audio recording[tiab] OR audio recordings[tiab] OR audio records[tiab]) OR thematic analysis[tiab] OR phenomenol*[tiab] OR grounded theory[tiab] OR grounded studies[tiab] OR grounded research[tiab] OR purposive sampling[tiab] OR constant comparative[tiab] OR constant comparison[tiab] OR purposive sample[tiab] OR field study[tiab] OR field studies[tiab] OR field research[tiab] OR biographical method[tiab] OR theoretical sampl*[tiab] OR openended[tiab] OR "open ended"[tiab] OR "life world"[tiab] OR life-world[tiab] OR conversation analysis[tiab] OR conversation analyses[tiab] OR theoretical saturation[tiab] OR OR "thematic analyses"[tiab] OR anxiety[tiab] OR anxieties[tiab] OR anxious)

AND

*Northern Ireland[PL]) OR (United Kingdom[PL]) OR (Britain[PL]) OR (Scotland[PL]) OR (Wales[PL]) OR (England[PL]) OR (great britain[MeSH Terms] OR (europe[MeSH Terms:noexp]) OR (Northern Ireland[MeSH Terms]) OR UK OR Scotland OR England OR Wales OR "Northern Ireland" OR Europe OR British OR Scottish OR Welsh OR International[tiab] OR U.K. OR "United Kingdom" OR European OR Britain OR "Channel Isles" OR "Channel Islands" OR English[tiab] OR Irish[tiab] OR "EU Member"[tiab] OR "district council" OR "local council" OR "local authorities" OR "NHS Trust" OR "primary care trust" OR "borough council"

* This set of terms has been developed to help identify only those studies conducted in the UK. It will be applied in selected databases only.

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Appendix 2: Eligibility criteria for the systematic review

Studies will be included if they meet all of the following criteria:

- 1. Study focus must be on obesity, body size, shape or weight.
- 2. Study must aim to study people's views of obesity, body size, shape or weight (where 'views' are attitudes, perspectives, opinions, beliefs, feelings, understandings or experiences).
- 3. Study must use data collection methods that elicit young people's views in their own words using interviews, participant observation, or focus groups.
- 4. Study reports on individuals or groups aged between 11 and 18, or presents data separately for this age group, or on a group whose average age falls within this range.
- 5. Study must be published in 1997 or later.
- 6. Study includes participants in the UK.
- 7. Study must be primary research, in that data have been collected during that study through interaction with or observation of study participants (We will identify systematic reviews so as to identify primary research studies).
- 8. Study must be published in English.

But excluded if they meet any of the following criteria:

- 1. Study does not report its methods (fails to report both its data collection and its analysis methods).
- 2. If they are Masters-level theses.

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PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	
ABSTRACT			
e Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	
INTRODUCTION	•		
Rationale	3	Describe the rationale for the review in the context of what is already known.	8
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	Last paragraph p8 (PICOS acronym not appropriate but Population and two other phenomena are stated (views, body size)
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	10 – indication. Is available from authors. Has no registration no.
		For peer review only - http://bmjopen.bmj.com/site/about/guidelines.xhtml	10.



PRISMA 2009 Checklist

Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	10
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	9
Search	8		Web only file 1
2 Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	10
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	10
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	10
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	10
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	n/a
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I ²) for each meta-analysis.	n/a
		Page 1 of 2	
Section/topic	#	Checklist item	Reported on page #
	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective	Not done
Risk of bias across studies		reporting within studies).	
Risk of bias across studies Additional analyses	16		17 web only file 4
2	16	reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating	17 web only file 4
Additional analyses	16	reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating	only file 4
Additional analyses RESULTS		reporting within studies). Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at	only file 4

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1 2 3

PRISMA 2009 Checklist

4 5 6 7	Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	see Table 3 and web only file 4
8 9 1(12 12	Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	Summary of themes: bottom p17 and table 3
14 15 16	Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	Web only file 3
17 18	Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	n/a
19	DISCUSSION			
20 22 22 22 24 20 27 28 20 27 28 20 27 28 20 20 20 20 20 20 20 20 20 20 20 20 20	5 6 7 8	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	Key messages section and initial sentences of first 3 paras in discussion
31	Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	28
33	Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	27-8
35	35 FUNDING			
36 37 38	Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	Footnotes
39 40 42 42 42 42 44	3 Page 2 of 2 4			
46 47 48 49				