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A scoping review

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HOW ARE CHILDREN AND YOUNG PEOPLE ENGAGED IN RESEARCH ON PAEDIATRIC OBESITY AND WHICH ISSUES DO THEY REPORT? A SCOPING REVIEW

Siegnella Concincion, Lieke van Houtum, Birgitta van de Vorst, Arnoud Verhoeff, and Christine Dedding

Abstract: The importance of engaging children and adolescents in research is increasingly acknowledged. The aim of this scoping review is to explore how children and young people have been engaged in research on paediatric obesity and which issues they have reported, in order to highlight areas that require further inquiry or action by researchers and health care professionals. There were 13 papers eligible for this review. Methods used included in-depth interviews, structured or semi-structured interviews, and focus groups, as well as more creative qualitative research methods. Half of the studies included young people with their parents; parents were always present when the interviewees were young children. Personal and sensitive themes, such as bullying, a desire to "fit in", strong negative emotions about oneself (e.g., low self-esteem, low self-efficacy), and not feeling supported by family, peers, and professionals, were more often shared if parents were not present. An additional issue, wanting to be independent versus being under parental control was found in studies with adolescents. Engaging children and adolescents in multiple phases of research on paediatric obesity is beneficial in allowing better insight into their perspectives and providing recommendations that are more in line with their personal needs and life circumstances; such studies are still scarce in this field, however.

Keywords: adolescents, children, paediatric obesity, scoping review, young people, youth engagement

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Severe paediatric obesity is a serious public health issue worldwide (Flodgren et al., 2017; Low et al., 2009; Martin et al., 2018; Spinelli et al., 2019; Waters et al., 2011; World Health Organization [WHO], 2018). The prevalence of obesity in children is still increasing in all countries, whether high-, middle-, or low-income, and this has significant implications for population health and for health services expenditures in the coming decades (Flodgren et al., 2017). The World Health Organization reported that, worldwide, 340 million children and adolescents aged 5 to 19 were overweight or obese in 2016 (WHO, 2021). More recent figures are available for children under the age of 5: in this age group, 39 million children were overweight or obese in 2020 (WHO, 2021).

Multiple studies have concluded that obesity stigma and bullying can harm the emotional and physical well-being of obese adolescents (Puhl & King, 2013; Rankin et al., 2016; Reece et al., 2015). Childhood obesity is associated with immediate adverse consequences, such as lower educational attainment and a higher risk for many harmful comorbidities later in life (Burchett et al., 2018; Hartcourt & Pons, 2019; Lutz, 2019; Martin et al., 2018; Pamungkas et al., 2019; Spinelli et al., 2019; WHO, 2018). In addition to the effects on biomedical health, being overweight or obese may affect the quality of life of young people by causing psychological problems (e.g., low self-esteem), which may be related to social issues such as stigmatisation, bullying, and exclusion (Buttitta et al., 2014). As obese children and adolescents are more likely to be obese in adulthood, it is of the utmost importance to intervene at a young age (Baoum et al., 2022; Llewellyn et al., 2016).

Walls (2018) described the growing obesity epidemic as a "wicked problem": one that is challenging, complex, and threatening to human health. Wicked problems are connected to multiple social, ecological, and economic interacting systems, and thus require solutions that change the system dynamics in favourable ways (Groves, 2008; Walls, 2018). It is increasingly acknowledged that we need to change focus from individual behaviour to the environment (Penney et al., 2014), and from top-down interventions and policies to co-creation with all stakeholders, including children and young people (Budin-Ljøsne et al., 2022). In the field of health research on paediatric obesity, many studies are quantitative and focus solely on the outcomes of health programs in terms of physical and psychological health (Lutz, 2019), without taking into account the specific needs and perspectives of the main stakeholders — children and young people (Macauley et al., 2022).

However, it is increasingly acknowledged that research should engage young people in ways that place them at the heart of the process (Budin-Ljøsne et al., 2022; Gibbs et al., 2018). There are several reasons for this. First, children have the right to give their opinions freely on issues that affect them, and should be taken seriously, as stated in the Convention on the Rights of the Child (Articles 12, 13, and 14; UNICEF, 1990). Second, much can be learned about the social reality of children "through listening to how children describe and account for the … social realities of their

lives, which are embedded in their everyday relationships and behaviours" (Backett-Milburn et al., 2003, p. 616). Social science research has shown that children, even young children, offer a unique perspective, and are willing and able to be involved in research (e.g., Alderson, 1992; Christensen & Prout, 2002; Dedding et al., 2013; Lems et al., 2019; Lems et al., 2020). These scholars have argued that the starting point is to see children as experts who have their own unique knowledge, and thus should be approached as knowledge-bearing experts and agents of change. Though there is an increasing body of knowledge on the importance of involving children and young people in research, and ways in which this can be achieved, such forms of youth engagement in obesity research are still rare (Bröer et al., 2023; Budin-Ljøsne et al., 2022).

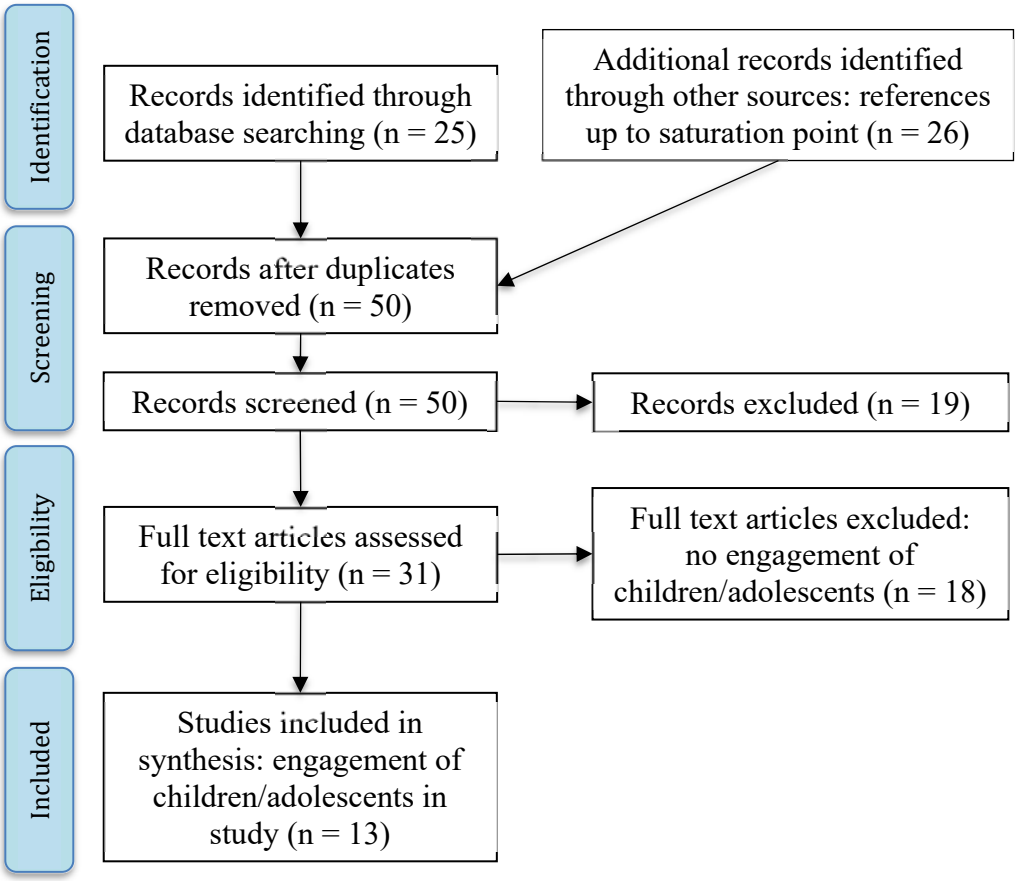
The aim of this scoping review is therefore: (a) to explore how children and young people have been engaged in obesity research so far; and (b) which issues they have reported, in order to highlight areas that require further inquiry or action by researchers and health care professionals.

Method

Since little is as yet known about how researchers involve children and young people in research on paediatric obesity, we conducted a scoping review. A scoping review is a process to rapidly outline both the key concepts underpinning a research area and the main available sources and types of evidence (Arksey & O'Malley, 2005; Macauley et al., 2022). Scoping studies differ from narrative or literature reviews in that the scoping process requires analytical reinterpretation of the literature (Levac et al., 2010). We used Arksey and O'Malley's (2005) framework, which contains six stages: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; (5) collating, summarizing, and reporting the results; and (6) consultation.

To identify relevant articles for the scoping review, an electronic search was conducted in the OVID (Medline/Pubmed), Researchgate, and Google Scholar databases. To identify and select papers focusing on the topic in question we used the keywords: *qualitative research, paediatric obesity and/or pediatric obesity, participatory research, children and adolescents.* Inclusion criteria specified English-language papers involving children or adolescents (ages 0–19) and published between 2000 and early 2020. A total of 51 studies were retrieved. Following the framework, two authors (SC, LvH) independently read all eligible papers. Where they disagreed, they met to discuss and reach consensus. Thereafter, the first author checked the references for possible additional articles. After full-text reviewing, a total of 13 papers were included. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method was used for transparent reporting of reviews (Figure 1).

Figure 1. *PRISMA Flow diagram of Study Selection*



Basic characteristics, such as study location, aim, design and methods, and participant characteristics, were collected for each study by three authors (SC, BvdV, LvH; Table 1), followed by qualitative analysis (i.e., content analysis; Thomas & Harden, 2008). This scoping review is the first part of a larger study on struggles and survival strategies of children with paediatric obesity.

Results

The majority of studies are from the United States (n = 7). Two are from the United Kingdom, and the other four studies came from Brazil, Iran, the Netherlands, and Switzerland. Eleven studies focused on perspectives, perceptions, and barriers within the context of paediatric obesity and included children and adolescents who were classified as overweight or obese. The other two focused on engaging adolescents in research on reducing adolescent obesity by developing computer-based (LeRouge et al., 2016) and digital communication interventions (Livingood et al., 2017). The ages of the children and adolescents ranged from 5 to 19 years; in 10 of the 13 studies, adolescents aged 12 and older were represented.

Out of the 13 studies, six included parents. Only one study interviewed adolescents individually and also together with their parents (Alston-Taylor et al., 2013). Children under 12 were interviewed alongside their parents in each case (Banks et al., 2013; Murtagh et al., 2006; Rice et al., 2017).

Overall, nine out of 13 studies reported ratios between girls and boys. Banks et al. (2013) did mention gender in patient details, but not ratios between boys and girls for the children who were interviewed with their parents. Girls were overrepresented: of the total of 267 children and adolescents enrolled in the nine studies providing ratios between girls and boys, 163 were girls. Strikingly, in the five studies that included parents and reported their gender, only 10 fathers participated, versus 97 mothers. Most studies did not report detailed demographic data. In those that did (Alston-Taylor et al., 2013; Amiri et al., 2011; Bishop et al., 2015; Rice et al., 2017), the study population appeared to be diverse in sociocultural and educational backgrounds.

Interviews were the most common method used (n = 9). The interviews varied between in-depth and structured or semi-structured interviews. Other methods were focus groups (n = 8) and creative qualitative research methods such as photovoice, drawing, and clip-art sessions (n = 2; Livingood et al., 2017; LeRouge et al., 2016). Five studies (e.g., Vieira et al., 2018) combined interviews and focus groups. Adolescents and parents were interviewed together as well as separately, with different questions for adolescent and parents.

Level of Engagement

Differences were found in the level of engagement; that is, to what extent children and adolescents were engaged in the research. In studies that included parents, the level of engagement of children appeared minimal. In 11 studies, the young people seemed to be only passively involved in the research, as informants in a single interview. In only two of the studies were young people given an opportunity to reflect on the findings of the research: Le Rouge et al. (2016) used drawing techniques for this purpose, and Livingood et al. (2017) used photovoice. Furthermore, only Livingood et al. (2017) involved young respondents in all phases of the research, developing a "youth research advisory board" (YRAB) and enabling them to have an active role in planning, conducting, and disseminating the research. This active role consisted of engaging them during various phases of research, analysis, interpretation, and recommendation. This enabled them to discuss, identify, and create consensus on the themes they perceived to be important. Furthermore, the YRAB described what recommendations they would make to the primary care physicians whose patients would be participating in potential digital communications interventions. Thus, in this study, young people had the opportunity to learn together with researchers and professionals; the researchers facilitated a long-term process in which adolescents learned to express their opinions on a subject and to reflect on it. As a result, the data from this study seem to be based on the adolescents' own views and opinions and thus to be more attuned to their social reality.

Table 1. *Overview of the Studies Included in the Scoping Review*

Author, year, DOI, location	Title	Aim	Design and methods	Participant characteristics
Alston-Taylor, S. J. et al. (2013) doi:10.1542/peds.2012-2114 Houston, Texas	A qualitative study of the day-to-day lives of obese Mexican–American adolescent females	To develop more effective weight loss interventions, this study examined the daily experiences and personal struggles of Mexican–American adolescent females with morbid obesity.	Qualitative; home-based interviews	20 severely obese girls, self-identified Mexican–American adolescent aged 12–19, and their families. Adolescents were > 150% of estimated ideal body weight (NHANES II). 20 mothers, 1 father.
Amiri, P. et al. (2011) doi:10.1007/s00038-010-0119-6 North of Tehran, Iran	Barriers to a healthy lifestyle among obese adolescents: A qualitative study from Iran	To explore adolescents' perceptions about underlying factors of their overweight/obesity and barriers to a healthy lifestyle.	Qualitative; purposive sampling, focus groups, and in-depth interviews	51 schoolchildren (27 girls and 24 boys) aged 15–17. 38 participants attended the focus groups.
Banks, J. et al. (2013) doi:10.1177/1367493512473854 Bristol, South Gloucestershire and North Somerset, UK	Identifying families' reasons for engaging or not engaging with childhood obesity services: A qualitative study	To examine families' reasons for engaging or not engaging with child obesity services.	Qualitative; semi-structured, in-depth interviews	16 interviews with parents who completed the Primary Care–Care of Childhood Obesity (PC–COCO) and 17 interviews with parents who withdrew from PC–COCO. 21 mothers, 1 father. 9 children participated alongside their parents (ages 5–16).
Bishop, J. A. et al. (2015) doi:10.1177/1941406415591209 Winston-Salem, North Carolina	Family perceptions of a family-based paediatric obesity treatment program	To explore patient and family perceptions and attitudes toward family-based treatment, and preferences for addressing health behaviours in family-based treatment settings.	Qualitative; interviews	Parent-and-child pairs (ages 7–18). 2 groups: (1) Active (Brenner FIT treatment): 15 families comprising 16 children (patients), 13 mothers, 3 fathers, 2 siblings; (2) Inactive (no longer in Brenner FIT treatment): 8 families comprising 7 children, 8 mothers, 1 father, 2 siblings.

Chamay Weber, C. et al. (2016) doi:10.1037/fsh0000219 Geneva, Switzerland	Parents' integration in the treatment of adolescents with obesity: A qualitative study	To explore parents' and adolescents' perceptions of their adolescents' obesity, as well as family dynamics around this issue before and after participating in a multidisciplinary family-based behavioural therapy for obesity (FBBT).	Qualitative; focus groups	23 parents and 21 adolescents aged 12–18 (13 girls, 8 boys); 21 mothers, 2 fathers.
Knoblock-Hahn, A. L. et al. (2016) doi:10.1016/j.jand.2015.08.022 Saint Louis, Missouri	Perceptions of adolescents with overweight and obesity for the development of user-centered design self-management tools within the context of the Chronic Care Model: A qualitative study	To conduct formative research to qualitatively identify views of adolescents with overweight and obesity on the use of consumer health technologies (CHT) to manage weight loss in chronic care management settings.	Part of a multi-perspective qualitative study, using focus groups	48 adolescents (33 girls, 15 boys), aged 12–17, participating in an intensive lifestyle-change summer camp.
LeRouge, C. et al. (2016) doi:10.1093/jamia/ocv078 Saint Louis, Missouri	Access to primary care child weight management programs: Urban parent barriers and facilitators to participation	To address how and in what context avatars can deliver computer-based interventions for adolescents' chronic weight management (to help overweight adolescents).	Part of a multi-perspective qualitative study (phase 1 and 2); multi-method, exploratory study, with focus groups, in-depth interviews, drawing, and clip-art sessions	48 adolescents (33 girls, 15 boys), aged 12–17, participating in an intensive lifestyle-change summer camp. Phase 1: 10 user-driven design focus groups with adolescents participating in 2 existing self-management programs. Phase 2: 70 adolescents from "Camp Jump Start" evaluated alternative mid-fidelity prototypes and discussed using avatars and contextual/ motivational applications.

Livingood, W. C. et al. (2017) doi:10.1177/1090198116677216 Jacksonville, Duval County, Florida	Engaging adolescents through participatory and qualitative research methods to develop a digital communication intervention to reduce adolescent obesity	To (a) describe participatory processes for engaging youth within the context of community-based participatory research (CBPR) and broader community; (b) share youth-engaged research findings related to the use of digital communication and implications for adolescent obesity intervention research; and (c) describe and discuss lessons learned from these participatory approaches.	Participatory and qualitative methods. (photovoice and focus group interviews), CBPR	66 adolescents; Youth Advisory Board (YAB) consisted of 16 youths aged 15–19 from at-risk communities. Participants comprised 41 middle school students, 9 adolescents.
Murtagh, J. et al. (2006) doi:10.1136/adc.2005.085712 Leeds, UK	A qualitative investigation into the levers and barriers to weight loss in children: Opinions of obese children	To identify the physical and psychological levers and barriers to weight loss experienced by obese children using qualitative techniques. Aimed to examine the levers and barriers to weight loss from a child's perspective, using techniques that have proved successful in exploring human perception and opinion.	Qualitative; interviews and focus group sessions	20 children (6 girls and 14 boys) aged 8–14, clinically obese.
Rice, K. G. et al. (2017) doi:10.1177/0009922816645515 Longwood, Boston, Massachusetts	Role of health coaches in paediatric weight management	To describe patients' and families' perspectives regarding the ideal role and responsibilities of a health coach to facilitate paediatric weight management in the primary care setting.	Qualitative; semi-structured, in-person interviews	Child–parent pairs; 23 parents, mean age 38. Children; 24 aged 3–18 (mean 9.8 years), 13 girls and 11 boys. Most responses from parents; 1 of the interviews conducted with a patient alone.

Stewart, L. et al. (2008) doi:10.1111/j.1365-277X.2008.00888.x Edinburgh and Glasgow, Scotland	The use of behavioural change techniques in the treatment of paediatric obesity: Qualitative evaluation of parental perspectives on treatment	To explore the thoughts and feelings of parents whose children had undertaken dietetic consultations that either employed behavioural change techniques or were delivered by dietitians with no formal training in these techniques.	Qualitative; evaluation of parental perspectives on treatment. Evaluation of a recently completed randomized controlled trial (RCT) of dietetic interventions for childhood obesity in the UK known as the SCOTT project	Parent-and child-pairs (children aged 5–8 and 9–11). Parents and children completed a semi-structured questionnaire together. 17 parents: 14 mothers, 2 fathers and 1 grandmother from diverse backgrounds and family circumstances. 8 were parents of children in novel treatment and 9 were parents of children who received standard care. 17 children, 9 girls and 8 boys. 7 dietitians from 3 dietetic departments returned the post-study questionnaire.
Stuij, M. et al. (2020) doi:10.1111/cch.12760 The Netherlands	Youth perspectives on weight-related words used by health care professionals: A qualitative study	To explore perspectives of Dutch children on the terminology health care professionals use when discussing weight.	Qualitative; interviews and a focus group discussion	18 children aged 8–16 who received health care support because of their weight. Out of this sample, 14 interviews; 7 girls, 7 boys. 1 focus group discussion: 2 girls, 2 boys.
Vieira, C. E. N. K. et al. (2018) doi:10.1590/S1980-220X2017025403339 State of Rio Grande do Norte, Brazil	School Health Nursing Program: Prevention and control of overweight/ obesity in adolescents	To address the use of an innovative method for constructing an intervention in the form of a program aimed at nursing care for preventing and controlling overweight or obesity in adolescents in Primary Health Care (PHC), and, more specifically, in the school environment	Qualitative methodological study; focus groups, interviews, integrative review	44 adolescents, ages 10–19, 4 nurses, 40 teachers from the state's municipal schools

Level of Engagement

Differences were found in the level of engagement; that is, to what extent children and adolescents were engaged in the research. In studies that included parents, the level of engagement of children appeared minimal. In 11 studies, the young people seemed to be only passively involved in the research, as informants in a single interview. In only two of the studies were young people given an opportunity to reflect on the findings of the research: Le Rouge et al. (2016) used drawing techniques for this purpose, and Livingood et al. (2017) used photovoice. Furthermore, only Livingood et al. (2017) involved young respondents in all phases of the research, developing a "youth research advisory board" (YRAB) and enabling them to have an active role in planning, conducting, and disseminating the research. This active role consisted of engaging them during various phases of research, analysis, interpretation, and recommendation. This enabled them to discuss, identify, and create consensus on the themes they perceived to be important. Furthermore, the YRAB described what recommendations they would make to the primary care physicians whose patients would be participating in potential digital communications interventions. Thus, in this study, young people had the opportunity to learn together with researchers and professionals; the researchers facilitated a long-term process in which adolescents learned to express their opinions on a subject and to reflect on it. As a result, the data from this study seem to be based on the adolescents' own views and opinions and thus to be more attuned to their social reality.

When young people are engaged for a longer period of time, it enhances the opportunity for them to take an active role. It gives the young people, researchers, and professionals time to reflect, to learn with and from each other, and to induce sustainable change. In addition, engaging adolescents during the interpretation of results and the drawing up of recommendations gives primary care physicians and academic researchers exclusive information about what types of intervention would be most relevant (Livingood et al., 2017).

Issues Reported by Children and Adolescents

As presented in Table 2, we found four themes reported by children and adolescents: low self-esteem, low self-efficacy, bullying, and lack of support from peers, family, and professionals. An additional issue, "wanting to be independent versus being under parental control", was found in studies with adolescents.

Adolescents with low self-esteem had difficulty making contact with peers, and felt conspicuous in crowds, exemplifying two concepts from research into low self-esteem: low self-worth and lack of self-confidence (e.g., Amiri et al., 2011, p. 185). For example, low self-esteem was illustrated by a 16-year-old girl's report of becoming frustrated at the sight of thin people (Amiri et al., 2011, p. 185), while other adolescents spoke of "comparing themselves with others" and believing that they were less valued than their normal-weight counterparts. In the context of lack of self-confidence, fear of ridicule was important; for example, a boy voiced that he was afraid of joining a crowd out of fear that someone would make fun of him or make jokes about him (Amiri et al., 2011, p. 185). Both children and adolescents expressed a desire to be "normal" and

to “fit or blend in” with their peers (Murtagh et al., 2006) so as not to be singled out for social torment, or undergo bullying and stigma (Alston-Taylor et al., 2013; Amiri et al, 2011; Banks et al., 2013; Murtagh et al., 2006; Stuij et al., 2020).

Lack of self-efficacy was strongly related to lack of self-confidence. According to Amiri et al. (2011), the repeated use of phrases such as “I can’t”, “I wanted to but couldn’t”, and “It is too hard” represented low self-efficacy among participants regarding behaviour change and lifestyle modification. Murtagh et al. (2006) examined participants’ (7–15 years old) reasons to change, cues for action, barriers to action, continued compliance, and barriers to compliance. They found that a barrier to action for children was the difficulty of making the sacrifices necessary to achieve weight loss while struggling to adhere to the other lifestyle restrictions essential in their drive to lose weight. A child shared, “You have a chocolate bar and put on a pound, you have sixteen hundred apples and you take off half a pound” (Murtagh et al., 2006, p. 922).

In three studies, adolescents reported being subject to bullying (Murtagh et al., 2006; Stuij et al., 2020; Vieira et al., 2018). In Vieira et al. (2018), one adolescent said, “Another bad thing is putting up with the teasing. Sometimes I pretend I don’t hear it, but it hurts. There are days I don’t want to go to school” (p. 4).

In eight studies, furthermore, we found youth perceived a lack of support; that is, they did not feel supported by family and peers, especially in relation to bullying. In fact, all participants in the study by Murtagh et al. (2006) admitted to having endured some form of bullying, with profound effects on their sense of self-worth: “People call me names because they think it’s funny but it’s not”, and “You’re fat, you’re slow, you’re ignorant, you’re useless” (p. 921). Murtagh et al. (2006) reported that most boys who were interviewed stated that bullying had led to them showing retaliation and uncharacteristic behaviours at school, which often resulted in being punished with exclusion from school activities. An adolescent boy said, “If I be naughty, make ’em laugh, then they might not call me names” (Murtagh et al., 2006, p. 921). Additionally, statements young people made in Stuij et al. (2020) implied that they experienced distance between themselves and professionals. In their study of youth perspectives on weight-related words, Stuij et al. (2020) reported that adolescents’ statements “illustrated the wish for support from a healthcare professional, in both treatment and working together, … namely, adding a positive spin to the (negatively experienced) conversations about weight” (p. 377).

The theme of being independent versus being under parental control was only found in studies that included adolescents. While it is common for adolescents to struggle with becoming independent and to wish to escape from their parents’ control, study participants voiced that the constant control their parents exerted on their eating habits discouraged them. In Chamay Weber et al. (2016), a 15-year-old girl said that her mother was always watching her and checking everything she ate, and that her mother did not understand that she could cope by herself. The adolescents were torn between their perceived inability to control their food intake, which was worsened by the constant monitoring of their parents, and their desire for responsibility and

autonomy. They reported that constant monitoring had contributed to their loss of confidence in their capacity to make changes and that it had actually increased their desire to eat (Chamay Weber et al., 2016).

Interestingly, there were differences in the themes that were shared by adolescents when they were interviewed alone rather than together with their parents. Themes such as bullying, low self-efficacy (i.e., lack of self-confidence), and prejudices related to weight were addressed only in the studies that interviewed adolescents without their parents present. This indicates that these themes are highly meaningful for young people, but difficult to talk about in the presence of parents. Quotes show shame, not wishing to talk about weight, and feeling hurt. For example, a ten-year-old boy said, "I also really don't like to talk about it, because some people are fat, some people are thin, and that's the way it is" (Stuij et al., 2020, p. 372).

Table 2. *Key Themes Expressed by Adolescents When Interviewed With Versus Without Parents*

Key theme	Studies without parents	Studies with parents
A. Low self-esteem	Stuij et al. (2020) Murtagh et al. (2006) Amiri et al. (2011)	Banks et al. (2013) Alston-Taylor et al. (2013)
B. Low self-efficacy	Murtagh et al. (2006) Amiri et al. (2011)	X
C. Bullying	Vieira et al. (2018) Stuij et al. (2020) Murtagh et al. (2006)	X
D. Lack of support from family, peers, or professionals	Vieira et al. (2018) Stuij et al. (2020) Murtagh et al. (2006) Amiri et al. (2011) Knoblock-Hahn et al. (2016) LeRouge et al. (2016)	Stewart et al. (2008) Bishop et al. (2015) Rice et al. (2017) Chamay Weber et al. (2016)
E. Independence vs. parental control	Murtagh et al. (2006) Amiri et al. (2011)	Chamay Weber et al. (2016)

Discussion

The aim of this scoping review was to explore how children and young people have been engaged in research on paediatric obesity and which issues they have reported. The results highlight the importance of listening to young people, especially by engaging them in research on paediatric obesity. It is evident that engaging young people is of the utmost importance in gaining insights into their perceptions of the personal and environmental barriers they face in living with paediatric obesity, and in developing research and health interventions to fit their needs and daily reality. There are five main findings to take into account.

First, when young people (age 7–16) are engaged in research without their parents present, they are generally more willing to address sensitive themes such as bullying and negative weight-

related prejudice (Murtagh et al., 2006; Stuij et al., 2020). However, parents are usually present when their children have appointments with health care professionals. Although this is intended to enable children and adolescents to express themselves freely in a safe environment, it is questionable whether it does so. Various studies have concluded that obesity stigma and bullying can harm the emotional and physical well-being of obese adolescents (Griffiths et al., 2006; Lems et al., 2019; Rankin et al., 2016). Moreover, because adolescents rely on peers for social support, identity, and developing self-esteem, the social and psychological ramifications for those victimized by bullying hinder their social development (Janssen et al., 2004). Ensuring that young people have opportunities to talk to health care professionals without their parents present could lead to greater understanding of their problems, and care that is better tailored to their needs.

Second, we found differences in youth's level of engagement in the included studies; only Livingood et al. (2017) involved youth in all phases of their research. While Murtagh et al. (2006) and Stuij et al. (2020) did not actively engage children in multiple phases of their research, they did advocate that, from a moral and rights-based perspective, evidence should be drawn from the ideas and opinions of obese children themselves. Additionally, Murtagh et al. (2006) reported that providing relevant health information to children is not enough to induce behavioural change: children living with obesity must be engaged at a personal level, where the issues that are most important to them can be understood and dealt with. Lems et al. (2019, 2020), for example, challenged stereotypes about adolescents not being interested in healthy living, and showed how health education could be better attuned to their interests and daily realities. Powers et al. (2006) stated that participation by youth in the research process can improve the quality of research by generating more reliable data and improving data interpretation.

Third, we found that the methods used to engage children and adolescents in research are crucial. Varied methods were used in the studies in this review, from interviews (in-depth, structured, or semi-structured) and focus groups to creative qualitative research methods such as photovoice, drawing, and clip-art sessions. Interviewing was the method most used. Interviewing implies that participants are asked questions that the researchers deem important, whereas creative methods create space for young people to reflect on and share their own stories (Grant, 2017). None of the studies used participant observation as a method to distinguish between what children and adolescents said during the interviews and focus groups and their *situated* behaviour. Becker and Geer (1957) reported that participant observation can give us a scale to measure the completeness of gathered data, which can serve to let us know what types of information escape us when we use other methods. Dedding et al. (2014) also pointed out the importance of looking at what children disclose through their actions: non-verbal, rather than verbal, participation might be a more powerful way for children to express themselves, especially in relation to the greater verbal competency of adults.

Fourth, in four of the 13 studies we assessed young children aged under 8 are underrepresented. Children under 8 were always interviewed alongside their parents in parent-and-child pairs (Banks et al., 2013; Murtagh et al., 2006; Rice et al., 2017), making it difficult to identify sensitive issues

or to distinguish the perspectives, experiences, and opinions of children from those of their parents. Vieira et al. (2018) and Stuij et al. (2020) also conducted interviews with children under 12 years of age; however, based on the reports, we could not establish whether parents were present during the interviews. In general, we did not find the results generated by children to differ much from those of adolescents. The participatory and reflective potential of a child or young person is often underestimated (Dedding et al., 2013, p. 12; Dedding et al., 2014; Sarti et al., 2018). Being able to estimate the competencies of children and young people, and attuning to them and their experiences, are core qualities of researchers working with youth and require special skills. Furthermore, researchers must carefully consider the ethical challenges of engaging children and young people in research. Van Bijleveld et al. (2013) reported that professionals have to maintain a difficult balance between the child's right to participate and the child's right to be protected, as well as between the need to gather evidence and the child's entitlement to give information on his or her own terms. Acknowledging the custodial role of the parents is legally compulsory and, moreover, necessary in order to act in the best interests of, and safeguard, the child. Habermas (2014) described the "communicative space" as the ideal place for people to come together — a place of mutual recognition that adopts reciprocal perspectives. Researchers need to develop such a space in order to learn together with children and young people, and their parents.

Fifth and finally, although we did not focus on the role of parents in this scoping review, our findings point to the underrepresentation of fathers in the studies we assessed. Few fathers participated alongside their children. Two studies reported that fathers were difficult to recruit (Bishop et al., 2015; Chamay Weber et al., 2016). Underrepresentation of fathers may skew results, as fathers'perceptions and views may differ from those of mothers. Studies report that fathers' behaviours and parenting practices play an important role in promoting healthy behaviours in children (Morgan & Young, 2017; Morgan et al., 2017). Previous research has underscored this idea from the perspective of adolescents themselves: fathers are seen as more independence-encouraging, while mothers are more likely to be accepting (McCormick & Kennedy, 1994; Keizer et al., 2019). For example, in their study of play between parents and infants in their first year of life, Crawley and Sherrod (1984) stated that in playing with their children fathers often encourage riskful play and promote independence, whereas mothers often focus more on avoiding the possibility of injury (see also Institute for Research and Poverty, 2020). Moreover, our findings bear indirectly on the role of parents in shaming their children with regard to their body weight, and how this relates to cultural differences in body image and beauty ideals. We therefore advocate for further research on this topic.

Limitations and Strengths

This review was not without limitations. Given the immense number of published studies related to paediatric obesity, we acknowledge that in this review we have limited ourselves only to English-language peer-reviewed publications. However, some of the included studies were undertaken in non-English-speaking countries, like Iran, Switzerland, and Brazil. Therefore, the included papers are geographically diverse, in keeping with the exploratory nature of a scoping

review. A further limitation is that the scoping review was unable to examine the potential moderating effects of diversity in children, adolescents, and their parents because of the insufficient reporting of variables in the studies, such as sociocultural, socioeconomic, and educational backgrounds. We do acknowledge that these issues matter.

Conclusion

In this scoping review we aimed to explore how children and young people have been engaged in research on paediatric obesity so far, and which issues they have reported. We conclude that conducting research solely with parent-and-child pairs makes it difficult to make a distinction between parent and child perspectives, experiences, and opinions. Our exploration highlights the importance of engaging children and adolescents in research, and of giving them the opportunity to air their views without their parents being present. Our review calls for more participatory approaches in research related to paediatric obesity and emphasizes the need to create space in all phases of research for the voices of children and young people who deal with obesity every day. Participant observations and creative methods could help provide a better-situated sense of what children and young people value. Furthermore, we advocate that studies should aim for a more diverse population, engaging children from a wide age range, as well as involving fathers in research on paediatric obesity. This scoping review shows that extra effort should be made for equal participation of children and young people (separately as well as alongside their parents) in order to get a more complete picture of the perspectives of both age groups. Last, the most important concerns relating to obesity that children and young people reported were: a desire to "fit in"; strong negative emotions about oneself; low self-esteem; not feeling supported by family, peers, and professionals; being subject to bullying; and a desire for independence versus being under parental control. To improve obesity care and well-being in young people, we must start acting on these concerns and investigate, together with children and young people, how all parties involved can address these issues together.

References

Alderson, P. (1992). Everyday and medical life choices: Decision-making among 8- to 15-year-old school students. *Child: Care, Health and Development*, *18*(2), 81–95. doi:10.1111/j.1365-2214.1992.tb00343.x

Alston-Taylor, S. J., Garland, B. H., Sanchez-Fournier, B. A., Allen, K. F., Doak, J. S., & Wiemann, C. M. (2013). A qualitative study of the day-to-day lives of obese Mexican-American adolescent females. *Pediatrics, 131*(6), 1132–1138. doi:10.1542/peds.2012-2114

Amiri, P., Ghofranipour, F., Ahmadi, F., Hosseinpanah, F., Montazeri, A., Jalali-Farahani, S., & Rastegarpou, A. (2011). Barriers to a healthy lifestyle among obese adolescents: A qualitative study from Iran. *International Journal of Public Health*, *56*, 181–189. doi:10.1007/s00038-010-0119-6

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. doi:10.1080/1364557032000119616

Backett-Milburn, K., Cunningham-Burley, S., & Davis, J. (2003). Contrasting lives, contrasting views? Understandings of health inequalities from children in differing social circumstances. *Social Science and Medicine 57*(4), 613–623. doi:10.1016/s0277-9536(02)00413-6

Banks, J., Cramer, H., Sharp, D. J., Hamilton-Shield, J. P., & Turner, K. M. (2013). Identifying families' reasons for engaging or not engaging with childhood obesity services: A qualitative study. *Journal of Child Health Care, 18*(2), 1–10. doi:10.1177/1367493512473854

Baoum, S., Alqahtani, M., Almotairi, A., Aldewli, M., Al Quwayd, M., Alkhalaf, Y., Alluhaydan, A., Alferaih, A., Alferaih, A., Alsam, A., & Alyahri, A. (2022). Importance of obesity screening programs among children and its effect on their quality of life. *Journal of Healthcare Sciences, 2*(11), 489–493. doi:10.52533/JOHS.2022.21124

Becker, H. S., & Geer, B. (1957). Participant observation and interviewing: A comparison. *Human Organization, 16*(3), 28–32. doi:10.17730/humo.16.3.k687822132323013

Bishop, J. A., Irby, M. B., & Skelton, J. A. (2015). Family perceptions of a family-based paediatric obesity treatment program. *Infant, Child, & Adolescent Nutrition, 7*(5), 278–286. doi:10.1177/1941406415591209

Bröer, C., Ayuandini, S., Baillergeau, E., Moerman, G., Veltkamp, G., Luszczynska, A., Budin-Ljøsne, I., Rito, A. I., Stensdal, M., Lien, N., & Klepp, K.-I. (2023). Recruiting and engaging adolescents in creating overweight and obesity prevention policies: The CO-CREATE project. *Obesity Reviews*, *24*(S1), Article e13546. doi:10.1111/obr.13546

Budin-Ljøsne, I., Ayuandini, S., Baillergeau, E., Bröer, C., Helleve, A., Klepp, K.-I., Kysnes, B., Lien, N., Luszczynska, A., Nesrallah, S., Rito, A., Rutter, H., Samdal, O., Savona, N., & Veltkamp, G. (2022). Ethical considerations in engaging young people in European obesity prevention research: The CO-CREATE experience. *Obesity Reviews*, *24*(S1), Article e13518. doi:10.1111/obr.13518

Burchett, H. E. D., Sutcliffe, K., Melendez-Torres, G. J., Rees, R., & Thomas, J. (2018). Lifestyle weight management programmes for children: A systematic review using qualitative comparative analysis to identify critical pathways to effectiveness. *Preventive Medicine*, *106*, 1–12. doi:10.1016/j.ypmed.2017.08.025

Buttitta, M., Iliescu, C., Rousseah, A., & Gueriien, A. (2014). Quality of life in overweight and obese children and adolescents: A literature review. *Quality of Life Research, 23*(4), 1117–1139. doi:10.1007/s11136-013-0568-5

Chamay Weber, C., Camparini, N., Lanza, L., & Narring, F. (2016). Parents integration in the treatment of adolescents with obesity: A qualitative study. *Families, Systems, & Health, 34*(4), 396–403. doi:10.1037/fsh0000219

Crawley, S. B., & Sherrod, K. B., (1984). Parent-infant play the first year of life. *Infant Behavior and Development*, *7*(1), 65–75. doi:10.1016/S0163-6383(84)80023-5

Christensen, P., & Prout, A. (2002). Working with ethical symmetry in social research with children. *Childhood, 9*(4), 477–497. doi:10.1177/0907568202009004007

Dedding, C., Jurrius, K., Moonen, X., & Rutjes, L. (2013). *Kinderen en jongeren actief in wetenschappelijk onderzoek. Ethiek, methoden en resultaten van onderzoek met en door jeugd* [Children and young people active in scientific research: Ethics, methods, and results of research with and by youth]. Houten: Uitgeverij Lannoo nv, Uitgeverij LannooCampus. https://www.boompsychologie.nl/media/4/9789401406512.pdf

Dedding, C., Reis, R., & Wolf, B. (2014). Revealing the hidden agency of children in a clinical setting. *Health Expectations, 18*(6), 2121–2128. doi:10.1111/hex.12180

Flodgren, G., Gonçalves-Bradley, D. C., & Summerbell, C. D. (2017). Interventions to change the behaviour of health professionals and the organisation of care to promote weight reduction in children and adults with overweight or obesity [Review]. *Cochrane Library: Cochrane Database of Systematic Reviews, 11*, Article CD000984. doi:10.1002/14651858.CD000984.pub3

Gerards, S. M. P. L., Gubbels, J. S., Dagnelie, P. C., Kremers, S. P. J., Stafleu, A., de Vries, N. K., & Thijs, C. (2014). Parental perception of child's weight status and subsequent BMIz change: The KOALA birth cohort study. *BMC Public Health, 14,* Article 291. doi:10.1186/1471-2458-14-291

Gibbs, L., Marinkovic, K., Black, A., Gladstone, B., Dedding, C., Dadich, A., O'Higgins, S., Abma, T., Casley, M., Cartmel, J., & Acharya, L. (2018). Kids in action: Participatory health research with children. In M. Wright & K. Kongats (Eds.), *Participatory health research* (pp. 93–113). Springer. doi:10.1007/978-3-319-92177-8_7

Grant, T. (2017). Participatory research with children and young people: Using visual, creative, diagram, and written techniques. In R. Evans & L. Holt (Eds.), *Methodological approaches* (pp. 261–284). Springer. doi:10.1007/978-981-287-020-9_19

Griffiths, L. J., Wolke, D., Page, A. S., Horwood, J. P., & the ALSPAC Study Team. (2006). Obesity and bullying: Different effects for boys and girls. *Archives of Disease in Childhood, 91*(2), 121–125. doi:10.1136/adc.2005.072314

Groves, T. (2008). Is obesity a wicked problem? [Rapid response]. *thebmj.* Retrieved on April 17, 2019, from https://www.bmj.com/rapid-response/2011/11/02/obesity-wicked-problem

Habermas, J. (2014). *On the pragmatics of social interaction.* John Wiley & Sons.

Harcourt, B. E., Pons, A., Kao, K.-T., Twindyakirana, C., Alexander, E., Haberle, S., McCallum, Z., & Sabin, M. A. (2019). Psychosocial measures and weight change in a clinical paediatric population with obesity. *Quality of Life Research, 28*(6), 1555–1564. doi:10.1007/s11136-019-02155-3

Institute for research and poverty. (2020, February). *Involved fathers play an important role in children's lives*, Fast Focus Research/Policy Brief No. 45-2020. Retrieved from Institute for research and poverty: https://www.irp.wisc.edu/resource/involved-fathers-play-an-important-role-in-childrens-lives/#_ednref15

Janssen, I., Craig, W. M., Boyce, W. F., & Pickett, W. (2004). Associations between overweight and obesity with bullying behaviors in school-aged children. *Paediatrics*, *113*(5), 1187–1194. doi:10.1542/peds.113.5.1187

Keizer, R., Helmerhorst, K. O. W., & van Rijn-van Gelderen, L. (2019). Perceived quality of the mother–adolescent and father–adolescent attachment relationships and adolescents' self-esteem. *Journal of Youth and Adolescence, 48*(6), 1203–1217. doi:10.1007/s10964-019-01007-0

Knoblock-Hahn, A. L., Wray, R. D., & LeRouge, C. M. (2016). Perceptions of adolescents with overweight and obesity for the development of user-centered design self-management tools within the context of the Chronic Care Model: A qualitative study. *Journal of the Academy of Nutrition and Dietetics*, *116*(6), 957–967. doi:10.1016/j.jand.2015.08.022

Lems, E., Hilverda, F., Broerse, J. E. W., & Dedding, C. (2019). 'Just stuff yourself': Identifying health-promotion strategies from the perspectives of adolescent boys from disadvantaged neighbourhoods. *Health Expectations 22*(5), 1040–1049. doi:10.1111/hex.12913

Lems, E., Hilverda, F., Sarti, A., van der Voort, L., Kegel, A., Pittens, C., Broerse, J., & Dedding, C. (2020). 'McDonald's is good for my social life'. Developing health promotion together with adolescent girls from disadvantaged neighbourhoods in Amsterdam. *Children & Society 34*(3), 204–219. doi:10.1111/chso.12368

LeRouge, C., Dickhut, K., Lisseti, C., Sangameswaran, S., & Malasanos, T. (2016). Engaging adolescents in a computer-based weight management program: Avatars and virtual coaches could help. *Journal of the American Medical Informatics Association, 23*(1), 19–28. doi:10.1093/jamia/ocv078

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science, 5*, Article 69. doi:10.1186/1748-5908-5-69

Livingood, W. C., Monticalvo, D., Bernhardt, J. M., Wells, K. T., Harris, T., Kee, K., Hayes, J., George, D., & Woodhouse, L. D. (2017). Engaging adolescents through participatory and qualitative research methods to develop a digital communication intervention to reduce adolescent obesity. *Health Education & Behavior, 44*(4), 570–580. doi:10.1177/1090198116677216

Llewellyn, A., Simmonds, M., Owen, C. G., & Woolacott, N. (2016). Childhood obesity as a predictor of morbidity in adulthood: A systematic review and meta-analysis. *Obesity Reviews*, *17*(1), 56–67. doi:10.1111/obr.12316

Low, S., Chew Chin, M., & Deurenberg-Yap, M. (2009). Review on epidemic of obesity. *Annals Academy of Medicine, Singapore, 38*(1), 57–59. doi:10.47102/annals-acadmedsg.V38N1p57

Lutz, A. G. (2019). Patients' autonomy as a negotiated order: An ethnographic perspective on the clinical management of childhood obesity. *Sociology of Health & Illness, 41*(4), 1–17. doi:10.1111/1467-9566.12863

Macauley, T., Rolker, H. B., Scherer, M., Brock, J., Savona, N., Helleve, A., & Knai, C. (2022). Youth participation in policy-making processes in the United Kingdom: A scoping review of the literature. *Journal of Community Practice, 30*(2), 203–224. doi:10.1080/10705422.2022.2073308

Martin, A., Booth, J. N., Laird, Y., Sproule, J., Reilly, J. J., & Saunders, D. H. (2018). Physical activity, diet and other behavioural interventions for improving cognition and school achievement in children and adolescents with obesity or overweight (Review). *Cochrane Library: Cochrane Database of Systematic Reviews, 3*, Article CD009728. doi:10.1002/14651858.CD009728.pub3

McCormick, C. B., & Kennedy, J. H. (1994). Parent-child attachment working models and self-esteem in adolescence. *Journal of Youth and Adolescence*, *23*(1), 1–18. doi:10.1007/BF01537139

Morgan, P. J., & Young, M. D. (2017). The influence of fathers on children's physical activity and dietary behaviors: Insights, recommendations and future directions. *Current Obesity Reports, 6*(3), 324–333. doi:10.1007/s13679-017-0275-6

Morgan, P. J., Young, M. D., Lloyd, A. B., Wang, M. L., Eather, N., Miller, A., Murtagh, E. M., Barnes, A. T., & Pagoto, S. L. (2017). Involvement of fathers in paediatric obesity treatment and prevention trials: A systematic review. *Paediatrics, 139*(2), Article e20162635. doi:10.1542/peds.2016-2635

Murtagh, J., Dixey, R., & Rudolf, M. (2006). A qualitative investigation into the levers and barriers to weight loss in children: Opinions of obese children. *Archives of Disease in Childhood, 91*(11), 920–923. doi:10.1136/adc.2005.085712

Pamungkas, R. A., & Chamroonsawasdi, K. (2019). Home-based interventions to treat and prevent childhood obesity: A systematic review and meta-analysis. *Behavioral Sciences, 9*(4), Article 38. doi:10.3390/bs9040038

Penney, T. L., Almiron-Roig, E., Shearer, C., McIsaac, J.-L., & Kirk, S. F. L. (2014). Modifying the food environment for childhood obesity prevention: Challenges and opportunities. *Proceedings of the Nutrition Society*, *73*(2), 226–236. doi:10.1017/S0029665113003819

Powers, J. L., & Tiffany, J. S. (2006). Engaging youth in participatory research and evaluation. *Journal of Public Health Management and Practice*, S79–S87. doi:10.1097/00124784-200611001-00015

Puhl, R. M., & King, K. M. (2013). Weight discrimination and bullying. *Best Practice & Research Clinical Endocrinology & Metabolism, 27*(2), 117–127. doi:10.1016/j.beem.2012.12.002

Rankin, J., Matthews, L., Cobley, S., Han, A., Sanders, R., Wiltshire, H. D., & Baker, J. S. (2016). Psychological consequences of childhood obesity: Psychiatric comorbidity and prevention. *Adolescent Health, Medicine and Therapeutics, 7*, 125–146. doi:10.2147/AHMT.S101631

Reece, L. J., Bissell, P., & Copeland, R. J. (2015). "I just don't want to get bullied anymore, then I can lead a normal life". Insights into life as an obese adolescent and their views on obesity treatment. *Health Expectations*, *19*(4), 897–907. doi:10.1111/hex.12385

Rice, K. G., Jumamil, R. B., Jabour, S. M., & Cheng, J. K. (2017). Role of health coaches in paediatric weight management: Patient and parent perspectives. *Clinical Paediatrics, 56*(2), 162–170. doi:10.1177/0009922816645515

Sarti, A., Schalkers, I., Bunders, J. F., & Dedding, C. (2018). Around the table with policymakers: Giving voice to children in contexts of poverty and deprivation. *Action Research, 16(*4), 396–413. doi:10.1177/1476750317695412

Spinelli, A., Buoncristiano, M., Anna Kovacs, V., & Yngve, A. (2019). Prevalence of severe obesity among primary school children in 21 European countries. *Obesity Facts: The European Journal of Obesity*, *12*, 244–258. doi:10.1159/000500436

Stewart, L., Chapple, J., Hughes, A. R., Poustie, V., & Reilly, J. J. (2008). The use of behavioural change techniques in the treatment of paediatric obesity: Qualitative evaluation of parental perspectives on treatment. *Journal of Humal Nutrition and Dietetics, 21*(5), 464–473. doi:10.1111/j.1365-277X.2008.00888.x

Stuij, M., van Maarschalkerweerd, P. E. A., Seidell, J. C., Halberstadt, J., & Dedding, C. (2020). Youth perspectives on weight-related words used by health care professionals: A qualitative study. *Child: Care, Health and Development, 46*(3), 369–380. doi:10.1111/cch.12760

Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology, 8*, Article 45. doi:10.1186/1471-2288-8-45

UNICEF. (1990, September 2). *The Convention on the Rights of the Child: The children's version*. Retrieved on April 10, 2020, from https://www.unicef.org/sites/default/files/2019-04/UN-Convention-Rights-Child-text.pdf

van Bijleveld, G. G., Dedding, C. W. M., & Bunders-Aelen, J. F. G. (2015). Children's and young people's participation within child welfare and child protection services: A state-of-the-art review. *Child and Family Social work, 20*(2), 129–138. doi:10.1111/cfs.12082

Vieira, C. E. N. K., Dantas, D. N. A., de Miranda, L. S. M. V., Araújo, A. K. C., Monteiro, A. I., & Enders, B. C. (2018). School health nursing program: Prevention and control of overweight/obesity in adolescents. *Revista da Escola de Enfermagem da USP, 52*, Article e03339. doi:10.1590/S1980-220X2017025403339

Walls, H. L. (2018). Wicked problems and a 'wicked' solution. *Globalization and Health, 14*, Article 34. doi:10.1186/s12992-018-0353-x

Waters, E., de Silva-Sanigorski, A., Burford, B. J., Brown, T., Campbell, K. J., Gao, Y., Armstrong, R., Prosser, L., & Summerbell, C. D. (2011). Interventions for preventing obesity in children [Review]. *Cochrane Library: Cochrane Database of Systematic Reviews, 12,* Article CD001871. doi:10.1002/14651858.CD001871.pub3

World Health Organization (WHO). (2018, February 16). *Obesity and overweight. Key facts*. Retrieved on April 17, 2019 from van https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight

World Health Organization (WHO). (2021, June 9). *Obesity and overweight*. https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight